

EDITOR'S NOTE

Welcome to the first Issue of Volume 66 of the *Federal Communications Law Journal*, the nation's premier communications law journal and the official journal of the Federal Communications Bar Association.

This Issue explores a number of important topics in the communications sector, from cutting-edge regulatory problems to perennial constitutional quandaries. The Issue opens with an Article on usage-based broadband pricing by Daniel Lyons, an assistant professor of law at Boston College Law School. After walking through the rise of usage based pricing in the broadband market and the justifications for adopting such a pricing model, Professor Lyons concludes that broadband service providers should be free to experiment with alternative pricing mechanisms, absent anticompetitive concerns.

Next, the Issue presents an Article by Samuel L. Feder, a partner at Jenner & Block LLP and former General Counsel of the FCC, Matthew E. Price, an associate with the same firm, and Andrew C. Noll, a J.D. candidate at Stanford Law School. They discuss the Supreme Court's recent decision in *City of Arlington v. Federal Communications Commission*, which upheld the FCC's shot-clocking rules, framing the majority opinion as a departure from the Court's previous decisions and asking how *Arlington's* reasoning might be applied to litigation over the FCC's Open Internet Order.

The Issue also features an Essay by former FCC Chairman Reed Hundt and Gregory Rosston, former FCC Deputy Chief Economist. In this piece, the authors explore the competition policies that the Commission has used in the past and how those regulatory models might be applied to different industries under the FCC's purview.

In addition to these pieces, this Issue contains three student Notes. In the first Note, Holly Trogdon discusses the potential for reducing infrastructure build-out costs through federal-state coordination, analyzing Google's deployment of fiber to the home in Kansas City as a case study. In the second Note, Darrel Pae takes a hard look at retransmission consent negotiations, arguing for expanding the FCC's role in overseeing the substantive aspects of such negotiations. In the third Note, Mary Shields addresses the interference problems that arose in the LightSquared-GPS dispute and proposes principles for resolving similar disputes based on the law of public prescriptive easements.

The *Journal* is committed to providing its readership with substantive coverage of relevant topics in communications law, and we appreciate the continued support of contributors and readers alike. We welcome your feedback and submissions—any questions or comments about this Issue or future Issues may be directed to fclj@law.gwu.edu, and any submissions

for publication consideration may be directed to fcljarticles@law.gwu.edu.
This Issue and our archive are available at <http://www.fclj.org>.

Andrew Erber
Editor-in-Chief

FEDERAL COMMUNICATIONS LAW JOURNAL

GW | LAW

FCBA
FEDERAL COMMUNICATIONS
BAR ASSOCIATION

VOLUME 66 ISSUE 1

DECEMBER 2013

Editor-in-Chief

ANDREW ERBER

Senior Managing Editor

JAMES CHAPMAN

Senior Production Editor

ADETOKUNBO FALADE

Senior Articles Editor

MICHAEL SHERLING

Senior Notes Editor

JAMI MEVORAH

Executive Editor

DAVID HATEF

Articles Editors

ADAM HOTTELL
TOM STRUBLE
MICHAEL WILLIAMS

Managing Editors

BEN ANDRES
DARREL JOHN PAE
CARLA VOIGT

Notes Editors

KEENAN ADAMCHAK
CLAYTON PREECE
MARGOT VANRIEL

MATHEW HATFIELD
MELISSA MILCHMAN
MARY SHIELDS

Associates
EVIN LUONGO
SEETA REBBAPRAGADA
HOLLY TROGDON

MILENA MIKAILOVA
MEREDITH SHELL
BRANDON WHEATLEY

JARUCHAT SIRICHOKCHATCHAWAN

Members

DAVID BLUM
NATHAN EAGAN
JOHN GASPARINI
CHRIS GRESALFI
MAXWELL HSU
RYAN KIM
ANNA MYERS
ALEX SCHNEIDER

DEONTREA CAMPBELL
MAX ETIN
LAURA GEIGEL
ANDREW HASTY
NAVNEET JASWAL
RICHARD LOUBE
RACHEL NOTEWARE
ANDREW STREET

SUMENG CHEN
MICHAEL FERRARI
ANTHONY GLOSSON
AUDRA HEALEY
DANIEL JOSLYN
MICHAEL MILANO
RYAN RADIA
ESTHER YOU

Faculty Advisors

PROFESSOR KAREN THORNTON

PROFESSOR DAWN NUNZIATO

Adjunct Faculty Advisors

ADAM COPELAND
JODI GRIFFIN

MATTHEW GERST
ETHAN LUCARELLI

Published by the GEORGE WASHINGTON UNIVERSITY LAW SCHOOL
and the FEDERAL COMMUNICATIONS BAR ASSOCIATION

Federal Communications Law Journal

The *Federal Communications Law Journal* is published jointly by the Federal Communications Bar Association and the George Washington University Law School. The *Journal* publishes three issues per year and features articles, student notes, essays, and book reviews on issues in telecommunications, the First Amendment, broadcasting, telephony, computers, Internet, intellectual property, mass media, privacy, communications and information policymaking, and other related fields.

As the official journal of the Federal Communications Bar Association, the *Journal* is distributed to over 2,500 subscribers, including Association members as well as legal practitioners, industry experts, government officials and academics. The *Journal* is also distributed by Westlaw, Lexis, William S. Hein, and Bloomberg Law and is available on the Internet at <http://www.fclj.org>.

The *Journal* is managed by a student Editorial Board, in cooperation with the Editorial Advisory Board of the FCBA and two Faculty Advisors.

Federal Communications Bar Association

The Federal Communications Bar Association (FCBA) is a volunteer organization of attorneys, engineers, consultants, economists, government officials and law students involved in the study, development, interpretation and practice of communications and information technology law and policy. From broadband deployment to broadcast content, from emerging wireless technologies to emergency communications, from spectrum allocations to satellite broadcasting, the FCBA has something to offer nearly everyone involved in the communications industry. That is why the FCBA, more than two thousand members strong, has been the leading organization for communications lawyers and other professionals since 1936.

Through its many professional, social, and educational activities, the FCBA offers its members unique opportunities to interact with their peers and decision-makers in the communications and information technology field, and to keep abreast of significant developments relating to legal, engineering, and policy issues. Through its work with other specialized associations, the FCBA also affords its members opportunities to associate with a broad and diverse cross-section of other professionals in related fields. Although the majority of FCBA members practice in the metropolitan Washington, D.C., area, the FCBA has ten active regional chapters: Atlanta, Carolina, Florida, Midwest, New England, New York, Northern California, Pacific Northwest, Rocky Mountain, and Texas. The FCBA has members from across the U.S., its territories, and several other countries.

FCBA Officers and Executive Committee Members
2013–2014

Joseph M. Di Scipio, <i>President</i>	Ann West Bobeck
David A. Gross, <i>President-Elect</i>	Kyle D. Dixon
Monica S. Desai, <i>Secretary</i>	Erin L. Dozier
Lee Petro, <i>Asst. Secretary</i>	Julie M. Kearney
Christopher J. Wright, <i>Treasurer</i>	John T. Nakahata
Robert E. Branson, <i>Asst. Treasurer</i>	Melissa Newman
M. Anne Swanson, <i>Delegate to the ABA</i>	Laura H. Phillips
David A. Konuch, <i>Chapter Representative</i>	Thomas C. Power
Michele K. Thomas, <i>Chapter Representative</i>	Natalie G. Roisman
Brendan Carr, <i>Young Lawyers Representative</i>	Jennifer Tatel

FCBA Editorial Advisory Board

Jessica Campbell	William Richardson
Deborah Salons	Lawrence J. Spiwak

The George Washington University Law School

Established in 1865, the George Washington University Law School is the oldest law school in Washington, DC. The school is accredited by the American Bar Association and is a charter member of the Association of American Law Schools. The Law School is located on the GW campus in the downtown neighborhood familiarly known as Foggy Bottom.

GW Law has one of the largest curricula of any law school in the nation with more than 250 elective courses covering every aspect of legal study. GW Law's home institution, the George Washington University, is a private, nonsectarian institution founded in 1821 by charter of Congress.

The *Federal Communications Law Journal* is published by the George Washington University Law School and the Federal Communications Bar Association three times per year. Offices are located at 2028 G St. NW, Suite LL-020, Washington, D.C., 20052. The *Journal* can be reached at fclj@law.gwu.edu, and any submissions for publication consideration may be directed to fcljarticles@law.gwu.edu. Address all correspondence with the FCBA to the Federal Communications Bar Association, 1020 19th St. NW, Suite 325, Washington, D.C., 20036-6101.

Subscriptions: Subscriptions are \$30 per year (domestic), \$40 per year (Canada and Mexico), and \$50 per year (international). Subscriptions are to be paid in US dollars, and are only accepted on a per-volume basis, starting with the first issue. All subscriptions will be automatically renewed unless the subscriber provides timely notice of cancellation. Address changes must be made at least one month before publication date, and please provide the old address or an old mailing label. Please send all requests for address changes or other subscription-related questions to fcljsubscribe@law.gwu.edu.

Single and Back Issues: Each issue of the current volume can be purchased for \$15 (domestic, Canada and Mexico) or \$20 (international), paid in US dollars. Please send all requests for single or back issues to fcljsubscribe@law.gwu.edu.

Manuscripts: The *Journal* invites the submission of unsolicited articles, comments, essays, and book reviews mailed to the office or emailed to fcljarticles@law.gwu.edu. Manuscripts cannot be returned unless a self-addressed, postage-paid envelope is submitted with the manuscript.

Copyright: Copyright © 2013 Federal Communications Bar Association. Except as otherwise provided, the author of each article in this issues has granted permission for copies of the article to be made for classroom use, provided that 1) copies are distributed at or below cost, 2) the author and the *Journal* are identified, 3) proper notice of copyright is attached to each copy, and 4) the *Journal* is notified of the use.

Production: The citations in the *Journal* conform to the *Bluebook: A Uniform System of Citation* (19th ed., 2010), copyright by the *Columbia, Harvard, and University of Pennsylvania Law Reviews* and the *Yale Law Journal*. Variations exist for purposes of clarity and at the editors' discretion. The *Journal* is printed by Joe Christensen, Inc.

Citation: Please cite this issue as 66 FED. COMM. L.J. ____ (2013).

The views expressed in the articles and notes printed herein are not to be regarded as those of the *Journal*, the editors, faculty advisors, the George Washington University Law School, or the Federal Communications Bar Association.

FEDERAL COMMUNICATIONS LAW JOURNAL

GW | LAW

VOLUME 66 ISSUE 1

FCBA
FEDERAL COMMUNICATIONS
BAR ASSOCIATION

DECEMBER 2013

ARTICLES

Internet Policy’s Next Frontier: Usage-Based Broadband Pricing

By Daniel A. Lyons 1

Broadband providers have begun abandoning all-you-can-eat unlimited Internet plans in favor of data caps and other regimes that charge customers based on use. Consumer groups, having won the battle for net neutrality, now challenge this shift. They fear usage-based pricing will lead to higher prices, reduced service, and elimination of competition from upstarts like Netflix.

This Article examines the policies underlying the usage-based pricing trend. Compared to unlimited use plans, usage-based pricing shifts more network costs onto those who use the network the most. This can reduce costs for lighter users and make broadband more accessible to low-income consumers. Usage-based pricing may also help reduce network congestion. It can also be used anticompetitively, meaning regulators should intervene to prohibit providers with market power from harming consumers. But otherwise, broadband providers should be free to experiment with different pricing strategies to compete for customers and fund future network upgrades.

City of Arlington v. FCC: The Death of Chevron Step Zero?

By Samuel L. Feder, Matthew E. Price, and Andrew C. Noll.....47

The Supreme Court’s recent decision in *City of Arlington v. Federal Communications Commission* has largely escaped notice, but is potentially a significant administrative law case. Although the Court granted the case to decide whether an agency should receive deference in deciding the scope of its own jurisdictions—the Court held that it should—the majority, concurring, and dissenting Justices debated a different question that can be traced back to the origins of the *Chevron* doctrine: whether, prior to affording *Chevron* deference, a court must first ascertain whether Congress intended to delegate to the agency the power to interpret the particular statutory provision at issue. The majority held that a court need not do so. Such a holding may have potentially significant consequences for administrative law. For example, under *Arlington*, courts would no longer adjust their level of deference depending upon the importance or nature of

the statutory ambiguity in question. And courts may seek to counterbalance the wide interpretive authority given to agencies by rejuvenating other administrative law doctrines, such as the nondelegation doctrine, that place limits on an agency's freedom of action.

ESSAY

Articulating a Modern Approach to FCC Competition Policy

By Reed E. Hundt and Gregory L. Rosston 71

The FCC has taken three different competition policy approaches: the *classic* role of regulating terms and conditions of sale, the *modern* role of using various tools to create largely deregulated, multi-firm, competitive markets, and the *laissez-faire* approach of believing that unregulated markets, even if monopolized, will produce the best outcome. For the most part, a light-handed modern role has proven successful. The FCC should adopt such an approach going forward with a classic regulatory role as a backstop, and it should articulate clearly its competition policy framework so that firms can understand the rules and compete to provide service to customers in a pro-competitive manner.

NOTES

Lessons from Google Fiber: Why Coordinated Cost Reductions to Infrastructure Access are Necessary to Achieve Universal Broadband Deployment

By Holly Trogdon..... 103

No one can contest that eliminating state and local rights-of-way fees results in lower broadband deployment costs for Internet service providers. After Google Fiber, it may be difficult to argue that doing so leads to savings significant enough for providers to build out broadband infrastructure to those who cannot afford or do not see the value of high-speed service.

Google Fiber can inform rights-of-way policy decisions to support the FCC's goal of universal high-speed broadband service. This Note argues that if the FCC wishes to meet its goal of universal service, it should engage in efforts to lower costs related to infrastructure access, understanding that as savings increase in the deployment phase, the subsidies needed from the FCC's Connect America Fund to bridge the broadband deployment gap decrease.

To support this effort, the FCC should not interfere with state and local governments' control and management of rights-of-way, including fees. Instead of the FCC utilizing its preemptive authority under the

Telecommunications Act, this Note suggests a more coordinated approach to cost reduction. The FCC should provide states with educational resources on rights-of-way best practices, an effort that can be supported Congress expanding the FCC’s jurisdiction to collect data on rights-of-way from states. Additionally, the FCC can encourage states to adopt deployment-friendly practices such as incorporating voluntary timelines, dispute resolution mechanisms, and “dig once” policies into their statutes or deployment plans.

Toward a Fairer, Subscriber-Empowered Multichannel Television Regime: Injecting Substance Into the Good Faith Requirement on Retransmission Consent Negotiations

By Darrel John Pae 139

Coercive bundling is the practice of conditioning a local broadcast station’s retransmission consent on the carriage of other networks affiliated with the local broadcast station. A market defect results because networks, and the programming they contain, are delivered to multichannel television subscribers without regard to whether those networks are actually demanded. This market defect allows broadcast stations and the media companies owning them to charge higher prices for their networks in a way that is not possible if those networks are offered independently of each other. It also paves the way for inefficiencies in the use of resources by multichannel video programming distributors (“MVPDs”), and harms the ability of smaller MVPDs to compete with their larger, more established counterparts. Meanwhile, subscribers not only are forced to receive programming they do not demand in the first place, they also have to pay increasing subscription fees passed on to them by MVPDs that are coerced to pay higher carriage fees for the bundles they have to accept in procuring retransmission consent. These detrimental effects are inefficaciously addressed by the FCC rules on good faith because the FCC’s review authority is currently limited to the procedural aspects of retransmission consent negotiations. Therefore, the only effective remedy is for Congress to authorize the FCC to oversee the substantive aspects of retransmission consent negotiations. The FCC should then strengthen its enforcement of rules governing the duty to negotiate in good faith and prohibit practices that constitute coercive wholesale bundling.

Public Easements in Spectrum: A Solution to Protect the Public Interest

By Mary Shields 177

Over roughly the past decade, the number of devices utilizing unlicensed spectrum has grown exponentially. This exponential growth mirrors a growth in the public’s perception of the importance of unlicensed devices. Unlicensed spectrum has also been important for the development and enhancement of telecommunications technology. While the FCC once presumptively protected a licensed operator from unlicensed transmissions

causing interference, it has recently issued decisions that favor unlicensed operators over the complaints of licensed operators, likely because of an appreciation of the importance of unlicensed uses.

At this moment, it is unclear in a given case which party the FCC will choose to protect, the unlicensed or licensed operator, as there are no formal rules that protect unlicensed services. In order to ensure protection for unlicensed services valued by the public and to establish a more predictable and equitable means of determining disputes between licensed and unlicensed operators, the FCC should adopt a public prescriptive easement framework to determine the outcome of interference disputes. The public prescriptive easement framework includes consideration of notice, duration of use, and use by the public; these considerations would adequately compare the public's interest in maintaining an unlicensed service with the interests of a licensee. The results will be more predictable and will ensure the preservation of services meaningful to the public.

Internet Policy’s Next Frontier: Usage-Based Broadband Pricing

Daniel A. Lyons*

TABLE OF CONTENTS

I.	INTRODUCTION	3
II.	THE SHIFT TO USAGE-BASED PRICING IN BROADBAND MARKETS....	6
	<i>A. A Taxonomy of Usage-Based Pricing</i>	6
	<i>B. Usage-Based Pricing for Fixed Broadband Service</i>	7
	<i>C. Usage-Based Pricing for Wireless Broadband Service</i>	11
III.	USAGE-BASED PRICING AS A COST RECOVERY TOOL	12
	<i>A. Distributional Effects of Flat-Rate and Metered Pricing</i>	13
	1. Simple Metered Pricing	15
	2. Data Caps and Tiered Service Models	16
	<i>B. Recovering Costs Through Price Discrimination</i>	17
	1. Marginal and Fixed Broadband Costs	17
	2. The Potential Value of Price Discrimination.....	21
	3. Ramsey Pricing and Price Discrimination in the Broadband Industry	24
	4. Price Discrimination and Increasing Broadband Penetration Rates	27
IV.	USAGE-BASED PRICING AS A CONGESTION MANAGEMENT TOOL...29	
	<i>A. Broadband Service and the Possibility of Congestion Costs</i>	29
	<i>B. Measuring Broadband Congestion</i>	33

* Assistant Professor of Law, Boston College Law School. This article was made possible through the assistance of the Mercatus Center at George Mason University and a grant from the BC Law School Fund, support which is gratefully acknowledged. Special thanks to Ted Bolema, Jerry Brito, Brett Frischmann, Brian Galle, Herbert Hovenkamp, Joseph Liu, Crystal Lyons, Randolph May, Adam Thierer, Michael Weinberg, Richard Williams, Christopher Yoo, and two anonymous commenters for helpful comments and suggestions.

C. Usage-Based Pricing as a Congestion Management Tool..... 35

V. POTENTIAL ANTICOMPETITIVE EFFECTS OF USAGE-BASED PRICING36

A. Data Caps as a Vertical Restraint on Trade 37

B. The Xfinity-Xbox Dispute..... 41

C. Data Caps and Market Power 43

VI. THE IMPORTANCE OF TRANSPARENCY43

VII. CONCLUSION45

I. INTRODUCTION

The United States is in the midst of an explosion in Internet content and applications. In 2012 alone, Internet traffic in the United States grew thirty-six percent, reaching a volume sixteen times greater than that of the entire U.S. Internet in 2005.¹ Peak-time traffic grew even faster,² driven by the rising popularity of bandwidth-intensive real-time entertainment such as Netflix, which by itself generates nearly one-third of all downstream traffic during peak hours.³ And that growth will continue for the foreseeable future: network equipment giant Cisco Systems expects U.S. Internet traffic nearly to triple between now and 2017.⁴ Globally, more data will traverse the network in 2017 than in every year from 1984 through 2012 *combined*.⁵

This steady growth in demand, and the continuing capital investment required to meet it, has prompted broadband providers to reconsider the flat-rate pricing model that has dominated the consumer Internet access market since the late 1990s. Flat-rate, or all-you-can-eat pricing, has proven popular with consumers, primarily because such plans are simple and predictable. Customers know how much they will pay for broadband access each month, and can use the Internet without worrying that excessive use

1. *VNI Forecast Highlights*, CISCO SYS., http://www.cisco.com/web/solutions/sp/vni/vni_forecast_highlights/index.html (last visited Aug. 10, 2013) (click “Filter by Country”, click the United States, and click “2012 Year in Review”) (“In the United States, average Internet traffic grew 36% in 2012. . . . Internet traffic was 240 Petabytes per day in 2012, up from 179 Petabytes per day in 2011. . . . U.S. Internet traffic in 2012 was equivalent to 16x the volume of the entire U.S. Internet in 2005.”).

2. *Id.* (same instructions) (“In the United States, peak Internet traffic grew 41% in 2012.”).

3. SANDVINE, GLOBAL INTERNET PHENOMENA REPORT 2H 2012 6 (2012) [hereinafter Sandvine 2012]. Sandvine defines peak time as the period within which aggregate network traffic is within five percent of its highest daily value. *Id.* at 29. On an average day, the peak time for downstream Internet traffic in North American fixed networks is roughly from 9:00 until 11:30 p.m. SANDVINE, GLOBAL INTERNET PHENOMENA REPORT FALL 2011 5 (2011) [hereinafter Sandvine 2011]. Sandvine estimates that peak times are becoming shorter but more intense, as “subscribers are concentrating the same amount of activity within an increasingly narrow slice of time.” *Id.* As discussed below, peak times on wireless networks are more varied and unpredictable.

4. *See VNI Forecast Highlights*, *supra* note 1 (click “Filter by Country”, click the United States, and click “2017 Forecast Highlights”) (“In the United States, Internet traffic will grow 3.2-fold from 2012 to 2017 Internet traffic will be 783 Petabytes per day in 2017, up from 240 Petabytes per day in 2012. . . . [P]eak Internet traffic will grow 3.6-fold.”).

5. *See id.* (“Globally, IP traffic will reach an annual run rate of 1.4 Zettabytes in 2017.”); ROBERT PEPPER, MOBILE NETWORKS IN A ZETTABYTE WORLD: TRENDS FROM CISCO’S VISUAL NETWORKING INDEX 3 (2012) (“By 2016, global IP traffic will reach an annual run rate of 1.3 zettabytes per year[.] . . . [M]ore traffic will traverse global networks than from the beginning of the Internet to today . . . combined. 1984-2012: 1.2 Zettabytes”), available at http://www.gsma.com/spectrum/wp-content/uploads/2012/06/Dr_Robert_Pepper_Cisco_Public_Policy-Forum_Data_Demand.pdf.

will eat into the family budget. But flat-rate unlimited use can also create inefficient network operation. Because price is not tied to online use, consumers have little incentive to economize their bandwidth consumption. Moreover, network costs are spread evenly throughout the customer base, forcing light Internet users to subsidize heavier users' data-intensive lifestyles.

Broadband providers have begun experimenting with alternative pricing strategies to address these inefficiencies. This movement is most visible in the wireless industry, where the smartphone revolution grew much faster than providers expected. Smartphone use, in turn, spawned a new industry in mobile content and applications and at times has caused wireless broadband demand to outstrip network capacity (a phenomenon sometimes called the "iPhone effect").⁶ Tiered pricing has now become the norm in wireless broadband, where consumers can choose from several different pricing and service options.⁷ Many residential fixed broadband providers have also explored tiered service, monthly data caps, and overage charges.

While regulators⁸ and many academics⁹ have largely supported this shift, many public interest groups have reacted with skepticism.¹⁰ Groups

6. Crystal Lyons, *Data Caps—Opportunities and Concerns for Developers*, BOSTINNO (July 2, 2012, 9:39 AM), <http://bostinno.com/channels/data-caps-opportunities-and-concerns-for-developers/>; David Goldman, *AT&T Isn't Nearly As Bad As You Think*, CNNMONEY (July 8, 2013, 6:08 AM), <http://money.cnn.com/2013/07/08/technology/mobile/att-4g-network/index.html> (describing the iPhone effect on AT&T's 3G network).

7. See, e.g., Rene Ritchie, *AT&T Adds Data Caps, Changes Rates for iPhone Plans, Will Support Tethering for Extra Charge*, iMORE (June 2, 2010, 7:48 AM), <http://www.imore.com/2010/06/02/att-adds-data-caps-rates-iphone-plans-plans-support-tethering/>.

8. *FCC Boss Backs Usage-Based Pricing for Cable Internet Access*, NBCNEWS (May 22, 2012, 4:14 PM) <http://www.nbcnews.com/business/fcc-boss-backs-usage-based-pricing-cable-internet-access-788008?franchiseSlug=businessmain>; Michael Turk, *Public Policy Discussion With FTC and FCC Commissioners*, CABLETECHTALK (June 15, 2011) <http://www.cabletechtalk.com/the-cable-show/public-policy-discussion-with-ftc-and-fcc-commissioners/>; but see Karl Bode, *FCC Boss Suddenly 'Concerned' About Bandwidth Caps?*, DSLREPORTS.COM (Sept. 12, 2012), <http://www.dsireports.com/shownews/FCC-Boss-Suddenly-Concerned-About-Bandwidth-Caps-121154> (Former Chairman Genachowski recently questioned the propriety of data caps).

9. *Hearing on Net Neutrality Before the S. Comm. on Commerce, Science, and Transportation*, 109th Cong. 2 (2006) (statement of Prof. Lawrence Lessig) ("I believe, for example, that consumer-tiering should be encouraged."); Cecilia Kang, *Comcast Illegally Interfered with Web File-Sharing Traffic, FCC Says*, WASH. POST (July 30, 2008), <http://www.washingtonpost.com/wp-dyn/content/article/2008/07/29/AR2008072902077.html> (quoting Prof. Timothy Wu, who describes usage-based pricing as "probably the fairest system going").

10. See, e.g., ANDREW ODLYZKO ET AL., *KNOW YOUR LIMITS: CONSIDERING THE ROLE OF DATA CAPS AND USAGE BASED BILLING IN INTERNET ACCESS SERVICE* 47 (2012); Letter from Free Press, Consumers Union, Public Knowledge, and New America Foundation to Sen. John D. Rockefeller and Sen. Kay Bailey Hutchison (Apr. 23, 2012) [hereinafter Letter from Free Press], available at http://www.freepress.net/sites/default/files/fp-legacy/PI_letter_Senate_Commerce_OVDtrends_Apr2012_FINAL.pdf.

such as Public Knowledge and Free Press, which helped lead the charge for net neutrality, have argued that broadband providers should charge customers the same amount regardless of use.¹¹ They fear that monthly consumption limits create artificial scarcity, allowing providers to pad profits and avoid future network upgrades. They also assert that fixed broadband providers may use monthly limits to shield their cable businesses from Internet-based competitors.¹² These arguments have found an audience at the Justice Department, which is investigating whether data caps violate antitrust law.¹³ In late 2012, Senator Ron Wyden introduced a bill that would regulate and limit the practice.¹⁴

This article explores the trend toward usage-based broadband pricing. It finds that data caps and other forms of metered consumption are not inherently anti-consumer or anticompetitive. Rather, they reflect different pricing strategies through which a broadband company may recover costs from its customer base and fund future infrastructure investment. By aligning costs more closely with use, usage-based pricing shifts more network costs onto those consumers who use the network the most. Companies can thus avoid forcing light Internet users to subsidize the data-heavy habits of online gamers and movie torrenters. Usage-based pricing may also help alleviate network congestion by encouraging customers, content providers, and network operators to use broadband more efficiently.

As opponents of usage-based pricing have noted, data caps may be deployed for anticompetitive purposes. But regulators should be concerned primarily when a firm with market power exploits that power in a way that harms consumers.¹⁵ Absent a specific market failure, which critics have not yet shown, broadband providers should be free to experiment with usage-based pricing and other pricing strategies, using these as tools in their arsenal to meet rising broadband demand. Public policies allowing

11. ODLYZKO ET AL., *supra* note 10, at 54.

12. *See id.* at 56. As discussed in greater detail below, this concern was brought into sharp focus when Comcast announced that customers who subscribe to both broadband and the company's Xfinity cable service would be permitted to watch Xfinity using an app on the Microsoft Xbox without incurring charges against the customer's data cap, even though Netflix and other Internet-based video streamed through the Xbox would be counted against the customer's cap. *See* App'ns of Comcast Corp., Gen. Electric Co., & NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses, *Petition to Enforce Merger Conditions*, FCC MB Docket No. 10-56 (fil. Aug. 1, 2012) [hereinafter *Petition to Enforce Merger Conditions*].

13. Cecilia Kang, *Justice Dept. Probing Cable Companies' Internet Data Limits*, WASH. POST (June 13, 2012), http://articles.washingtonpost.com/2012-06-13/business/35460748_1_cable-companies-internet-data-antitrust.

14. Data Cap Integrity Act, 112 Cong. (2012), *available at* <http://www.wyden.senate.gov/download/data-cap-integrity-act-bill-text>.

15. Market power is the ability for a corporation to raise its prices above the competitive level by reducing output. *See* PAUL KRUGMAN & ROBIN WELLS, *MICROECONOMICS* 358 (2008).

providers the freedom to experiment best preserve the spirit of innovation that has characterized the Internet since its inception.

This article critically examines the policies underlying this shift toward usage-based pricing. Part I describes usage-based pricing generally and details its rise in both wireless and fixed broadband service. Part II analyzes usage-based pricing as a cost recovery tool, a way that a broadband provider can allocate its fixed costs across its customer base. Part III considers the pricing strategy as a method of managing broadband network congestion. Part IV examines the potential anticompetitive uses of a usage-based pricing strategy. Finally, Part V highlights the need for transparent policies and consumer education to facilitate the shift toward usage-based pricing, and offers policy recommendations to protect consumers.

II. THE SHIFT TO USAGE-BASED PRICING IN BROADBAND MARKETS

A. *A Taxonomy of Usage-Based Pricing*

“Usage-based pricing” is an umbrella term for any billing system that charges on the basis of consumption. Although Internet access providers abandoned usage-based pricing for consumers early in the industry’s history,¹⁶ it is common in other parts of the Internet ecosystem and in many other network industries.¹⁷ In its simplest form, known as “metering,” the firm charges a basic fee per unit consumed. For example, telephone companies such as AT&T and Sprint historically charged a certain rate per

16. During the early 1990s, dial-up Internet providers typically offered Internet access at a per-minute rate. This changed in 1996, when industry leader America Online changed to a flat-rate, unlimited use pricing model. The company was initially unprepared for the increased demand generated by the shift, which led to numerous blackouts and busy signals. See Matthew T. Bodie, *AOL Time Warner and the False God of Shareholder Primacy*, 31 J. CORP. L. 975, 986 (2006) (citing NINA MUNK, *FOOLS RUSH IN: STEVE CASE, JERRY LEVIN, AND THE UNMAKING OF AOL TIME WARNER* 84 (2004)). But the move nonetheless proved popular with consumers, leading competitors to follow suit. As dial-up yielded to higher-capacity broadband networks, competitors retained the unlimited flat-fee model.

17. Network industries are those in which consumers attach themselves to one or more networks, for example, communications and transportation networks, such as telephone, computer, railroad, or electricity networks. Networks tend to exhibit positive feedback due to demand-side scale economies: large networks are more attractive to buyers, and thus tend to get larger. See Carl Shapiro, Deputy Assistant Attorney Gen., Antitrust Div., Dep’t of Justice, Speech before the American Law Institute and American Bar Association: Antitrust in Network Industries (Jan. 25, 1996), available at <http://www.justice.gov/atr/public/speeches/0593.pdf>.

minute for long-distance calls. The price per minute became a high-profile point of competition between carriers.¹⁸

In more sophisticated variations, companies can use metered pricing to induce particular customer behavior. Many companies offer a per-unit discount on large purchases to encourage higher-volume consumption. Alternatively, some utilities such as water companies charge a higher rate per unit after consumption reaches a certain threshold, to encourage conservation and penalize customers who draw more than their neighbors from a common pool.¹⁹ Some electricity utilities, facing above-capacity demand during peak times, charge a different rate per kilowatt-hour for peak and non-peak electricity use, hoping to induce customers to shift nonessential consumption.²⁰ Similarly, wireless companies famously offered free nights and weekends to customers, partly to shift call volumes to periods when the telephone network was underutilized.²¹

Companies may also adopt a *two-part tariff*, wherein the customer pays a fixed rate per month for access to the network and an additional fee per unit for consumption on that network. Two-part tariffs are attractive to network industries because the fixed fee ensures that all customers contribute in some measure toward common network costs, while the per-unit fee recovers marginal costs efficiently, and can also shift some network costs onto heavier users. Tiered pricing is one form of a two-part tariff that is common in the wireless telephone industry. Under tiered pricing, customers could choose among wireless plans, each of which offers a certain number of minutes per month at a fixed rate.²² Each customer receives unrestricted calling each month up to his or her plan limit, and then incurs an additional per-minute charge for consumption exceeding that threshold.²³

B. Usage-Based Pricing for Fixed Broadband Service

Although residential consumers are accustomed to flat-rate unlimited Internet access, it is important to note that usage-based pricing has long been the norm in many other parts of the Internet ecosystem. Content providers often get online by purchasing Internet transit service from a

18. See, e.g., Edward Cavanaugh, *Antitrust Remedies Revisited*, 87 OR. L. REV. 147, 198 (2005) (discussing long-distance competition in the wake of the 1984 breakup of the AT&T monopoly).

19. See SCOTT WALLSTEN, PROGRESS & FREEDOM FOUND. PROGRESS SNAPSHOT, MANAGING THE NETWORK? RETHINK PRICES, NOT NET NEUTRALITY 3 (Release 3.12, Oct. 2007).

20. See e.g., *On Peak & Off Peak Hours*, PACIFIC POWER, <http://www.pacificpower.net/ya/po/otou/ooh.html> (last visited Aug. 10, 2013).

21. See Jerry Ellig, *Intercarrier Compensation and Consumer Welfare*, 2005 U. ILL. J.L. TECH. & POL'Y 97, 105 (2005); Christopher S. Yoo, *Network Neutrality, Consumers, and Innovation*, 2008 U. CHI. LEGAL F. 179, 206–07 (2008).

22. See Ellig, *supra* note 21, at 104–06.

23. *Id.*

transit provider.²⁴ Transit providers act as gateways allowing content providers to route their data to the Internet. Smaller transit providers also often purchase transit service from larger networks.²⁵ Transit is typically sold on a metered basis: customers pay based upon the volume of traffic they send each month.²⁶ Many customers pre-commit to certain volumes each month at a “committed rate”, and pay an incremental rate-per-unit for traffic above the committed rate.²⁷ To avoid transit fees and to route content more quickly to its destination, some content providers choose instead to purchase access from private content-delivery networks such as Akamai or Limelight, which also typically charge customers based on volume.²⁸

Many fixed broadband providers are moving toward usage-based pricing for residential consumers as well. More specifically, several have adopted data caps, which can function as a two-part tariff. A consumer typically purchases a fixed number of gigabytes that he or she may consume monthly, often followed by some penalty if the consumer exceeds the cap. Comcast adopted a 250-gigabyte monthly cap on residential broadband customers in 2008.²⁹ The company contacted customers who

24. See CHRISTOPHER S. YOO, *THE DYNAMIC INTERNET* 94 (2012); WILLIAM B. NORTON, *THE INTERNET PEERING PLAYBOOK* 28 (2013).

25. NORTON, *supra* note 24, at 28.

26. Importantly, transit rates typically do not reflect a customer’s total monthly bandwidth usage, but rather the customer’s peak bandwidth usage. See YOO, *supra* note 24, at 94; NORTON, *supra* note 24, at 31–32. The transit provider maintains a meter that records the traffic the customer sends for transit. Every five minutes, the meter is sampled, and the transit provider records the total traffic since the last five-minute interval. At the end of the month, each five-minute interval is converted into megabits-per-second and rank-ordered from lowest to highest. The megabits-per-second at the 95th percentile is used to determine the customer’s bill for the month, so that the customer is not penalized for occasional, unusually large traffic bursts. The transit provider multiplies the 95th-percentile megabit-per-second rate by the contractual price per megabit per second to calculate the customer’s monthly bill. NORTON, *supra* note 24, at 30–32.

27. *Id.* at 32–33.

28. *Id.* at 149; see, e.g., DAN RAYBURN, *VIDEO CDN DATA: PRICING, CONTRACT, VOLUME AND MARKET SIZING TRENDS* (May 14, 2012), available at <http://blog.streamingmedia.com/wp-content/uploads/2012/09/2012CDNSummit-Rayburn-Pricing.pdf> (showing that CDN customers typically pay on a per-GB-delivered or per-Mbps-sustained basis).

29. See *Announcement Regarding an Amendment to Our Acceptable Use Policy*, COMCAST, <http://xfinity.comcast.net/terms/network/amendment/> (last visited Aug. 10, 2013) [hereinafter *Comcast Acceptable Use*]. The policy took effect on October 1, 2008. This change came shortly after the FCC sanctioned the company for secretly degrading peer-to-peer networking traffic as a method of managing network congestion. See *Formal Complaint of Free Press & Public Knowledge Against Comcast Corp. for Secretly Degrading Peer-to-Peer Applications*, *Memorandum Opinion and Order*, 23 FCC Rcd. 13028, 13066 (2008) [hereinafter *Formal Complaint of Free Press*], *vacated*, *Comcast Corp. v. FCC*, 600 F.3d 642 (D.C. Cir. 2010). As a result, many commenters have suggested Comcast adopted its data cap to solve the congestion problems caused by peer-to-peer traffic, although Comcast did not explicitly make this connection.

exceeded the cap³⁰ and reserved the right to terminate service to repeat offenders, though it is unclear how often it actually did so.³¹

Shortly thereafter, Time Warner Cable experimented with a much lower data cap and an overage charge in some markets, but canceled the pilot program after negative customer feedback.³² AT&T and CenturyLink have also adopted data caps,³³ although Verizon has not. In May 2012, Comcast eliminated its 250-gigabyte cap and since then has begun testing other pricing models in some markets, including a soft cap of 300 gigabytes with a per-gigabyte overage charge for exceeding the cap.³⁴

Of course, the effectiveness of a data cap depends significantly on customers' understanding of how much data their online activities consume, and how close they come to the cap each month. A recent Sandvine report on network use states that the mean monthly data

30. *Comcast Acceptable Use*, *supra* note 29 ("The only difference is that we will now provide a limit by which a customer may be contacted. As part of our pre-existing policy, we will continue to contact the top users of our high-speed Internet service and ask them to curb their usage. If a customer uses more than 250 GB and is one of the top users of our service, he or she may be contacted by Comcast to notify them of excessive use."); *How Comcast Reads Your Data Usage*, COMCAST, <http://customer.comcast.com/help-and-support/internet/data-usage/> (last updated Aug. 8, 2013) ("If you exceed 250 GB again within six months of the first contact, your service will be subject to termination and you will not be eligible for either residential or commercial Internet service for twelve months.").

31. Public Knowledge, a public interest group that has challenged data caps, has profiled Andre Vrignaud, a gaming consultant whose access was terminated after he exceeded the cap for two consecutive months in 2011. *See* ODLYZKO ET AL., *supra* note 10, at 3–4. Vrignaud claimed his excessive use stemmed from his reliance on cloud-based storage. *Id.*; *see also* Ryan Singel, *Comcast Bans Seattle Man from Internet for his Cloudy Ways*, WIRED (July 13, 2011, 4:20 PM), <http://www.wired.com/epicenter/2011/07/seattle-comcast/>. After Vrignaud's story received national attention, Comcast offered to restore his service, though he apparently declined the offer. *See* Dean Takahashi, *Who Will Pick Up Paying Customer That Comcast Dropped Because of High Data Usage?*, VENTUREBEAT (July 29, 2011, 2:00 PM), <http://venturebeat.com/2011/07/29/who-will-pick-up-paying-customer-that-comcast-dropped-because-of-high-data-usage/>.

32. In Beaumont, Texas, customers were offered a choice of 5, 10, 20, or 40 gigabytes monthly, with a fee for exceeding the cap. *See* Chloe Albanesius, *Time Warner to Test Usage-Based System*, PC MAGAZINE (Jan. 17, 2008, 5:39 PM), <http://www.pcmag.com/article2/0,2817,2250259,00.asp>. The company later marketed 100 gigabyte caps in New York and North Carolina. *See* Chloe Albanesius, *Time Warner Scraps Bandwidth Cap Testing*, PC MAG. (Apr. 16, 2009, 3:35 PM), <http://www.pcmag.com/article2/0,2817,2345430,00.asp>.

33. *See* Jared Newman, *AT&T's U-Verse and DSL Data Caps: Good Deal, Bad Precedent*, PC WORLD (Mar. 14, 2011, 8:43 AM), http://www.pcworld.com/article/222039/atandts_uverse_and_dsl_data_caps_good_deal_bad_precedent.html; *Excessive Use Policy*, CENTURYLINK, <http://qwest.centurylink.com/internet/help/eup.html> (last visited Aug. 10, 2013).

34. *See Comcast Monthly Data Usage Threshold Suspension*, COMCAST, <http://customer.comcast.com/help-and-support/internet/common-questions-excessive-use/> (last updated July 23, 2013).

consumption in 2012 was 51.3 gigabytes.³⁵ Based on this figure, one could use almost six times more data than the average consumer before running afoul of Comcast's 300-gigabyte limit. According to Netflix, streaming video typically consumes between 0.3 and 1.0 gigabytes per hour, while its high-definition ("HD") content streams at 2.3 gigabytes per hour.³⁶ To reach 300 gigabytes, one would need to stream 130 hours of HD content in one month—or approximately two feature-length movies each day. Alternatively, one could stream between 300 and 1000 hours of non-HD content. Comcast notes that its previous 250-gigabyte data cap permitted a customer to send approximately 50 million emails or download 62,500 songs each month.³⁷ While it is not inconceivable that a customer would reach these totals, they far exceed the amount of content a typical subscriber consumes each month. A recent Federal Communications Commission report notes that "most thresholds in wire-line today in the US appear to affect only high end users."³⁸ Of course, this conclusion may change if monthly mean data consumption rises significantly and consumption limits do not keep pace.³⁹ Comcast and other providers have created online tracking tools to help consumers measure their monthly usage and determine how much data individual activities consume.⁴⁰

Other broadband providers have begun offering speed-based service tiers. Rather than paying for a fixed amount of gigabytes monthly, the customer chooses among different maximum download and upload rates.⁴¹ For example, the basic Verizon FiOS broadband plan delivers customers 15 megabits per second ("Mbps") download and 5 Mbps upload.⁴² But customers can upgrade to premium plans offering between 50 and 500 Mbps download, and 25–100 Mbps upload.⁴³ Some broadband providers

35. Sandvine 2012, *supra* note 3, at 6. While mean monthly data use is 51.3 gigabytes, median monthly data use is a much lower 16.8 gigabytes. *Id.* This implies that the mean is artificially inflated by heavier users and the median figure is more representative of the "average" household. *Id.* Nonetheless, to be cautious, this analysis uses the mean figure, particularly in light of the fact that per capita data consumption has likely increased since 2012. *Id.*

36. *Netflix Lowers Data Usage By 2/3 for Members in Canada*, NETFLIX (March 28, 2011, 7:00 PM), <http://blog.netflix.com/2011/03/netflix-lowers-data-usage-by-23-for.html>.

37. *Comcast Acceptable Use*, *supra* note 29.

38. FCC, OPEN INTERNET ADVISORY COMMITTEE 2013 ANNUAL REPORT 23 (2013), available at <http://transition.fcc.gov/cgb/oiac/oiac-2013-annual-report.pdf>.

39. *See id.* According to Sandvine, mean monthly data use in 2011 was 22.7 gigabytes, meaning that is more than doubled in one year. *See* Sandvine 2011, *supra* note 3, at 5.

40. *See Comcast Monthly Data Usage Threshold Suspension*, *supra* note 34.

41. *See, e.g.,* Michael Weinberg, *Price Discrimination and Data Caps Are Not the Same Thing*, ALLTHINGS.D (Apr. 8, 2013), <http://allthingsd.com/20130408/price-discrimination-and-data-caps-are-not-the-same-thing/>; Daniel A. Lyons, *We Should Promote Broadband Pricing Innovation*, COMPUTERWORLD (June 18, 2013), http://www.computerworld.com/s/article/9240126/We_should_promote_broadband_pricing_innovation.

42. *Whatever You're Into, There's a FiOS Speed for You*, VERIZON, <http://www.verizon.com/home/fios-fastest-internet/fastest-internet-plans/> (last visited Aug. 14, 2013).

43. *Id.*

offer unlimited monthly data at various speeds, while others offer plans that vary both maximum speed and monthly data limits.⁴⁴

C. Usage-Based Pricing for Wireless Broadband Service

Like fixed broadband service, most wireless broadband providers initially offered flat-rate unlimited data plans. But the surprisingly strong surge in smartphone-driven mobile data demand prompted most wireless carriers to shift to data caps, primarily as a way to slow the growth rate of mobile broadband demand and allow network capacity to catch up.⁴⁵ In 2007, AT&T paid generously to be the exclusive carrier of Apple's iPhone, at a time when the smartphone was in its infancy. While the agreement succeeded in drawing more smartphone customers to AT&T, these customers were generally tech-savvy users with significant data demands.⁴⁶ By some reports, the average iPhone user consumed ten times the bandwidth of a typical smartphone user.⁴⁷ This concentration of heavy data users on the AT&T network led to much-publicized congestion in many urban areas, where smartphone users were concentrated. The company explained that forty percent of the network's traffic was driven by just three percent of its smartphone users, forcing the company to examine strategies either to reduce iPhone customer data use or to compensate the company for the congestion that they caused.⁴⁸ In December 2010, AT&T shifted to a three-tiered pricing plan, with limits at 200 megabytes, 2 gigabytes, and 4 gigabytes, with a per-gigabyte overage charge.⁴⁹ Verizon Wireless adopted similar caps the following year,⁵⁰ and in mid-2012 both companies added a

44. For example, in some markets Comcast offers several tiers of service at different speeds, but each tier is subject to a soft monthly data cap and an overage charge for exceeding the plan. See Teff Baumgartner, *Comcast, TWC Try on Data Caps*, MULTICHANNEL NEWS, Aug. 5, 2013, 2013 WLNR 19139706; *What Are the Different Plans You Will Be Launching?*, COMCAST, <http://customer.comcast.com/help-and-support/internet/data-usage-what-are-the-different-plans-launching> (last updated Aug. 27, 2013, 6:14 PM).

45. See, e.g., Andrew M. Seybold, *Wireless Network Congestion*, ANDREWSEYBOLD (Feb. 9, 2012), andrewseybold.com/2845-wireless-network-congestion.

46. Brian X. Chen, *AT&T Chief Regrets Offering Unlimited Data for iPhone*, N.Y. TIMES (May 4, 2012, 4:25 PM), <http://bits.blogs.nytimes.com/2012/05/04/att-randall-stephenson/>.

47. Sam Oliver, *AT&T Caps New iPhone, iPad Data Plans at 2GB, Announces Tethering*, APPLE INSIDER (June 2, 2010, 8:05 AM), http://www.appleinsider.com/articles/10/06/02/att_announces_iphone_tethering_plans_caps_ipad_3g_data_at_2gb.html.

48. *Id.*

49. *Id.*

50. Trefis Team, *Verizon's Stock Looks Full at \$42 As It Readies to Scrap Unlimited Data Plans*, FORBES (May 29, 2012, 10:58 AM), <http://www.forbes.com/sites/greatspeculations/2012/05/29/verizons-stock-looks-full-at-42-as-it-readies-to-scrap-unlimited-data-plans/>. Verizon's data caps came shortly after Apple made the iPhone available on Verizon's network. Both AT&T and Verizon initially grandfathered in the unlimited flat-rate data plans for existing customers, although both sometimes throttle back the speeds of the top five percent of data users still enrolled in these unlimited plans.

shared-data option, which allows customers to share their monthly data multiple devices.

Other wireless carriers have embraced different methods of managing consumer data use. Like its competitors, T-Mobile also adopted a tiered pricing system for its customers in 2011.⁵¹ T-Mobile, however, does not assess an overage charge on customers who exceed the cap.⁵² Instead, those customers see their speed reduced to 100 kilobytes per second for the rest of the month.⁵³ Sprint offers unlimited data at a flat rate.⁵⁴ But speed tests often place the Sprint network a distant third behind AT&T and Verizon in most major areas, which suggests that these unlimited plans may take a toll on network operations.⁵⁵

III. USAGE-BASED PRICING AS A COST RECOVERY TOOL

At their core, data caps and other forms of usage-based pricing represent different pricing strategies through which a company can spread its costs over its customer base. Usage-based pricing allows broadband companies to shift more of their network costs onto those who use the network the most. This alternative pricing strategy may prove both more efficient for network providers and more attractive to consumers, particularly those who cannot afford an unlimited flat-rate plan.

Verizon Wireless has further announced that these grandfathered customers must surrender their unlimited data plans if they wish to migrate from 3G to the company's new LTE network, meaning many unlimited plans will be phased out over the next few years. *Id.*

51. Jagdish Rebellio, *Wireless Operators Prefer Tiered Pricing*, *Market Insight*, IHS ELECTRONICS & MEDIA (Aug. 12, 2011), <http://www.isuppli.com/mobile-and-wireless-communications/marketwatch/pages/wireless-operators-prefer-tiered-pricing.aspx>. T-Mobile offers a premium tier with unlimited monthly data.

52. *See* Danny Sullivan, *In T-Mobile's 'Simple Choice' Plan, 'Unlimited' Meets Limits*, CNET (Mar. 26, 2013, 5:08 PM), http://news.cnet.com/8301-33620_3-57576454-278/in-t-mobiles-simple-choice-plan-unlimited-meets-limits/.

53. *See id.*

54. Sinead Carew, *Sprint 4G Network Upgrade May Kill Unlimited Data Plan*, HUFFINGTON POST (Nov. 26, 2011, 12:01 PM), http://www.huffingtonpost.com/2011/11/26/sprints-4g-network-unlimited-data-plan_n_1114084.html.

55. *See, e.g.*, David Goldman, *Which iPhone Carrier is Best in Your City?*, CNNMONEY (May 30, 2012), <http://money.cnn.com/2012/05/30/technology/iphone-carrier-compare/>. PC Magazine notes that nationwide tests show Sprint's 3G network is "the slowest of the major wireless providers," with download speeds half of that on Verizon's 3G network. Sascha Segan & Alex Colon, *Exclusive: Testing Sprint's New 4G LTE Network*, PC MAGAZINE (June 18, 2012), <http://www.pcmag.com/article2/0,2817,2405675,00.asp>. The company is developing a 4G LTE network that will make the company more competitive. *Id.* The new network is projected to deliver maximum speeds slower than AT&T or Verizon, but is designed to manage traffic so as to deliver a consistent average speed during periods of high demand. *Id.*

A. *Distributional Effects of Flat-Rate and Metered Pricing*

Under a flat-rate pricing system, lighter users end up paying a disproportionate share of overall network costs. As the Federal Communications Commission (“FCC”) has noted, “[r]equiring all subscribers to pay the same amount for broadband service, regardless of the performance or usage of the service, would force lighter end users of the network to subsidize heavier end users.”⁵⁶ Heavier users consume more of the network’s total capacity than lighter users, yet light and heavy users contribute equally to cover the network’s costs. This means that lighter users pay a higher effective rate per megabyte than heavier users. To put the Commission’s concern another way, flat-rate pricing forces below-average users to purchase more broadband access than they use.⁵⁷ Typically, the network owner will set a price that reflects the bandwidth consumed by the average user.⁵⁸ This means that lighter users are charged as if they consume an average amount of data monthly, although by definition their actual usage is below that amount.⁵⁹

This disparity could discourage broadband adoption, and limit access to broadband services, particularly among poorer consumers. If lighter users are forced to purchase more broadband than they need, some lighter users may choose not to purchase access at the single flat rate, even though the benefits they receive would exceed the cost of providing service at their anticipated volume level.⁶⁰ These consumers demand less from the Internet each month than the average user, and therefore may not place a high premium on unlimited access, though they might be willing to pay a lower rate for the small amount of monthly data to meet their needs.

These effects would be unremarkable if most consumers used roughly the same amount of data. Cross-subsidization is a trivial issue if there is little absolute difference in data consumption between below-average and above-average users. In that instance, the amount of the subsidy would be small and might cancel out over time if individual users consume slightly below-average amounts of data in one month, and slightly above-average amounts in the next.

But this turns out not to be the case. According to Sandvine’s Fall 2012 report on network traffic, the heaviest one percent of downstream users account for 12.8% of total North American fixed downstream traffic, while the heaviest one percent of upstream users account for almost thirty-

56. Preserving the Open Internet Broadband Industry Practices, *Report & Order*, FCC 10-201, para. 72 (2010), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf.

57. Yoo, *supra* note 21, at 203.

58. *See id.*

59. *Id.*

60. *See id.*

nine percent of total upstream use.⁶¹ By comparison, the bottom half of broadband consumers account for only 5.2% of total North American fixed broadband traffic.⁶²

The gulf is vaster in the wireless market. Sandvine notes that median monthly mobile data consumption in North America is 32.9 megabytes.⁶³ But mean monthly consumption is almost ten times that figure, at 317.2 megabytes.⁶⁴ This means that a small number of heavy users are consuming significantly more data than the typical consumer.⁶⁵ This surprising result stems from the fact that the mobile data market is bimodal, consisting of a large number of first-generation feature phones and an increasing number of first-time smartphone adopters, both of which use small amounts of data, in addition to a customer segment using more data-intensive smartphones and tablets.⁶⁶ Therefore the mobile data network is dominated by a small, but increasing, number of heavy users. In fact, Sandvine estimates that the heaviest one percent of mobile data users consume 23.9% of upstream and 18.7% of downstream mobile traffic.⁶⁷ By comparison, the bottom half of all wireless data customers account for less than one percent of total network traffic.⁶⁸

Given the substantial disparity between heavy and light users, it is not surprising that some broadband providers are exploring alternative pricing regimes that would eliminate the cross-subsidy. Former Commission Chairman Julius Genachowski noted that usage-based pricing can “increase choice and competition, and it can increase fairness. It can . . . result in lower prices for people who consume less broadband, so experimentation in this area with those goals in mind is particularly appropriate.”⁶⁹ Former Federal Trade Commission Chairman Jon Leibowitz, an antitrust lawyer who specialized in telecommunications

61. Sandvine 2012, *supra* note 3, at 7. “Downstream” refers to the flow of information from the Internet to the consumer, while “upstream” refers to the flow of information from the consumer to another destination on the Internet. *Id.*

62. *Id.*

63. *Id.* at 9.

64. *Id.*

65. The mean is the average amount of data consumed per customer, and is calculated by dividing total data consumption by total number of customers. The median is the amount of data consumed by the customer at the midpoint of the range, meaning if you ranked all customers from least data to most data, an equal number of customers use less than the median and more than the median. The significant disparity between the mean and the median stems from the fact that the customers who use above-median amounts of data consume *significantly* more data.

66. *See id.*; Sandvine 2011, *supra* note 3, at 10.

67. Sandvine 2012, *supra* note 3, at 10.

68. *Id.*

69. *Usage-Based Pricing Can Help Competition, Genachowski Says*, COMM. DAILY, 2012 WLNR 11103531 (May 23, 2012).

issues, similarly supports usage-based pricing, noting that the practice would help fund future investment in network expansion and upgrades.⁷⁰

1. Simple Metered Pricing

There are several usage-based pricing models that could shift more network costs onto heavier users. A simple metered pricing plan, which bills the consumer on a per-megabyte or per-gigabyte basis, would ensure that the amount each consumer pays for broadband access reflects the use each customer receives from the network. Like water utilities, broadband providers could set a higher per-unit rate on data consumption above a certain amount to recover an even greater proportion of costs from those who draw most upon the common bandwidth pool.

But simple metered pricing might prove difficult to administer. First, the additional transaction costs of real-time tracking and billing at the customer-specific level may offset any revenue gains achieved by differential pricing.⁷¹ Christopher Yoo posits that high transaction costs may explain why the local telephone market never moved to per-minute pricing despite a strong case that such pricing would be more efficient and fairer to consumers.⁷² He suggests that similar dynamics could also undermine usage-based broadband pricing.⁷³ Brett Frischmann and Barbara van Schewick have responded that in the broadband market, these transaction costs are probably much lower than Yoo hypothesizes, given that most consumers access the Internet through a single network gateway.⁷⁴ They also note that many providers already offer an array of statistics on individual use by consumer.⁷⁵ This is particularly true in the wireless industry, where both provider-operated and third-party applications give customers real-time information about data use and send warnings as data use approaches important thresholds.⁷⁶

Even if Frischmann and van Schewick are correct that tracking tools lower the transaction costs of simple metered pricing, investors may be

70. Jonathan Make, *Usage Based Billing Seen Being Introduced by U.S. Wireline ISPs*, COMM. DAILY, 2012 WLNR 12561386 (June 21, 2011).

71. See Christopher S. Yoo, *Network Neutrality and the Economics of Congestion*, 94 GEO. L.J. 1847, 1868 (2006).

72. See *id.*

73. See *id.*

74. Brett M. Frischmann & Barbara van Schewick, *Network Neutrality and the Economics of an Information Superhighway: A Response to Professor Yoo*, 47 JURIMETRICS J. 383, 394 (2007).

75. See *id.*

76. Verizon and AT&T each offer applications, known as My Verizon and myAT&T, respectively, that report a customer's data use as measured by the company's remote servers. Several third-party applications, such as 3G Watchdog, reports usage by tracking information as it flows through the device itself. See generally Ed Rhee, *How to Track Data Usage on Your Android Phone*, CNET (July 8, 2011, 2:15 PM), http://howto.cnet.com/8301-11310_39-20077775-285/how-to-track-data-usage-on-your-android-phone/.

wary of pricing strategies that cover significant fixed installment costs through purely volume-based rates. By definition, the fixed costs stay relatively constant, while variations in aggregate monthly consumption may leave the company without sufficient revenue to meet those costs. In that circumstance, the company may have to raise rates, which customers are unlikely to appreciate as a reward for their conservation.

Simple metered pricing also might prove a challenge for consumers. Although many consumers could pay less under a metered system, Andrew Odlyzko stresses the importance of “mental transaction costs,” the cost to consumers of the mental effort required to sort out the many available choices in an increasingly complicated world.⁷⁷ After facing choices all day, consumers may simply find it fatiguing to have to decide whether downloading a movie in HD rather than standard definition is worth the additional bandwidth cost.⁷⁸ Odlyzko also notes that unlimited use plans have an insurance effect: some customers may prefer to pay more for unlimited service in order to be protected from bill shock during a period of unusually high broadband usage (if, for example, a child unwittingly downloads significant quantities of data).⁷⁹ Odlyzko argues that the decision fatigue and insurance effects likely explain the results of 1970s AT&T studies showing light-use local telephone customers preferred flat-rate billing over per-minute billing, even though they would likely pay less under a metered regime.⁸⁰ Similarly, in the late 1990s AT&T Worldnet dial-up customers typically moved from metered rates to a \$19.95 flat rate for unlimited use when their metered rates approached \$11–12/month.⁸¹ These studies suggest that many consumers are willing to pay a premium to avoid having to make a cost-benefit analysis of each broadband transaction.

2. Data Caps and Tiered Service Models

Like simple metered service, data caps help broadband companies shift more network costs onto heavier users. All customers pay the same flat rate for service up to the cap, and heavier users pay an additional amount per unit for consumption beyond the cap. Like metered pricing, data caps help solve some of the inefficiencies of flat-rate service. The overage charge becomes a way to mitigate the cross-subsidy by recovering a greater portion of network costs from heavier users. Tiered service plans

77. Odlyzko credits Nick Szabo with originating the phrase, “mental transaction costs,” to describe the difficulty of implementing micropayment regimes. *See* ODLYZKO ET AL., *supra* note 10, at 72; Andrew Odlyzko, *The History of Communications and its Implications for the Internet 7* (June 16, 2000) (unpublished manuscript) (on file with AT&T Research Labs), *available at* <http://www.dtc.umn.edu/~odlyzko/doc/history.communications0.pdf>.

78. *See* ODLYZKO ET AL., *supra* note 10, at 44.

79. *See id.* at 41 (describing the results of AT&T studies conducted in the 1970s).

80. *See id.* at 44.

81. *See id.* at 43.

increase customer choice by offering consumers several different monthly data plans. Heavier users will choose a larger monthly data allotment, which is priced higher than the lower tiers purchased by lighter users. In that way, the price difference between large and small plans helps ameliorate the cross-subsidy by recovering more revenue from heavier users.

Monthly data plans help ameliorate some of the stress that simple metering places on consumers. As noted above, many fixed wireless providers have adopted soft data caps set well above the average consumer's monthly use. For most consumers, this data cap provides the same predictability of the flat-rate model and spares them the mental accounting costs of a strictly metered regime. Most consumers will receive peace of mind knowing that unless they dramatically increase their online activity, they will remain under the cap and can predict with certainty their monthly broadband costs. Of course, if a company adopts a single soft data cap for all customers, the company must monitor average use and adjust the cap periodically to assure that the cap remains well above the average user's monthly consumption. Otherwise, customers will begin to suffer from the mental fatigue that Odlyzko describes.

Wireless data plans force consumers to think more carefully about their data consumption. As described above, many wireless providers offer several tiers of service, but even the largest tier of service is rarely sufficient for a customer to conduct all of his or her Internet activity wirelessly. This leads wireless broadband customers to conserve their wireless data use where possible, for example by using Wi-Fi to offload traffic from 3G and 4G networks to less congested fixed broadband networks. Of course, even under high fixed broadband data caps, heavier users must monitor their usage and evaluate the cost of activities that might push them over the cap. But if, as AT&T's iPhone user data suggests, the network's heaviest users are likely to be the most technologically savvy,⁸² then this segment may better understand their data consumption patterns and may suffer less mental fatigue from calculating whether the additional megabyte consumption of an online activity is worth the price.

B. Recovering Costs Through Price Discrimination

1. Marginal and Fixed Broadband Costs

Some commentators have questioned the notion that usage-based pricing helps broadband providers recover their costs more efficiently. They argue that it is a mistake to recover more network costs from heavier

82. INFORMA TELECOMS & MEDIA, UNDERSTANDING TODAY'S SMARTPHONE USER: DEMYSTIFYING DATA USAGE TRENDS ON CELLULAR & WI-FI NETWORKS 5 (2012), available at http://www.informatandm.com/wp-content/uploads/2012/02/Mobidia_final.pdf; see also *supra* text accompanying note 46.

users because heavy users contribute little marginal cost to network operations.⁸³ Odlyzko notes that statistical multiplexing allows multiple users to share the same bandwidth simultaneously, meaning that each additional user imposes only trivial marginal costs onto the network.⁸⁴ Although Odlyzko concedes that “determining the actual cost of using a broadband network is exceedingly difficult,”⁸⁵ a *New York Times* editorial states that “moving an extra gigabyte of data at off-peak times costs virtually nothing.”⁸⁶ Similarly, Netflix, which is responsible for almost a third of all peak-time downstream traffic and therefore sees data caps as a threat to business growth, claims that “the marginal cost of providing an extra gigabyte of data . . . is less than one cent, and falling.”⁸⁷ As a result, Netflix general counsel David Hyman asserts that there is “no good reason for bandwidth caps and fees to take root.”⁸⁸ For this reason, skeptics claim it is “entirely inaccurate” to suggest that average users subsidize heavier “bandwidth hogs.”⁸⁹ Free Press, Public Knowledge, and other public interest groups have thus asked regulators and antitrust enforcers to investigate the industry’s use of data caps because the caps lack any “legitimate economic justification.”⁹⁰

As an initial matter, the call for additional oversight on these grounds seemingly reflects a misunderstanding of the role of regulation. Underlying this critique is the unstated premise that equitable cost distribution is the only presumptively “legitimate” broadband pricing strategy, and companies must justify to the regulator any deviation from this model. While an equality standard has an intuitive appeal,⁹¹ there is no reason to believe that it represents the only, or even the best, broadband pricing structure.

Generally, when companies experiment with different pricing strategies, they can test potentially more efficient business models.⁹² If

83. See Hibah Hussain et al., *Capped Internet: No Bargain for the American Public*, NEW AMERICA FOUND. (Feb. 20, 2013), http://newamerica.net/publications/policy/capped_internet_no_bargain_for_the_american_public.

84. ODLYZKO ET AL., *supra* note 10, at 17.

85. *Id.* at 19.

86. *To Cap, or Not: Broadband Limits Need to be Carefully Monitored to Promote Innovation and Competition*, N.Y. TIMES, July 21, 2011, at A20.

87. David Hyman, *Why Bandwidth Pricing is Anti-Competitive*, WALL ST. J. (July 7, 2011, 7:01 PM), <http://online.wsj.com/article/SB10001424052702304447804576414220570134518.html>.

88. *Id.*

89. ODLYZKO ET AL., *supra* note 10, at 17.

90. Letter from Free Press, *supra* note 10, at 2; see also *Petition to Enforce Merger Conditions*, *supra* note 12.

91. See, e.g., Matthew Edwards, *Price and Prejudice: The Case Against Consumer Equality in the Information Age*, 10 LEWIS & CLARK L. REV. 559, 583–85 (2006). Edwards notes an Annenberg Public Policy Center report that concludes consumers “overwhelmingly object” to differential pricing as “ethically wrong.” See *id.* at 585 (citing JOSEPH TUROW ET AL., OPEN TO EXPLOITATION: AMERICAN SHOPPERS ONLINE AND OFFLINE 4 (2005), available at http://repository.upenn.edu/cgi/viewcontent.cgi?article=1035&context=asc_papers).

92. See Edwards, *supra* note 91, at 586–91.

these new models prove less efficient, companies will abandon them. This experimentation brings consumers the benefits of increased competition and increased choices in the marketplace. Normally, the regulator should intervene only if the practice actually harms consumers and consumers cannot punish the practice because the company has market power.⁹³ Otherwise, companies should be presumptively permitted to experiment with alternative forms of cost recovery because experimentation helps the industry test potentially more efficient methods of operation.

But setting aside this general objection, focusing on only the marginal cost of each gigabyte of capacity tells us little about efficient broadband pricing.⁹⁴ It is true that, except during periods of congestion, the marginal costs of additional bandwidth consumption are very small.⁹⁵ But emphasizing marginal costs ignores the significant sunk costs required to build and maintain a broadband network. As Gregory Sidak explains, investors will fund these networks only if they can reasonably expect that the company will recover the costs of this investment, including a competitive return on capital.⁹⁶ Marginal cost pricing is thus insufficient because it does not provide sufficient revenue to cover the network's fixed costs.⁹⁷

In the broadband industry, those costs are significant. Broadband providers have invested over \$300 billion in private capital in the past decade to build and upgrade the nation's broadband networks.⁹⁸ These investments include nearly \$23 billion that Verizon has invested in FiOS, which boosts broadband speeds and capacity by replacing legacy copper telephone wire with higher-speed fiber optic cable in portions of its footprint.⁹⁹ AT&T has also spent several billion dollars on fiber

93. See, e.g., *Comcast Cable Commc'ns, LLC v. FCC*, 717 F.3d 982, 990 (D.C. Cir. 2013) (Kavanaugh, J., concurring) (collecting sources).

94. Scott Wallsten, *Data Caps Aren't Perfect, But That's OK*, ARS TECHNICA (May 11, 2012, 11:29 AM), <http://arstechnica.com/tech-policy/2012/05/opinion-data-caps-arent-perfect-but-thats-okay/>.

95. See Hyman, *supra* note 87.

96. J. Gregory Sidak, *A Consumer-Welfare Approach to Network Neutrality Regulation of the Internet*, 2 J. COMP. L. & ECON. 349, 357 (2006).

97. *Id.*; see also Wallsten, *supra* note 94.

98. CRAIG MOFFETT, U.S. TELECOMMUNICATIONS AND CABLE & SATELLITE: CAPITAL PUNISHMENT 6 (Bernstein Research) (Dec. 2010); see also Randolph J. May, *Prices and Profits in the Broadband Marketplace*, FREE STATE FOUND. (Aug. 11, 2011, 1:50 PM), <http://freestatefoundation.blogspot.com/2011/08/prices-and-profits-in-broadband.html>. The Columbia Institute for Tele-Information estimates that broadband providers invested \$69 billion in 2008 and \$60 billion in 2009 alone, of which approximately half was attributable to broadband service (as opposed to other services that the companies provide). See Larry F. Darby & Joseph P. Fuhr Jr., *Innovation and National Broadband Policies: Facts, Fiction, and Unanswered Questions in the Net Neutrality Debate*, 20 MEDIA L. & POL. 3, 11–12 (2011).

99. See MOFFETT, *supra* note 98, at 28.

upgrades.¹⁰⁰ In the wireless sector, providers spent nearly \$20 billion in 2008 to acquire spectrum when the 700 MHz block was freed up by the digital television transition, and are investing billions more to develop those assets into high-speed LTE data networks.¹⁰¹ Of course, some broadband companies can recover these costs partly through voice and cable services that network upgrades also make available.¹⁰² But a recent report suggests that “as much as two-thirds of current investments are being made to provide and expand wired and wireless broadband” rather than voice or cable service, and “the trend over the past few years has been growing.”¹⁰³ Moreover, as subscribership rates fall, telecommunications companies must look increasingly to broadband rates to recover these common costs.¹⁰⁴ Investment analyst Craig Moffett estimates that the return on these investments has been flat to negative over the past decade.¹⁰⁵ He further warns that “[c]ompanies whose ROICs [Return on Investment Capital] fail to exceed their costs of capital or whose marginal ROICs are

100. As Moffett notes, Verizon’s FiOS service provides fiber-optic cable to the consumer’s home. By comparison, AT&T’s U-Verse project provides fiber-optic cable to a neighborhood node, but relies upon legacy copper wire to transmit data from the node to individual homes. By avoiding the last-mile fiber drop, AT&T has spent much less per subscriber than Verizon. But Verizon’s network will deliver greater speeds and capacity as Internet demand continues to grow. As Moffett writes, “Verizon’s network is inarguably future-proof. AT&T’s is not.” *Id.*

101. Eric Bangeman, *700 MHz Spectrum Auction Wraps Up, Tops \$19.5 Billion*, ARS TECHNICA (Mar. 18, 2008, 5:57 PM), <http://arstechnica.com/uncategorized/2008/03/700mhz-spectrum-auction-wraps-up-tops-19-5-billion/>.

102. See ODLYZKO ET AL., *supra* note 10, at 20–21. To the extent that these costs are directly attributable to other services alone (such as the cost of new set-top boxes for cable customers), they should be excluded from the broadband cost base. But much of these firms’ network investment consists of common costs: upgrades to the network that benefit both broadband and other services. There are many ways that these common costs can be allocated among the company’s services. As discussed below, Ramsey pricing suggests that a multiproduct firm should recover its common costs by raising prices on both products in a way that preserves the ratio of consumption that would occur if the rates were priced at marginal cost. This means raising prices more on price-inelastic services than on price-elastic ones. See, e.g., William Baumol & David Bradford, *Optimal Departures from Marginal Cost Pricing*, 60 AM. ECON. REV. 265, 265–83 (1970); Frank Ramsey, *A Contribution to the Theory of Taxation*, 37 ECON. J. 47, 47–61 (1927). Elasticity estimates vary widely among studies, but it is quite possible that broadband service is more inelastic than cable or telephone service, given the wider range of services that broadband makes available. If this is true, then Ramsey pricing suggests much of these common costs should be recovered through broadband prices rather than cable or telephone rates.

103. ROBERT C. ATKINSON & IVY E. SCHULTZ, BROADBAND IN AMERICA: WHERE IT IS AND WHERE IT IS GOING (ACCORDING TO BROADBAND PROVIDERS) 11 (2009) (prepared for FCC’s Omnibus Broadband Initiative).

104. See, e.g., MOFFETT, *supra* note 98, at 11 (“Carriers have no choice but to invest in the network to keep it operational, and are allocating ‘growth capital’ to it by building-out expensive fiber infrastructures. At the same time, highly profitable traditional voice subscribers are fleeing in droves, leaving the network to support fewer operating profit dollars.”).

105. See *id.* at 1.

weak are likely to face stiff headwinds in the capital markets” and will be unattractive to investors going forward.¹⁰⁶

These fixed costs are not merely one-time investments. Rather, “sunk investment is made continuously over time” as firms continue to expand and upgrade their networks to meet rising demand.¹⁰⁷ Cisco Systems anticipates that American IP traffic will triple between 2012 and 2017, representing a twenty-three percent compound annual growth rate.¹⁰⁸ Mobile data will grow at an even faster rate: Cisco estimates that mobile traffic will grow nine-fold by 2017, or fifty-six percent each year between now and then.¹⁰⁹ This increase is driven by consumer demand for greater quantities of and more bandwidth-intensive Internet content and applications, such as streaming video and real-time conferencing.¹¹⁰ According to Sandvine, real-time entertainment comprised fifty-nine percent of peak-time traffic on fixed networks, up from twenty-nine percent in 2009, and fifty percent of peak mobile traffic, up from eleven percent only three years ago.¹¹¹ As a result, analysts estimate that broadband providers must continue to invest \$30 billion to \$40 billion annually to expand and upgrade their networks to meet this growing demand.¹¹²

2. The Potential Value of Price Discrimination

For broadband providers and other industries with significant fixed costs, the challenge is therefore to design a pricing structure that spreads fixed costs intelligently across the company’s customer base. There are many possible ways that a company may do so, but there is no economic reason to believe that, because incremental marginal costs are small, fixed costs should be shared equally across all consumers. In fact, writes economist Scott Wallsten, “efficient pricing will, in general, charge users with high demand more than users with low demand *even if those users impose no additional costs on the network.*”¹¹³ This practice is known as “price discrimination.”¹¹⁴

Price discrimination occurs when a company sells similar goods to different buyers based on their willingness to pay, rather than the cost of

106. *Id.* at 12.

107. Sidak, *supra* note 96, at 357.

108. *VNI Forecast Highlights*, *supra* note 1 (click “Filter by Country”, click the United States, and click “2017 Forecast Highlights”).

109. *Id.* (same instructions).

110. Sandvine 2012, *supra* note 3, at 6, 9; Sandvine 2011, *supra* note 3, at 6.

111. Sandvine 2011, *supra* note 3, at 6, 10.

112. *See, e.g.*, May, *supra* note 98; ATKINSON & SCHULTZ, *supra* note 103, at 11.

113. Wallsten, *supra* note 94.

114. As Brett Frischmann notes, not all usage-based pricing may constitute price discrimination. To the extent that a company charges different rates in order to recover different customers’ congestion costs, the rate structure is better described as cost-based differential pricing. *See* BRETT FRISCHMANN, *INFRASTRUCTURE* 117, 122–23 (2012).

service.¹¹⁵ Or in economic terms, it is when a company's sales exhibit different ratios of price to cost.¹¹⁶ Price discrimination stems from the recognition that different customers have different *reservation prices*, the maximum rate that a customer is willing to pay for a good or service.¹¹⁷ Its success depends first upon the firm's ability to identify and charge more to those customers who have higher reservation prices, and second on customers' inability to arbitrage the price difference.

Although "price discrimination gets a bad name in part because it sounds sinister,"¹¹⁸ it is a fairly common practice throughout society (although sometimes it goes by the more benign term "customer segmentation"). Matthew Edwards notes that many movie theaters provide discounts to senior citizens and children, thus charging adult non-senior customers more for the same good.¹¹⁹ Publishers offer titles at different rates to consumers and institutional buyers, such as colleges and libraries.¹²⁰ And a car dealership may sell the same model automobile to different customers at different prices, if one customer is better at haggling and a discount is needed to close the sale.¹²¹ Although each of these sellers is engaged in "discrimination," these price differences are a legal and largely uncontroversial practice.¹²² Price discrimination can be lucrative for producers, because it allows them to increase revenue by charging higher prices to those who place a higher value on the product.

The practice has more ambiguous effects on customers and total welfare, though antitrust scholar Herbert Hovenkamp notes that "most price discrimination is socially beneficial."¹²³ Hovenkamp explains that the practice often "produces higher output and thus yields greater consumer

115. Edwards, *supra* note 91, at 562.

116. *Id.*; see also Daniel J. Gifford & Robert T. Kudrle, *The Law and Economics of Price Discrimination in Modern Economies: Time for Reconciliation?*, 43 U.C. DAVIS L. REV. 1235, 1239–40 (2010).

117. HERBERT HOVENKAMP, *FEDERAL ANTITRUST POLICY: THE LAW OF COMPETITION AND ITS PRACTICE* § 1.1, at 4 (3d ed. 2005).

118. See ROBERT D. ATKINSON & PHILIP J. WEISER, INFO. TECH. & INNOVATION FOUND., A "THIRD WAY" ON NETWORK NEUTRALITY 6 (May 30, 2006).

119. See Edwards, *supra* note 91, at 563.

120. *Id.*

121. *Id.*

122. *Id.* at 582; see, e.g., *Langford v. Rite Aid of Ala., Inc.*, 231 F.3d 1308, 1309 (11th Cir. 2000) (finding no duty to disclose prices or avoid price discrimination between insured and uninsured purchasers of pharmaceuticals); *Bonilla v. Volvo Car Corp.*, 150 F.3d 62, 71 (1st Cir. 1998) (observing that "there is nothing in the law of fraud that prevents even a single seller from charging different markups in different markets so long as there is no affirmative misrepresentation"). As Professor Edwards notes, the Robinson-Patman Act prohibits price discrimination in certain commercial transactions of commodities, if the two buyers are competitors and the sale harms competition between them. Edwards, *supra* note 91, at 577–78. But this act does not protect end-user consumers (who are not competitors), for good reason. *Id.* at 582–83.

123. *Id.* at 588 (quoting HERBERT HOVENKAMP, *ANTITRUST LAW* ¶ 2340c, at 139).

benefits than forced nondiscriminatory pricing.”¹²⁴ One oft-cited example is the airline industry, which exhibits a cost structure similar to broadband providers and where price discrimination occurs regularly.¹²⁵ Assume, for example, that an airline’s average cost to transport a passenger on a full flight is \$700. This amount would be sufficient to cover the passenger’s small marginal costs (primarily the in-flight meal) and a pro rata portion of the flight’s fixed costs (such as fuel, employee salaries, and the installment payment for the plane). The business traveler, racing to town for a meeting, may pay \$1000 for her ticket, while the college student who is heading home may pay only \$500 for the next seat over.¹²⁶ The businessperson likely has a higher reservation price than the college student, because of the greater demands on her time. By charging the businessperson a higher price, the airline can secure from her a greater contribution to the airline’s fixed costs. This contribution allows the airline to offer a discounted ticket to the student.

In this hypothetical, the ability to price discriminate allows the airline to serve more customers than under a flat-rate system. If the airline were instead forced to charge a single uniform rate of \$700, the student and others with lower reservation prices would not be able to fly. Moreover, the airline might not be able to sell enough \$700 tickets to fill the airplane, which would mean the uniform rate would have to be greater than \$700 to cover the flight’s fixed costs.¹²⁷ Of course, the airline could sell more tickets at a \$500 rate, but this rate would fail to cover the airline’s fixed costs. If airlines were forbidden from engaging in price discrimination, many customers who currently receive discounted fares would have to pay more for airline tickets, and many would instead choose not to fly at all.¹²⁸ Price discrimination allows the airline to capture more revenue from those willing to pay more, while expanding service to customers with lower reservation prices.

Of course, price discrimination works only if the company can successfully separate customers by reservation price. Ideally, a company would like to charge each customer exactly the maximum that the customer is willing to pay for the good—a scenario known as “first-degree price discrimination.”¹²⁹ In reality, first-degree price discrimination is virtually impossible to achieve, so companies must devise strategies to segment the

124. *Id.*; see also Babette E.L. Boliek, *FCC Regulation vs. Antitrust: How Net Neutrality is Defining the Boundaries*, 52 B.C. L. REV. 1627, 1678 (2011) (“Although ‘discrimination’ has a negative popular association, in economic theory, price discrimination may actually serve to increase consumer welfare.”)

125. Wallsten, *supra* note 94; Philip J. Weiser, *The Next Frontier for Net Neutrality*, 60 ADMIN. L. REV. 273, 282 (2008).

126. See Wallsten, *supra* note 94.

127. In this hypothetical, one can assume that the airline cannot sell all its seats at a \$700 rate. Otherwise, it would not have sold a \$500 ticket to the student.

128. ATKINSON & WEISER, *supra* note 118, at 282.

129. Edwards, *supra* note 91, at 566–68.

customer base in ways that successfully charge more to those willing to pay more.¹³⁰ One way airlines distinguish business executives from students is by offering separate first-class and coach tickets. First-class fares include additional perks designed to appeal to executives, perks for which they are willing to pay extra but which do not add measurably to the marginal cost of service. Another way is to put restrictions on discount tickets that would discourage executives from buying. For example, requiring a twenty-one-day advance purchase to receive the discounted rate drives executives toward a higher fare, since business trips are often scheduled at the last minute and cannot be predicted three weeks in advance.¹³¹ Similarly, offering the discount only in conjunction with a Saturday stay is an inconvenience for business executives who would rather spend their weekends at home with their families.¹³²

3. Ramsey Pricing and Price Discrimination in the Broadband Industry

In the broadband industry, as with many industries marked by high fixed costs, price discrimination based on customers' willingness to pay is an efficient way to recover costs with minimal distortion to overall social welfare.¹³³ This practice, familiar to many regulated industries, is known as "Ramsey pricing."¹³⁴ Ideally, a firm maximizes overall social welfare by pricing its goods at marginal cost: this ensures that the company serves every customer who values the good at or above the cost of producing it.¹³⁵ But as noted above, broadband providers cannot use marginal cost pricing

130. Economists divide imperfect price discrimination into two categories: second-degree price discrimination, where the price per unit varies based upon the quantity (or sometimes, the quality) of the good purchased, and third-degree price discrimination, where the price varies based on some identifiable characteristic of the consumer. *See, e.g.*, FRISCHMANN, *supra* note 114, at 17. Usage-based pricing constitutes second-degree price discrimination, which Frischmann finds less problematic because it is more compatible with nondiscrimination norms that govern many networked industries: all consumers are presented with the same price schedule and the consumers themselves choose how much service to purchase. *Id.* at 122. To the extent that the network's price schedule differentiates among customers, it does so only on a very general basis (such as charging residential customers and businesses different rates), which reflects differences in the cost to serve the group, differences in demand among groups, and group elasticity of demand. *Id.*

131. Edwards, *supra* note 91, at 566–68.

132. Of course, firms can price discriminate for reasons other than finding customer reservation prices. For example, many airlines offer bereavement fares for families traveling to funerals, despite the fact that a funeral is an important event and the customer may have a high reservation price to get to the event on time. This form of humane price discrimination would also be impossible if airlines were required to charge a uniform flat rate per seat.

133. Sidak, *supra* note 96, at 368.

134. *Id.*; *see also* YOO, *supra* note 24, at 101–03.

135. Michael E. Levine, *Price Discrimination Without Market Power*, 19 YALE J. ON REG. 1, 9 (2002).

because they need to recover fixed costs¹³⁶ and fund future network investments. With Ramsey pricing, firms recover these fixed costs by raising prices more on those who are most willing to pay for the service, and less on those who would buy less (or not at all) if the price rose.¹³⁷ Or in economic terms, the firm sets prices in inverse proportion to customers' price elasticity of demand.¹³⁸ In an ideal world, where the firm can perfectly separate each customer by his or her elasticity, Ramsey pricing would allow the firm to recover all of its costs while ensuring that few if any consumers who value the service at marginal cost will ever be priced out of the market.¹³⁹

Usage-based pricing strategies incorporate Ramsey pricing principles. By paying for consumption, consumers reveal how much they value broadband access. This form of price discrimination allows providers to recover more network costs from those whose consumption is least sensitive to changes in price. The extent to which the pricing strategy approximates Ramsey efficiency depends on the company's ability to separate customers by willingness to pay. Simple per-unit metered pricing segments customers substantially, correlating each consumer's total bill with the value that consumer receives from network use. If heavy users are highly price inelastic, a higher per-unit charge for consumption above a certain threshold may get even closer to Ramsey efficiency. By comparison, a data cap divides the customer base into only two groups (typical users, who do not exceed the cap, and heavy users, who do), but the overage charge allows the company to further segment the heavy user group based on the amount by which each customer exceeds the cap. Tiered data pricing lies somewhere between these two poles. By allowing customers to choose from an array of possible monthly limits, the provider can segment its customer base more finely than with a simple cap, though not as much as per-unit metering. The provider can experiment with different tiers and different rates per tier until it finds the pricing structure that best covers its fixed costs.

Speed-based pricing strategies may similarly approximate Ramsey efficiency, although the customer segments differ somewhat from those revealed by monthly data plans. Speed tiers segment the customer base by varying *quality* of service, while data tiers vary *quantity* of service. Speed tiers help broadband providers identify customers who use more advanced Internet applications, such as online gaming and video conferencing, which

136. Wallsten, *supra* note 94.

137. Levine, *supra* note 135.

138. See, e.g., Daniel F. Spulber & Christopher S. Yoo, *Toward a Unified Theory of Access to Local Telephone Networks*, 61 FED. COMM. L.J. 43, 85 n.205 (2008); see generally Baumol & Bradford, *supra* note 102, at 267 (discussing the rules that determine whether a price-output combination is socially optimal); Ramsey, *supra* note 102, at 47–48, 58–59 (discussing the relationship between price discrimination, revenue, and utility).

139. Levine, *supra* note 135, at 9.

perform less-than-optimally at low speeds.¹⁴⁰ But speed tiers alone cannot help differentiate the heavy gamer from the “sampler” of advanced services, such as the grandma who occasionally tries to video-chat with her grandchildren.¹⁴¹ On the other hand, data tiers lump together all who upload or download large quantities of material, which does not distinguish Netflix streamers from less sophisticated consumers who happen to use a nightly cloud-based backup service. By experimenting with different pricing plans, broadband providers can test the price elasticity of different customer segments, to discover through revealed preferences which price discrimination model is most efficient.

Some view price discrimination skeptically because they assume the practice shows that the firm has market power.¹⁴² But as a unanimous Supreme Court recently recognized, “while price discrimination may provide evidence of market power . . . it is generally recognized that it also occurs in fully competitive markets.”¹⁴³ The Court’s holding is consistent with more recent scholarship suggesting that price discrimination is often a byproduct of healthy competition among firms. William Baumol and Daniel Swanson have explained that competition compels firms to charge lower prices to price sensitive consumers when possible.¹⁴⁴ When companies have significant fixed costs, new firms can enter the market and customers can be segmented by demand.¹⁴⁵ Companies must therefore resort to price discrimination or else they will fail to cover their costs.¹⁴⁶ Michael Levine similarly argues that in firms with high fixed costs, price discrimination will often be the dominant pricing strategy even in the absence of market power.¹⁴⁷ Under these conditions, Baumol and Swanson argue, price discrimination may be inevitable and “firms may be able to indulge persistently in uniform pricing only if they possess the sort of monopoly power that forecloses such competition and enables them to obtain abundant earnings.”¹⁴⁸

140. See Lyons, *supra* note 41.

141. *Id.*

142. See, e.g., Gloria J. Hurdle & Henry B. McFarland, *Criteria for Identifying Market Power: A Comment on Baumol and Swanson*, 70 ANTITRUST L.J. 687, 693 (2003); Jonathan B. Baker, *Competitive Price Discrimination: The Exercise of Market Power Without Anticompetitive Effects (Comment on Klein and Wiley)*, 70 ANTITRUST L.J. 643, 644 (2003) (“Price discrimination is properly understood as providing evidence of market power, as antitrust law has long recognized.”).

143. *Ill. Tool Works, Inc. v. Indep. Ink, Inc.*, 547 U.S. 28, 44–45 (2006).

144. William J. Baumol & Daniel G. Swanson, *The New Economy and Ubiquitous Competitive Price Discrimination: Identifying Defensible Criteria of Market Power*, 70 ANTITRUST L.J. 661, 674, 669–70 (2003); see also Sidak, *supra* note 96, at 367–68; see generally Joshua D. Wright, *Missed Opportunities in Independent Ink*, 2006 CATO SUP. CT. REV. 333, 339, 341, 348 (2006) (discussing competitive price discrimination).

145. Baumol & Swanson, *supra* note 144, at 662.

146. *Id.*

147. See Levine, *supra* note 135, at 8.

148. Baumol & Swanson, *supra* note 144, at 662.

4. Price Discrimination and Increasing Broadband Penetration Rates

Usage-based pricing may also make entry-level broadband access more affordable.¹⁴⁹ The FCC has stated that increasing broadband adoption rates is one of its biggest public policy challenges.¹⁵⁰ While sixty-five percent of Americans have broadband access, those without access are generally “older, poorer, less educated, more likely to be a racial or ethnic minority, and more likely to have a disability” than those with broadband in the home.¹⁵¹ According to the Commission’s survey, those without broadband access cited cost as the primary barrier to adoption.¹⁵² A 2009 report by Kevin Hassett and Robert Shapiro similarly concludes based upon several studies that “price is the strongest determinant of broadband subscription.”¹⁵³ After projecting broadband adoption rates under different pricing models, Hassett and Shapiro concluded that “spreading [broadband] costs equally among all consumers—the minority who use large amounts of bandwidth and the majority who use very little—will significantly slow the rate of adoption at the lower end of the income scale.”¹⁵⁴ If broadband providers can shift more network costs onto heavier users, they can offer lower rates for light users. This practice benefits firms and consumers alike: it allows firms to capture more of the demand curve, offering service to more people who value the service above marginal cost, while at the

149. Cf. Sidak, *supra* note 96, at 367 (competition forces firms to lower the price they charge to price-sensitive consumers).

150. FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 167 (2010) [hereinafter NATIONAL BROADBAND PLAN], available at <http://download.broadband.gov/plan/national-broadband-plan.pdf>.

151. *Id.* at 168. According to the Commission’s report, those over age sixty-five have a thirty-five percent adoption rate. The rate for low-income consumers (defined as having household income below \$20,000 per year) is forty percent. For those without a high school diploma, the rate is twenty-four percent. Among African-Americans, the adoption rate is fifty-nine percent, while among Hispanic Americans the rate is forty-nine percent. Only forty-two percent of the disabled have broadband. *Id.*

152. *Id.* at 168, 170. Thirty-six percent of respondents cited cost as the primary reason they do not have broadband access, followed by lack of digital literacy (twenty-two percent) and relevance (nineteen percent).

153. KEVIN A. HASSETT & ROBERT J. SHAPIRO, TOWARDS UNIVERSAL BROADBAND: FLEXIBLE BROADBAND PRICING AND THE DIGITAL DIVIDE 4–5 (Aug. 2009) (Georgetown Center for Business and Public Policy), available at http://www.gcbpp.org/files/Academic_Papers/AP_Hassett_Shapiro_Towards.pdf (citing, among other sources, PAUL RAPPOPORT ET AL., WILLINGNESS TO PAY AND THE DEMAND FOR BROADBAND SERVICE (2003), available at http://www.economics.smu.edu.sg/events/Paper/Rappoport_3.pdf; AUSTAN GOOLSBEE, THE VALUE OF BROADBAND AND THE DEADWEIGHT LOSS OF TAXING NEW TECHNOLOGY (2006), available at <http://faculty.chicagobooth.edu/austan.goolsbee/research/broadb.pdf>; and JOHN HERRIGAN, HOME BROADBAND ADOPTION 2009 (2009) (Pew Internet & American Life Project), available at <http://www.pewinternet.org/~media/Files/Reports/2009/Home-Broadband-Adoption-2009.pdf>).

154. HASSETT & SHAPIRO, *supra* note 153, at 12.

same time it narrows the “digital divide” between those who can afford broadband access and those who cannot.¹⁵⁵

Of course, price discrimination only leads to higher adoption rates if broadband providers in fact reduce prices for lighter users. This appears to be the case. A 2010 study by Scott Wallsten and James Riso surveyed more than 25,000 broadband plans across several OECD countries.¹⁵⁶ They found that residential broadband plans with data caps were, on average, about \$164 less per year than similar but unlimited plans, while residential triple play plans (which combine broadband, voice, and video) were \$152 less per year if they contain a data cap.¹⁵⁷ As a result, Wallsten and Riso concluded that “many consumers, particularly the low-volume users, are likely to pay less for broadband with data caps than they would for plans offering unlimited data transfer.”¹⁵⁸

In the United States, Comcast has used pricing innovation to bring basic Internet access to low-income consumers. In 2011, the company introduced its “Internet Essentials” plan, which offers eligible consumers a low-speed-tier plan (5 Mbps download, 1 Mbps upload) for \$9.95 per month.¹⁵⁹ In its first two years, the company signed up 220,000 households, or almost 900,000 consumers. This flexibility, in turn, likely helps boost broadband adoption rates. Because existing Comcast subscribers are ineligible, it is reasonable to assume that many Internet Essentials subscribers are households that did not previously have broadband access and could not afford, or otherwise chose not to purchase, more expensive plans with fewer limitations.

One also sees some evidence that price discrimination helps reduce wireless broadband prices, though the record is mixed. In June 2010, AT&T eliminated its \$30 per month unlimited data plan for smartphone users. Instead, customers could choose a 200-megabyte plan for \$15 per month or 2 gigabytes for \$25 per month.¹⁶⁰ If a customer exceeded his or

155. *Id.*

156. SCOTT WALLSTEN & JAMES L. RISO, RESIDENTIAL AND BUSINESS BROADBAND PRICES PART 1: AN EMPIRICAL ANALYSIS OF METERING AND OTHER PRICE DETERMINANTS 1 (Nov. 2010) (Technology Policy Institute), available at <http://techpolicyinstitute.org/files/residential%20and%20business%20broadband%20prices%20pt1.pdf>.

157. *Id.* at 16.

158. *Id.* at 3.

159. See Comcast, CABLEFAX DAILY, Aug. 14, 2013, 2013 WLNR 20166462. The program also provides computers at subsidized rates and free digital literacy training. Consumers are eligible if one member of the household is eligible to participate in the National School Lunch Program. See *Internet Essentials*, COMCAST, <http://www.internetessentials.com/how-it-works> (last visited Aug. 14, 2013). In markets where Comcast has monthly data limits, Internet Essentials customers are subject to the same restrictions as other residential subscribers.

160. See Press Release, AT&T, AT&T Announces New Lower-Priced Wireless Data Plans to Make Mobile Internet More Affordable to More People (June 2, 2010), available at <http://www.att.com/gen/press-room?pid=17991&cdvn=news&newsarticleid=2830854&mapcode=financial|mk-att-blackberry-torch>.

her data cap, the company charged \$15 for each additional 200 megabytes on the smaller plan or \$10 for each additional gigabyte under the larger plan.¹⁶¹ At the time of the change, sixty-five percent of AT&T customers used less than 200 megabytes of data each month, while ninety-eight percent used less than 2 gigabytes.¹⁶² This meant that the move from unlimited to tiered service was less expensive for most AT&T customers and made wireless broadband a more affordable option for consumers who found the \$30 flat rate unacceptable.¹⁶³ There were no comparable savings when Verizon Wireless phased out its \$30 per month unlimited data plan in June 2011, shortly after introducing the iPhone to its network. Henceforth, new Verizon customers could choose from three different tiers of service, the cheapest of which was 2 gigabytes per month at the same \$30 rate as the old unlimited plan.¹⁶⁴

IV. USAGE-BASED PRICING AS A CONGESTION MANAGEMENT TOOL

Usage-based pricing can also be a tool to compel more efficient network operation. If the price a customer pays for use reflects the cost that use imposes on the network, the customer is less likely to overuse the network. Usage-based pricing may also incentivize companies throughout the Internet ecosystem to adopt more efficient data-management practices. The extent to which usage-based pricing can help manage network congestion depends on the nature of congestion and the feasibility of structuring a pricing strategy that would correlate prices with congestion costs.

A. Broadband Service and the Possibility of Congestion Costs

As Christopher Yoo and others have noted, unlimited flat-rate pricing plans “tend to induce excessive levels of congestion.”¹⁶⁵ This is because broadband service is an example of what economists call a “club good.”¹⁶⁶ A club good is one that exhibits some characteristics of a private good and

161. *Id.*

162. *Id.*

163. See Press Release, AT&T, AT&T Launches New Data Plans (Jan. 18, 2012), available at <http://www.att.com/gen/press-room?pid=22240&cdvn=news&newsarticleid=33672>. The company raised its rates to \$20 per month for 300 megabytes, \$30 per month for 3 gigabytes, or \$50 per month for 5 gigabytes. This means that the 2012 entry-level price remains below the 2010 flat rate.

164. See Cecilia Kang, *Verizon Phasing Out Unlimited Mobile Data Plans*, WASH. POST, June 23, 2011, at A15.

165. Yoo, *supra* note 21, at 204.

166. See Yoo, *supra* note 71, at 1863–64 (describing broadband as a club good); William D. Rahm, *Watching Over the Web: A Substantive Equality Regime for Broadband Applications*, 24 YALE J. REG. 1, 18 (2007).

some of a public good. Like a private good, a club good is excludable, meaning the owner can prevent consumers who have not paid from accessing the service.¹⁶⁷ This distinguishes club goods from purely public goods (such as broadcast television) and common pool resources (like fish in a public lake). But club goods are also non-rivalrous, meaning that they can be shared by more than one person at the same time.¹⁶⁸ This distinguishes them from typical private goods such as food or clothing. James Buchanan, the Nobel-prize-winning economist who devised the term, cited the community swimming pool as his primary example.¹⁶⁹ Other economists have shown how the cinema, cable television, and many social organizations can be club goods.¹⁷⁰ Broadband networks also fit the definition: the broadband provider may exclude consumers who have not paid for the service, but multiple consumers can use the network simultaneously.¹⁷¹

Because of these characteristics, club goods are affected by congestion costs, the marginal cost of additional network use. As implied by their name, congestion costs are the costs that one consumer's use imposes on other consumers, which in the broadband industry can take the form of packet delays or packet loss.¹⁷² When the network is lightly loaded, congestion costs are "essentially zero."¹⁷³ But when the network is running near full capacity, the congestion costs created by an additional user can be substantial.¹⁷⁴

As Yoo has shown, unlimited flat-rate pricing can lead to overconsumption because consumers do not directly pay the congestion

167. See Yoo, *supra* note 71, at 1863 (citing James Buchanan, *An Economic Theory of Clubs*, 32 *ECONOMICA* 1 (1965) and RICHARD CORNES & TODD SANDLER, *THE THEORY OF EXTERNALITIES, PUBLIC GOODS, AND CLUB GOODS* 351–53 (2d ed. 1996)).

168. *Id.* at 1863–64.

169. *Id.*; see also Patrick McNutt, *Public Goods and Club Goods*, in *ENCYCLOPEDIA OF LAW AND ECONOMICS* 936 (1999).

170. J. ANDREW HANSZ & DARREN K. HAYUNGA, *CLUB GOOD INFLUENCE ON RESIDENTIAL TRANSACTION PRICES* (Aug. 5, 2011), available at <http://aux.zicklin.baruch.cuny.edu/jrer/papers/pdf/forth/accepted/Club%20Good%20Influence%20on%20Residential%20Transaction%20Prices.pdf>.

171. See sources cited *supra* note 153.

172. When a broadband consumer requests Internet content from a server, the server breaks the content into a series of small packets, each of which travels across the Internet to the consumer. Once it arrives, the consumer's computer reassembles the packets into a message. Congestion occurs when more packets seek to pass through a particular bottleneck than that bottleneck can handle. This surge in demand forces the network to queue the packets, which can cause packet delay. If the queue gets too long, the network may simply delete some packets entirely, which creates packet loss. Generally speaking, packet delay and packet loss are more perceptible for consumers using real-time applications such as streaming video and video conferencing, because the consumer experience depends upon a continuous flow of packets at a relatively steady rate. See Yoo, *supra* note 71, at 1861–62.

173. ANDREA GRABER, *INTERNET PRICING: ECONOMIC APPROACHES TO TRANSPORT SERVICES AND INFRASTRUCTURE* 33 (2005).

174. See *id.* As noted above, congestion thus increases the marginal cost of serving a broadband consumer. See *supra* Part II.B.1.

costs that they impose on the network.¹⁷⁵ Ideally, a network provider would encourage each consumer to use the network as long as the benefit he or she gets from network use exceeds the cost of that use.¹⁷⁶ But under a flat-rate system, the consumer pays no additional cost for additional use, even when this consumption imposes congestion costs on society as a whole.¹⁷⁷ For example, a consumer may choose to watch a bandwidth-intensive movie or play interactive video games during peak times, even though this adversely affects the network's overall operations. The consumer suffers some congestion cost (because the movie or game may suffer some congestion-related packet delays), but this cost is less than the congestion costs that the consumer's decision imposes on all other network users.¹⁷⁸

A broadband provider can alleviate congestion in two ways: it can add network capacity or it can ration access.¹⁷⁹ If congestion occurs regularly, the provider should invest capital to expand the network and provide more bandwidth to all users. But if congestion occurs only infrequently, expansion may be an inefficient solution, because it leads to significant expenditures for additional capacity that lies dormant most of the time. In this situation, rationing may be a better solution because it encourages consumers and network owners to manage existing capacity more efficiently. And the two are not mutually exclusive solutions: a provider may find rationing sufficient to address present congestion, but as consumers adopt increasingly intensive applications (such as streaming 4K Ultra HD video or telemedicine), the increased frequency with which congestion occurs may require the company to install additional capacity.

If done correctly, usage-based pricing can alleviate congestion by discouraging bandwidth overconsumption. A per-unit pricing strategy forces each consumer to internalize the congestion costs that marginal consumption imposes on others.¹⁸⁰ Ideally, the per-unit price would fluctuate to reflect the precise congestion cost of additional use at that time, though transaction costs may prohibit pricing at that level of precision.¹⁸¹ By bringing a consumer's private costs into line with the overall social costs of additional use, usage-based pricing encourages a consumer to consume additional resources only if his or her benefit exceeds the total

175. See Yoo, *supra* note 21, at 204–05.

176. See *id.*

177. See Yoo, *supra* note 71, at 1864. It is worth noting, however, that providers of some club goods can rely on flat-rate pricing because many customers choose to consume only small amounts of club resources despite the fact that additional consumption is costless. Gym memberships are one notorious example. Stefano DellaVigna and Ulrike Malmendier, *Paying Not to Go to the Gym*, 96 AM. ECON. REV. 694, 695 (2006).

178. GRABER, *supra* note 173, at 2–3, 34; Yoo, *supra* note 71, at 1864.

179. GRABER, *supra* note 173, at 1–2.

180. See Yoo, *supra* note 71, at 1874; ODLYZKO ET AL., *supra* note 10, at 14.

181. See, e.g., ODLYZKO ET AL., *supra* note 10, at 55 (“Data sent or received during peak hours could be charged at rates that reasonably reflected their impact on network congestion. This practice could encourage users to manage their network usage more efficiently and reduce congestion generally.”).

cost. Usage-based pricing thus can temper the activities of “bandwidth hogs” whose heavy consumption could impose substantial congestion costs on their neighbors.

Usage-based pricing also forces Internet content and application providers to be more efficient when sending content to consumers. Because consumers pay based upon bandwidth consumed, they demand that content and application providers deliver their services using as little bandwidth as possible. These consumer demands can encourage greater use of zipped files and other forms of compression, which leads to greater overall efficiency in network use. For example, Odlyzko notes that when Canada adopted usage-based pricing in 2011, Netflix responded by offering two tiers of service: a high-quality, heavy-bandwidth streaming service, or a low-quality alternative that consumes two-thirds less bandwidth.¹⁸²

Finally, usage-based pricing can force broadband providers to operate more efficient networks. If a broadband company is paid by volume of traffic that passes through its system, it will manage traffic where possible to maximize that volume. As volume rises, the increased congestion signals to the broadband provider the need for additional capacity. But importantly, under usage-based pricing, the increased volume that generates the congestion also helps fund the network expansion.

Some critics argue that usage-based pricing may encourage broadband providers to restrict capacity, thus creating artificial scarcity that allows the company to raise rates without investing in network expansion.¹⁸³ But this critique seems misplaced. A provider could create artificial scarcity only if it has market power, meaning it is insulated from competition. Otherwise, when a provider subjects customers to artificially high levels of congestion or low monthly limits, consumers will flee to another provider that is investing in its network to better meet demand.

But if a firm has market power, it may avoid additional capital investment whether it uses flat rates or usage-based rates. A monopolist charging usage-based rates may lower its data cap and use overage charges to pad its bottom line. But a monopolist offering flat rates may exploit this power by increasing the rate for unlimited service and pocketing, rather than reinvesting, the added revenue. The difference is that under usage-based rates, consumers make efficient use of the limited capacity available. In a capacity-constricted flat rate system, congestion rises until the only people using the network are those who can best tolerate lengthy service delays. This is what Jeffrey MacKie-Mason and Hal Varian call the “Yogi Berra equilibrium”: the point where the network is “so crowded that no one

182. *Id.* at 14 (citing *Netflix Lowers Data Usage by 2/3 for Members in Canada*, NETFLIX (Mar. 28, 2011), <http://blog.netflix.com/2011/03/netflix-lowers-data-usage-by-23-for.html>).

183. *See, e.g.*, ODLYZKO ET AL., *supra* note 10, at 56.

goes there anymore.”¹⁸⁴ Thus while firms may have incentives to pad profits by restricting capacity, their ability to do so depends much more on their market power than their choice of pricing strategy.

Whether usage-based pricing can be a useful tool to manage broadband congestion turns on two subsidiary inquiries. First, how congested are broadband networks? And second, how easily can usage-based pricing target and alleviate that congestion?

B. Measuring Broadband Congestion

Although congestion is difficult to measure with certainty, and performance varies by network provider, many analysts have concluded that congestion is not presently a significant problem for fixed broadband networks.¹⁸⁵ The FCC's most recent survey of fixed broadband performance, released in July 2012, shows that the average fixed broadband provider delivered ninety-six percent of its advertised speeds during peak usage periods.¹⁸⁶ This was up from eighty-seven percent in 2011.¹⁸⁷ The Commission attributes this improvement to “improvements in network performance” rather than downward adjustment on advertised speeds, noting that there was a thirty-eight percent increase in average speeds delivered to customers.¹⁸⁸ Peak-time performance varies somewhat based upon technology. During peak periods, fiber-based networks such as FiOS delivered 117% of advertised download speeds, while cable-based services delivered ninety-nine percent of advertised speeds and DSL-based services lagged behind, at just eighty-four percent of advertised speeds.¹⁸⁹

Of course, this does not suggest that congestion is never a problem for fixed broadband networks. In 2008, the Commission sanctioned Comcast Corporation for throttling traffic between users operating peer-to-peer networks.¹⁹⁰ Comcast claimed throttling was necessary because these networks created an unexpected spike in demand for upload bandwidth, which imposed congestion costs on other consumers who shared upload

184. Jeffrey K. MacKie-Mason & Hal R. Varian, *Pricing Congestible Network Resources*, 13 IEEE J. OF SELECTED AREAS OF COMM. 1141, 1146 (1995), *quoted in* GRABER, *supra* note 173, at 137.

185. *See* Letter from Free Press, *supra* note 10, at 1.

186. FCC, 2012 MEASURING BROADBAND AMERICA JULY REPORT: A REPORT ON CONSUMER WIRELINE BROADBAND PERFORMANCE IN THE U.S. 10 (2012). Peak time is defined as weeknights from 7:00 p.m. to 11:00 p.m. local time, when aggregate network demand is typically highest. *Id.* at 8.

187. *Id.* at 10.

188. *Id.* at 5–6.

189. *Id.* at 10–11 (Peak-time upload speeds were 106% of advertised for fiber, 110% for cable, and 103% for DSL).

190. *See Formal Complaint of Free Press, supra* note 29, at 13031.

bandwidth with someone operating a peer-to-peer network.¹⁹¹ One can also infer some level of network congestion from the rise of the Content Delivery Network (“CDN”) industry. Significant content providers such as Netflix rely on third-party CDNs such as Akamai and Level 3 Technologies to deliver their services.¹⁹² CDNs store multiple copies of a content provider’s data in locations across the country, and carry that data over their privately owned networks rather than the public Internet to a location on the broadband provider’s network closest to the consumer. One advantage that CDNs offer to content providers is the ability to avoid potential congestion costs associated with the bottlenecks of the public Internet. More generally, Say’s Law suggests that any installed capacity will eventually become saturated: greater network capacity drives greater demand for bandwidth-intensive applications that the additional capacity makes possible.¹⁹³ This suggests that congestion may be managed or brought into equilibrium for a time, but supports the idea that congestion can be a legitimate factor in pricing determinations for broadband providers.

Congestion is a much more significant issue for wireless providers.¹⁹⁴ As former FCC Chairman Genachowski and many commentators note, the smartphone revolution has unleashed tremendous demand for wireless applications and services. While wireless providers are investing billions of dollars to upgrade and expand network capacity, neither these efforts nor spectrum policy has been able to match that demand.¹⁹⁵ Industry analyst Peter Rysavy notes that the bandwidth-intensive mobile applications such as streaming video are “growing tremendously, and it’s unclear how long operators will be able to keep up. In the absence of new spectrum, which does not seem to be materializing fast enough . . . the result will be networks running at capacity.”¹⁹⁶ Given these dynamics, Rysavy concludes,

191. *Id.* at 13031–32. The Commission assumed without deciding that Comcast’s factual claims were true and found targeted throttling of peer-to-peer traffic was an unreasonable method of alleviating network congestion. *Id.* at 13056.

192. See ODLYZKO ET AL., *supra* note 10, at 23–24.

193. See GRABER, *supra* note 173, at 6.

194. See ODLYZKO ET AL., *supra* note 10, at 21.

195. See, e.g., John Eggerton, *Cable Show 2012: Genachowski Praises Cable for Wi-Fi Efforts*, BROADCASTING & CABLE (May 22, 2012, 12:02 PM), http://www.broadcatingcable.com/article/484944-Cable_Show_2012_Genachowski_Praises_Cable_for_Wi-Fi_Efforts.php (interview by Michael Powell, NCTA President, with Julius Genachowski, former Chairman, FCC); Joe Zeto, *Addressing Mobile Data Growth & Impending Network Congestion*, WIRELESS WEEK (Feb. 7, 2012, 5:07 PM), <http://www.wirelessweek.com/articles/2012/02/technology-addressing-mobile-data-growth-impending-network-congestion-wireless-networks/>.

196. PETER RYSAVY, INFORMATIONWEEK REPORTS, LTE: HUGE TECHNOLOGY, HUGE CHALLENGES 8 (Mar. 2012), available at http://www.rysavy.com/Articles/2012_03_LTE.pdf.

“congestion is unavoidable.”¹⁹⁷ This is reflected in the prevalence of tiered pricing in the wireless industry.

C. Usage-Based Pricing as a Congestion Management Tool

Although usage-based pricing encourages more efficient network consumption generally, many question its usefulness for alleviating congestion specifically. While data caps and tiered pricing have become prominent usage-based pricing strategies in the marketplace,¹⁹⁸ they are rather crude tools for addressing network congestion.¹⁹⁹ Data caps limit the amount of bandwidth that a customer uses each month. While this limit reduces overall traffic on the network, it does not directly target traffic during congestion periods. This is the equivalent of trying to solve rush-hour highway congestion by placing a limit on the number of miles each driver can drive each month. The cap may have some indirect effect on congestion, if heavy users choose to reduce consumption by reducing peak-time use. But the cap also targets heavy users who generate huge volumes of traffic during off-peak periods (for example, by backing up systems at 2:00 a.m.), whose uses generate virtually no congestion costs.²⁰⁰ For this reason, Sandvine estimates that “monthly usage quotas have only a limited impact, if any at all, on peak network demand.”²⁰¹

If feasible, peak-time pricing could be a more effective usage-based strategy to alleviate congestion.²⁰² When facing rush-hour traffic congestion, London famously began charging commuters a fee to drive in the busiest part of town during peak times. This strategy has reduced congestion by thirty percent.²⁰³ For many years, peak pricing was a staple of long-distance and wireless telephone service in order to drive traffic toward nights and weekends when networks were less congested.²⁰⁴ In broadband, a metered rate that charges customers more for peak-time use

197. PETER RYSAVY, RYSAVY RESEARCH, MOBILE BROADBAND CAPACITY CONSTRAINTS AND THE NEED FOR OPTIMIZATION 5 (Feb. 2010); *see also* RYSAVY, *supra* note 196, at 8.

198. *See supra* Section I.A–B.

199. ODLYZKO ET AL., *supra* note 10, at 28; Wallsten, *supra* note 94.

200. GRABER, *supra* note 173, at 84.

201. Sandvine 2011, *supra* note 3, at 5; *see* YOO, *supra* note 24, at 97–98; OPEN INTERNET ADVISORY COMMITTEE 2013 ANNUAL REPORT, *supra* note 38, at 28–29.

202. GRABER, *supra* note 173, at 86–100; Wallsten, *supra* note 19, at 2; but *see* YOO, *supra* note 24, at 99 (noting that even peak-time pricing “mimics congestion-based pricing imperfectly” and will still “result in a degree of inefficiency”).

203. *See* Sam Schwartz et al., *A Comprehensive Transportation Policy for the 21st Century: A Case Study of Congestion Pricing in New York City*, 17 N.Y.U. ENVTL. L.J. 580, 596–97 (2008–2009) (discussing London and Stockholm examples); but *see* Michael H. Schuitema, Comment, *Road Pricing as a Solution to the Harms of Traffic Congestion*, 34 TRANSP. L.J. 81, 92–112 (2007) (noting distributional and other problems with congestion-based pricing of traffic).

204. *See supra* Section I.A.

might similarly encourage customers to shift peak-time activities to less expensive off-peak hours.²⁰⁵

But it may be difficult to identify predictable periods of congestion and communicate that clearly to consumers. This may be possible for fixed broadband. Although the consensus is not universal, most analysts generally agree with the FCC that fixed broadband networks experience consistent peaks on weekdays between 7:00 p.m. and 11:00 p.m., which coincides with the time that consumers return home from work and consume bandwidth-heavy applications such as streaming video.²⁰⁶ As a result, a primetime premium may be a feasible solution to alleviate future fixed broadband congestion, assuming traffic patterns do not change as network use rises. But there is much less consensus regarding wireless congestion periods. Wireless customers vary widely in their data consumption habits. Network optimization company Bytemobile notes that, with the rise of wireless video, “mobile networks are under constant strain for the majority of the day.”²⁰⁷ Systems can monitor network load and automatically raise prices when they detect congestion. However, unless these periods are easily understood and predicted by consumers, they are unlikely to affect consumer behavior.²⁰⁸

V. POTENTIAL ANTICOMPETITIVE EFFECTS OF USAGE-BASED PRICING

While there are many potential benefits that flow from usage-based pricing, some critics do not trust the practice because of a fear of anticompetitive harm. These commentators fear that broadband providers may adopt data caps to achieve an unfair economic advantage in the video market. They note that “in the United States Internet service providers are almost always also in the pay-television business,” which competes against Internet-based video providers such as Netflix and Hulu.²⁰⁹ Comcast estimates that the amount of data required to replace its cable service with an Internet-based competitor would be 288 gigabytes each month²¹⁰—a figure suspiciously close to the 300-gigabyte monthly cap that the company is test-marketing. Given the incentive to discriminate, critics allege that

205. See Sandvine 2011, *supra* note 3, at 5.

206. See FCC, *supra* note 186, at 8.

207. BYTEMOBILE, MOBILE ANALYTICS REPORT 3 (June 2011).

208. Odlyzko notes that even simple, relatively clear time-of-day pricing in other industries often fails to measurably change consumer behavior. ODLYZKO ET AL., *supra* note 10, at 28–29.

209. *Id.* at 48.

210. See App’ns of Comcast Corp., Gen. Electric Co., & NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licenses, *Opposition to Petitions to Deny and Response to Comments*, FCC MB Docket No. 10-56, at 93 (fil. July 21, 2010).

data caps serve primarily “to protect [broadband providers’] legacy, linear video distribution models from emerging online video competition.”²¹¹

A. *Data Caps as a Vertical Restraint on Trade*

These are valid concerns, although they come with some caveats. For many consumers, over-the-top video providers like Netflix are complements rather than substitutes to traditional cable: they offer an alternative slate of entertainment choices but do not replicate the specific channels and programs that cable offers. Cable industry analyst James Ratcliffe explains that subscription rates remain high because “pay TV continues to provide customers with the content they want, a lot of which isn't available outside the traditional pay environment,” such as live sporting events.²¹² Moreover, many broadband providers (particularly DSL and wireless providers) do not deliver cable service, and not all who do (like Verizon) have adopted data caps. Nonetheless, the Commission has correctly found that vertically integrated broadband providers “have incentives to interfere with the operation of” Internet-based competitors.²¹³ These integrated companies wish to keep as many customers as possible enrolled in the “triple-play” bundle of voice, video, and data service, because it increases overall revenues, spreads the common costs of the network more widely, and can thus minimize the cost of each network service.

But regulatory intervention requires more than a showing that a vertically integrated firm has incentives to take actions that might harm competitors. The firm must also have the ability to do so. Antitrust law subjects almost all vertical restraints to the rule of reason, which makes these restraints actionable only if the firm has market power.²¹⁴ Without

211. Letter from Free Press, *supra* note 10, at 2.

212. James Ratcliffe, *Why Cable is Winning the Cord-Cutting War*, HOLLYWOOD REPORTER (Aug. 24, 2012, 6:00 AM), <http://www.hollywoodreporter.com/news/cable-TV-netflix-hulu-youtube-hbo-time-warner-362784>. Of course, some of the content Ratcliffe touts can be downloaded illegally online. *See, e.g.*, Susan P. Crawford, *Team USA Deserves No Gold Medals for Internet Access*, BLOOMBERG (Aug. 5, 2012, 6:30 PM), <http://www.bloomberg.com/news/2012-08-05/team-usa-deserves-no-gold-medals-for-internet-access.html> (discussing file-sharing site Pirate Bay's circumvention of NBC's time-shifted Olympics coverage by hosting user-uploaded video of Olympic events). Moreover, popular cable providers such as HBO and ESPN are experimenting with web-based alternative delivery systems, and Intel seeks to enter the market as an Internet-based cable competitor, whose offerings would be a substitute for, rather than a complement to, traditional cable. *See, e.g.*, Cliff Edwards, *Intel Confident of Obtaining Programs for Web TV Service*, BLOOMBERG (June 25, 2013, 5:02 PM), <http://www.bloomberg.com/news/2013-06-25/intel-confident-it-will-obtain-programs-for-internet-tv-service.html>.

213. Preserving the Open Internet: Broadband Industry Practices, *Report and Order*, FCC 10-201, 25 FCC Rcd. 17905, 17916 (2010) [hereinafter *Preserving the Open Internet Report and Order*].

214. *See* Leegin Creative Leather Products, Inc. v. PSKS, Inc., 551 U.S. 877, 881 (2007). Technically, tying (which is a form of vertical inter-brand restraint) remains a per se

market power, a firm cannot maintain anticompetitive conduct, because customers will defect. If consumers in a competitive market wish to use Netflix and find that one company's data caps prevent them from doing so, those consumers will move to another broadband provider.²¹⁵ If no provider offers uncapped service and consumers demand it, over time one provider may change its policies to meet this pent-up demand.

Although analysts dispute the precise level of competition in fixed broadband markets,²¹⁶ Gregory Sidak and David Teece are probably correct that "the market for broadband access is both highly rivalrous and workably (even if not perfectly) competitive."²¹⁷ The Commission notes that eighty-two percent of American census tracts have at least two competitive options for fixed broadband service.²¹⁸ Of course, in most places this means only two options: the telephone company and the cable company. Susan Crawford notes that because of cable's recent upgrade to DOCSIS 3.0, a new standard that boosts performance of cable-based data transmission, cable companies offer speeds far greater than copper-based DSL service.²¹⁹

Alfred Kahn, the late dean of regulated utilities law, has explained that "[t]here is no consensus among economists about the likely sufficiency of competition under duopoly."²²⁰ On the one hand, Verizon's recent cross-

offense, meaning a defendant can be held liable even without a finding of market power. But as Hanno Kaiser notes, this is somewhat of a distinction without a difference, as one element of a tying claim is that the defendant have market power in the tying market. See Hanno F. Kaiser, *Are "Closed Systems" an Antitrust Problem?* 7 COMP. POL'Y INT'L 91, 99–101 (2011).

215. See Einer Elhauge, *Tying, Bundled Discounts, and the Death of the Single Monopoly Profit Theory*, 123 HARV. L. REV. 397, 401 (2009) (emphasizing the appropriateness of a market power requirement in analyzing vertical restraints); cf. Jeffrey Jarosch, *Novel "Neutrality" Claims Against Internet Platforms: A Reasonable Framework for Initial Scrutiny*, 59 CLEV. ST. L. REV. 537, 543 (2011) (discussing role of market power in claims against closed Internet platforms such as Apple's App Store).

216. See, e.g., ODLYZKO ET AL., *supra* note 10, at 32–33 (noting estimates about fixed broadband concentration and difficulty of entry).

217. J. Gregory Sidak & David J. Teece, *Innovation Spillovers and the "Dirt Road" Fallacy: The Intellectual Bankruptcy of Banning Optimal Transactions for Enhanced Delivery over the Internet*, 6 J. COMP. L. & ECON. 521, 526 (2010). Sidak and Teece cite several studies filed before the FCC in the net neutrality proceeding, including filings from Michael and one from Gary Becker and Dennis Carlton. See *id.* at 526 n.33.

218. NATIONAL BROADBAND PLAN, *supra* note 150, at 37. The Commission notes that it lacks the granularity of price and performance data needed to determine if two providers compete head-to-head throughout each census tract. *Id.*

219. Susan P. Crawford, *The Looming Cable Monopoly*, 29 YALE L. & POL'Y REV. 34, 36 (2010). Crawford notes that competition remains more robust where cable companies compete with fiber-based telephone networks such as Verizon's FiOS service. But Verizon has no immediate plans to expand the present FiOS service footprint.

220. ALFRED E. KAHN, FTC WORKSHOP ON BROADBAND CONNECTIVITY COMPETITION POLICY (last updated Feb. 21, 2007), available at <http://www.ftc.gov/opp/workshops/broadband/presentations/kahn.pdf>.

promotional agreement with leading cable providers,²²¹ and its decision not to extend the FiOS footprint beyond the 19 million homes passed in the initial deployment plan,²²² suggest the market may be trending toward cooperation. But as Sidak and Teece show, some providers experience annualized churn rates between 28.8% and 36%, which suggests that a sizeable number of customers do change broadband providers each year.²²³ And providers are competing in ways that are reducing switching costs. AT&T adopted a no-term service contract option in 2008, advertising it as service “without the hassle of a term commitment like those of cable companies.”²²⁴ Most of the industry quickly followed suit. The cable industry’s deployment of DOCSIS 3.0 also evinces a desire to gain a competitive edge over Verizon and AT&T, which might not have happened if the companies had market power and thus felt no need to respond to telephone-based competition. While the level of competition varies by market, a recent Federal Communications Commission report on usage-based pricing finds that “there is no indication that ISPs are offering different policies in areas with limited competition.”²²⁵

Competition is likely to increase as other platforms become more suitable substitutes for wireline broadband service, just as satellite rose as an intermodal competitor to traditional cable service. With the advent of 4G LTE speeds, many services available over fixed broadband networks are also available over wireless broadband as well; the gating factor is the capacity of wireless networks to offer these services at the same scale as today’s cable and telephone companies. And the FCC’s most recent broadband report notes that “the satellite industry began launching a new generation of satellites offering performance as much as 100 times superior to the previous generation,” offering speeds that “will support many types of popular broadband services and applications.”²²⁶ This means that satellite-based broadband is, or may soon be, available throughout the country as an alternative to telephone or cable-based broadband service.

221. See Press Release, Verizon Wireless, Comcast, Time Warner Cable, and Bright House Networks Sell Advanced Wireless Spectrum to Verizon Wireless for \$3.6 Billion (Dec. 2, 2011), available at <http://news.verizonwireless.com/news/2011/12/pr2011-12-02.html>. The cross-promotion agreement was part of a larger deal in which Verizon Wireless purchased valuable spectrum from a consortium of cable providers.

222. Cecelia Kang, *Verizon Ends Satellite Deal, FiOS Expansion As It Partners With Cable*, available at http://www.washingtonpost.com/blogs/post-tech/post/verizon-ends-satellite-deal-fios-expansion-as-it-partners-with-cable/2011/12/08/gIQAGANrfO_blog.html (last visited Sept. 15, 2013).

223. Sidak & Teece, *supra* note 217, at 564–65.

224. Press Release, AT&T, Two Years, One Price, No Term Contract: AT&T Introduces New Broadband Plans with Guaranteed Monthly Rate (Aug. 20, 2008), available at <http://www.att.com/gen/press-room?pid=4800&cdvn=news&newsarticleid=26024>.

225. See OPEN INTERNET ADVISORY COMMITTEE 2013 ANNUAL REPORT, *supra* note 38, at 18.

226. FCC, 2013 MEASURING BROADBAND AMERICA FEBRUARY REPORT 7 (2013).

Opponents must also show that data caps harm consumers. Netflix can argue, and has argued, that data caps are a threat to its existing business model.²²⁷ But the Supreme Court has repeatedly reminded litigants that the antitrust laws were passed for “the protection of *competition*, not *competitors*.”²²⁸ Like price discrimination, vertical restraints have ambiguous effects on consumer welfare.²²⁹ Some vertical restraints “give rise to competitive foreclosure concerns,” but most are procompetitive because they “generate significant efficiencies and enhance consumer welfare.”²³⁰ For example, when AT&T entered into an exclusive vertical agreement with Apple to distribute the iPhone, the wireless provider received a competitive advantage over Verizon and other competitors.²³¹ But this was undeniably good for consumers: it woke up a sleepy smartphone market, as AT&T advertised the product for which it paid so dearly, and Verizon began working with Google to develop the rival Android platform as a competitive alternative.

As discussed above, broadband operators can offer several procompetitive justifications for data caps. Caps allow firms to shift more network costs onto heavier users, which can expand service to light users who cannot afford the higher uniform flat rate.²³² They also encourage consumers, content providers, and broadband providers themselves to use network resources more efficiently.²³³ As critics point out, caps could also deter customers from canceling cable service in favor of Internet-based video options. This is harmful to that subset of consumers who subscribe to both broadband and cable and would cancel cable but for the data cap. But it could benefit those customers who subscribe only to broadband service: because cable and broadband service share common network costs, a shrinking base of cable subscribers would force the company to recover those costs by raising broadband rates.²³⁴ The net effect of the practice is difficult to determine with certainty, meaning that the anticompetitive case is not as simple or obvious as some critics assert.

Perhaps for this reason, several antitrust scholars have surmised that the Department of Justice is unlikely to find that data caps are anticompetitive. Harry First notes that “[a]ll these cable companies are really facing big competition from the telcos” and “[i]f the consumer can

227. See, e.g., Hyman, *supra* note 87. Hyman is general counsel for Netflix.

228. Brooke Group Ltd. v. Brown & Williamson Tobacco Corp., 509 U.S. 209, 224 (1993) (quoting Brown Shoe Co. v. United States, 370 U.S. 294, 320 (1962)).

229. Thomas W. Hazlett & Joshua D. Wright, *The Law and Economics of Net Neutrality*, 45 IND. L. REV. 767, 798 (2012).

230. *Id.* at 797.

231. See *supra* text accompanying notes 45–46.

232. See *supra* Section II.

233. See *supra* Section III.

234. See George S. Ford, *A Most Egregious Act? The Impact on Consumers of Usage-Based Pricing*, in PHOENIX CENTER PERSPECTIVES 12-02 (May 23, 2012). Ford argues that the net effect of charging consumers who switch from cable to Internet-based video services a fee is positive.

just switch, then it's not exclusionary and bad business."²³⁵ Similarly, Herbert Hovenkamp notes that "[i]f it's simply data caps . . . that's a tougher antitrust case to make because public utilities have a legitimate interest in preventing overuse of their assets, particularly if other people's access is being limited as a result. . . . There's a legitimate claim on the part of the Internet providers that staged pricing or caps are reasonable."²³⁶ First further explained that the agency's case likely depends on whether it can find evidence of collusion among broadband providers: "[i]f they make these decisions unilaterally about how they're going to price downloading from the Internet individually, that's not going to exclude these Internet rivals."²³⁷ These comments echo the conclusions of a 2007 Federal Trade Commission study, which found that it is "difficult to find evidence that vertical controls reduce welfare" and that "optimal policy places a heavy burden on plaintiffs to show that a restraint is anticompetitive."²³⁸

This analysis highlights the importance of case-by-case adjudication of allegedly anticompetitive conduct. One cannot say as a general matter that data caps and other forms of usage-based pricing are inherently anticompetitive. The effect they have on competition turns upon a fact-sensitive inquiry into the broadband provider's market power, and quantification of the impact that the pricing strategy has on different segments of the provider's customer base.

B. *The Xfinity-Xbox Dispute*

First and Hovenkamp suggested that the Justice Department may have an easier time challenging Comcast's specific practice of exempting Xfinity app use from its data cap when watched through the Xbox video game console, while subjecting Netflix and other like services to the normally applied data cap.²³⁹ Their conclusions stem from Attorney General Eric Holder's congressional testimony suggesting that this practice may violate a condition that the Justice Department placed on Comcast's 2011 merger with NBC Universal.²⁴⁰ First wondered if the general investigation "was generated out of a concern that Comcast is violating the decree they entered into."²⁴¹

235. Melissa Lipman, *DOJ Needs Collusion, Dominance to Make Antitrust Case*, LAW360 (June 13, 2012), <http://www.law360.com/articles/349639/doj-needs-collusion-dominance-to-make-cable-antitrust-case>.

236. *Id.*

237. *Id.*

238. See Hazlett & Wright, *supra* note 229, at 815–16 (quoting Luke Froeb, Director, Bureau of Econ., Fed. Trade Comm'n, Presentation to European Ass'n for Research in Indus. Econ.: Economics and Antitrust: Enforcement R&D, at 23 (Sept. 2, 2005), available at <http://www.ftc.gov/speeches/froeb/earie.pdf>, and James C. Cooper et al., *Vertical Antitrust Policy as a Problem of Inference*, 23 INT'L J. INDUS. ORG. 639 (2005)).

239. Lipman, *supra* note 235.

240. *Id.*

241. *Id.*

But setting aside any special provisions attached to the Comcast merger, it is unlikely that the Xbox issue actually violates general antitrust principles. Comcast offers a service known as Xfinity On Demand, which is available for Xfinity cable subscribers to watch on television using a traditional cable box.²⁴² Customers who subscribe to both Xfinity cable service and Comcast broadband service may also access Xfinity On Demand using the Xfinity App on Microsoft's Xbox 360 video game console, which is connected to the television and the Internet. When a customer chooses to access Xfinity On Demand via the Xfinity App, the data used to view the service is exempt from the customer's monthly cap—even though other content viewed through the Xbox, such as Netflix, continues to count against the cap.

Although at first blush this arrangement appears discriminatory, it is hard to show any consumer harm because of the way the offer is structured. The exemption flows from Microsoft's ongoing efforts to market the Xbox as an alternative to a traditional cable set-top box. The Xfinity App is only available to customers who subscribe to Comcast's cable service, and the exemption only applies when the customer views Xfinity content on the customer's television through the Xbox. Accessing the Xfinity App on a computer or tablet would incur data use subject to the cap. Ultimately, this means only that existing Xfinity cable customers are free to use an Xbox in lieu of a traditional cable box to view cable content on their televisions. Netflix may complain that the exemption leads Comcast customers to watch Xfinity rather than Netflix content using the Xbox, because Xfinity content does not incur data charges. But importantly, a customer may already do this regardless of the exemption, simply by turning on the cable box.

From the consumer's standpoint, therefore, the exemption is merely a matter of convenience. Traditional cable consumption on television does not count toward monthly data limits, and no one seems to be suggesting that it should. The Xbox exemption merely allows customers to watch traditional cable consumption on television using the Xbox rather than a traditional set-top box as the conduit. This innovation is proconsumer, in that it gives consumers a choice of receivers for their television and perhaps allows some consumers to avoid Comcast's monthly set-top box rental fees. But the consumer is not receiving any new cap-exempt content as a result of the agreement, because the consumer already receives the same cap-exempt Xfinity programming through the cable system. Thus, while at first blush this dispute looks like an example of the potential ills of data caps, ultimately the issue does little to undermine the potential benefits of experimenting with various forms of usage-based pricing.

242. See Tony Werner, *The Facts About Xfinity TV and Xbox 360: Comcast is Not Prioritizing*, COMCAST VOICES (May 15, 2012), <http://blog.comcast.com/2012/05/the-facts-about-xfinity-tv-and-xbox-360-comcast-is-not-prioritizing.html>.

C. Data Caps and Market Power

The antitrust analysis of data caps in Section V.A suggests that critics' opposition to data caps is somewhat misplaced. The real threat to consumer welfare is not usage-based pricing, but market power. After all, a firm with market power can exploit consumers whether it relies on usage-based pricing or flat-rate pricing. A broadband provider with market power that wishes to offset lost cable revenue through additional broadband revenue need not use data caps to deter or punish video cord-cutters. It could simply raise standalone flat-rate broadband prices to punish those who do not also purchase cable service. And any broadband provider lacking market power could not gouge customers under either scenario, because affected consumers would simply take their business elsewhere.

As the Commission noted, vertically integrated firms often have incentives to leverage power in one market to improve their position in another market. The Madison River investigation is a testament to this possibility. Madison River Communications paid a \$15,000 fine to the Commission in 2005 to settle allegations that it blocked third-party Voice-over-Internet-Protocol ("VoIP") services from operating on its network because these VoIP services competed against Madison River's traditional telephone network.²⁴³ Regulators should remain vigilant with regard to potentially anticompetitive conduct, but they should also heed antitrust law's lesson that many vertical restraints are procompetitive, and absent market power, consumers can punish those that are not without help from the Justice Department.

Therefore, while there are risks that usage-based pricing can become a tool for anticompetitive conduct, this does not undermine the potential benefits of allowing firms to experiment with the practice. There may be significant consumer benefits that flow from data caps and other forms of usage-based pricing. And when a pricing change adversely affects consumers, usually they can punish this behavior by switching providers. Regulatory enforcement should usually step in only if a company has wielded market power in a way that causes actual harm to consumers. As a result, any enforcement should take the form of *ex post* adjudication of specific harmful conduct, rather than *ex ante* prohibitions on pricing tools that help broadband providers improve the efficiency of the network.

VI. THE IMPORTANCE OF TRANSPARENCY

To temper the concerns addressed above, and alleviate the concerns of both critics and consumers about the introduction and use of data caps, providers should clearly communicate to the public any changes in

243. Madison River Commc'ns, LLC & Affiliated Cos., *Consent Decree*, DA 05-543, 20 FCC Rcd. 4295 (2005).

practices. On a basic level, this transparency is mandated by the FCC's Open Internet Order. The order requires that

a person engaged in the provision of broadband Internet access service shall publicly disclose accurate information regarding the network management practices, performance, and commercial terms of its broadband Internet access services sufficient for consumers to make informed choices regarding use of such services and for content, application, service, and device providers to develop, market, and maintain Internet offerings.²⁴⁴

Clear disclosure of a firm's network management practices, including its billing practices, is an integral component of robust competition.²⁴⁵ Customers can compare different broadband providers only if they have an accurate description of each firm's value proposition. Clear disclosure also puts content and application providers on notice of potential ways that these practices affect their customers' behavior, so they can adjust their business models accordingly.²⁴⁶

But disclosure of billing terms is not the only way the firm should communicate its plans to consumers. As Odlyzko notes, consumers prefer flat rates to metered rates, in part because they tend to overestimate their monthly data consumption and because of the mental transaction costs of making decisions under a metered regime.²⁴⁷ Unlike minutes on a long-distance plan, megabytes are difficult units for consumers to conceptualize. But to achieve efficiency gains from usage-based pricing, a network provider must assure that its users generally understand how much data each online transaction consumes. To migrate successfully to usage-based prices without adversely affecting its reputation with customers, the provider should take steps to correct this overestimation and convince users that they are better off with usage-based pricing.

Graber suggests sending customers a bill comparing their flat-rate pricing with a hypothetical usage-based bill that shows both total use and potential savings under the new plan.²⁴⁸ Providers might also circulate fliers on a regular basis noting the average amount of data consumed by popular activities, like Comcast did when it first adopted a data cap in 2008.²⁴⁹ As data consumption enters the zeitgeist, Internet content and application providers may also meet consumer demand by providing estimates of how

244. Preserving the Open Internet Report and Order, *supra* note 213, at 17937.

245. *Id.* at 17936–37.

246. *Id.*

247. ODLYZKO ET AL., *supra* note 10, at 44; *see also* GRABER, *supra* note 173, at 41.

248. GRABER, *supra* note 173, at 41.

249. Tom Corelis, *Comcast Sets Data Cap at 250 GB*, DAILY TECH (Aug. 29, 2008, 7:35 AM), <http://www.dailytech.com/Comcast+Sets+Data+Cap+at+250+GB/article12812.htm>.

much data individual actions might consume. Application developers in Apple's App Store and the Google Play Store routinely say how large each application is, so the consumer understands how much storage space the program will consume on the consumer's device. The market for Internet content and applications may ultimately evolve to provide similar information about consumption when possible.

Finally, providers need to make it easy for consumers to check their monthly data use. Most providers that have adopted usage-based pricing already make this information readily available to consumers through an application on the consumer's device or a web-based interface. Many also provide emails or text messages warning customers when monthly use begins to approach certain limits (such as a data cap). The prevalence of these tools shows that they are both feasible to provide and popular with consumers. Any firm considering usage-based pricing should make them available to consumers once the transition is complete.

VII. CONCLUSION

Ultimately, data caps and other pricing strategies are ways that broadband companies can distinguish themselves from one another to achieve a competitive advantage in the marketplace. When firms experiment with different business models, they can tailor services to niche audiences whose interests are inadequately satisfied by a one-size-fits-all plan. Absent anticompetitive concerns, public policy should encourage companies to experiment with different pricing models as a way to compete against one another.

As Christopher Yoo has noted, the trend toward pricing experimentation in telecommunications mirrors a greater trend toward greater experimentation and *ex post* oversight in antitrust law generally.²⁵⁰ Usage-based pricing can be a useful tool for broadband providers to create differentiation in the marketplace by spreading network costs in new ways and can promote greater efficiency by consumers, content providers, and the network operator itself. Only through experimentation and empirical measurement will providers find the optimal pricing solution—which may vary from network to network. Regulators have correctly rejected the call to interfere with this pricing flexibility by imposing broadband price controls. They should continue to do so, absent a showing of market failure and consumer harm. There is no reason to believe that a one-size-fits-all pricing plan represents the only or even the best option in an increasingly diverse Internet ecosystem.

250. Yoo, *supra* note 24, at 8–9; *see, e.g.*, Boliek, *supra* note 124, at 1680 (“Antitrust laws take a “wait and see” approach to new innovations and product development, and authorities will only intervene if such innovation is found to be anticompetitive *ex post* of deployment.”).

City of Arlington v. FCC: The Death of Chevron Step Zero?

Samuel L. Feder^{*}
Matthew E. Price^{**}
Andrew C. Noll^{***}

TABLE OF CONTENTS

I.	INTRODUCTION	48
II.	THE COURT’S DECISION IN <i>CITY OF ARLINGTON V. FCC</i>	51
	<i>A. The Circuit Split Leading to Arlington</i>	52
	<i>B. The Background Surrounding the Arlington Case</i>	54
	<i>C. The Majority Opinion</i>	57
III.	THE REAL QUESTION PRESENTED IN <i>ARLINGTON</i> : THE DISSENT AND THE CONCURRENCE	59
IV.	THE IMPLICATIONS OF <i>ARLINGTON</i>	62
	<i>A. Chevron Step Zero?</i>	62
	<i>B. The Open Internet Case</i>	64
	<i>C. The Nondelegation Doctrine</i>	67
V.	CONCLUSION	69

* Samuel L. Feder is a partner at Jenner & Block LLP’s Washington, D.C., office and a former General Counsel of the Federal Communications Commission.

** Matthew E. Price is an associate at Jenner & Block LLP and a former law clerk to Justice Stephen G. Breyer.

*** Andrew C. Noll is a J.D. candidate at Stanford Law School.

I. INTRODUCTION

While much attention has been paid to the Supreme Court's marquee opinions this last Term on gay rights,¹ voting rights,² and affirmative action,³ a potentially significant administrative law decision has largely escaped notice. In *City of Arlington v. Federal Communications Commission*, the Supreme Court held that an agency should receive *Chevron* deference for its interpretation of a statutory ambiguity concerning its "jurisdiction"—that is, the scope of its regulatory authority.⁴ Some Courts of Appeals had previously held that an agency's decisions regarding the scope of its jurisdiction should not receive *Chevron* deference, distinguishing jurisdictional questions from other questions of statutory interpretation.⁵ In an opinion authored by Justice Scalia, the Supreme Court rejected that view, holding that "judges should not waste their time . . . decid[ing] whether an agency's interpretation of a statutory provision is 'jurisdictional' or 'nonjurisdictional.' Once those labels are sheared away, it becomes clear that the question in every case is, simply, whether the statutory text forecloses the agency's assertion of authority, or not."⁶ And with respect to that question, *Chevron* applies and the agency receives deference.⁷

Arlington is potentially significant, however, less for its holding than for its dialogue between the majority opinion and the concurrence and dissenting opinions. Interestingly, neither the concurrence by Justice Breyer nor the dissent by Chief Justice Roberts takes issue with the majority's resolution of the question presented.⁸ None of the Justices believed that a distinction should be made between jurisdictional and non-jurisdictional questions. Nonetheless, the case produced heated disagreement among the Justices, tracking a long-running battle over a different question: whether, prior to invoking *Chevron* deference, a court must first make a separate judicial determination that Congress intended to

1. See *United States v. Windsor*, 133 S. Ct. 2675 (2013); *Hollingsworth v. Perry*, 133 S. Ct. 2652 (2013).

2. See *Shelby Cnty. v. Holder*, 133 S. Ct. 2612 (2013).

3. See *Fisher v. Univ. of Tex. at Austin*, 133 S. Ct. 2411 (2013).

4. *City of Arlington v. FCC*, 133 S. Ct. 1863 (2013).

5. See, e.g., *City of Arlington v. FCC*, 668 F.3d 229, 248 (5th Cir. 2012) (noting the question presented in the case was "whether *Chevron* applies in the context of an agency's determination of its own statutory jurisdiction, and the circuit courts have adopted different approaches to the issue").

6. *City of Arlington*, 133 S. Ct. at 1870–71.

7. *Id.*

8. See *id.* at 1875–77 (Breyer, J., concurring); *id.* at 1877–86 (Roberts, C.J., dissenting).

delegate to the agency the power to interpret the particular statutory provision at issue.⁹

According to Justice Scalia and the majority, when Congress has conferred general rulemaking authority to an agency to administer a statute, and the agency has promulgated its interpretation of the statute through notice-and-comment rulemaking or adjudication, then *Chevron* applies and the agency should receive deference for its resolution of any ambiguity in statutory language.¹⁰ However, according to Justice Breyer and the dissenters led by the Chief Justice, before deferring under *Chevron*, a court must first ask whether—notwithstanding Congress’ general conferral of rulemaking authority—Congress intended to delegate to the agency the authority to interpret the particular statutory provision.¹¹ If so, then *Chevron* applies and the agency’s interpretation receives deference.¹² If not, then a court must use the tools of statutory interpretation to divine Congress’s intent as best it can, informed by the agency’s view only to the extent that the court finds it to be persuasive.¹³

The difference in these two approaches can be traced back to *Chevron* itself and the initial administrative law cases following it. *Arlington* is potentially significant because it could be read to resolve that long-running dispute in favor of Justice Scalia’s expansive view of agency authority. Such a resolution could have significant consequences for administrative law. In many cases the difference in approach may not matter to the outcome (here, for example, Justice Breyer found that Congress had intended to delegate to the agency interpretive authority over the provision at issue, and thus, he too applied *Chevron*);¹⁴ however, in some cases the difference in approach will matter. For example, when *Arlington* is read in conjunction with cases such as *Brown & Williamson*,¹⁵ it is unclear whether a court should take a harder look when an agency’s interpretation significantly expands the agency’s authority to regulate matters of great economic and social importance than it should when an agency’s interpretation concerns a minor, interstitial issue.

Moreover, the Court’s decision could place pressure on other administrative law doctrines—such as the long-dormant nondelegation doctrine—to do the work of constraining administrative agencies. Significantly, the first third of the Chief Justice’s dissent is devoted to describing the “danger posed by the growing power of the administrative

9. Compare *id.* at 1873–75 (majority opinion) with *id.* at 1879–80 (Roberts, C.J., dissenting).

10. See *id.* at 1874 (majority opinion).

11. See *id.* at 1875 (Breyer, J., concurring); see also *id.* at 1880 (Roberts, C.J., dissenting).

12. See *id.* at 1875 (Breyer, J., concurring).

13. See *Skidmore v. Swift & Co.*, 323 U.S. 134, 140 (1944).

14. See *City of Arlington*, 133 S. Ct. at 1877 (Breyer, J., concurring).

15. See *FDA v. Brown & Williamson Tobacco Corp.*, 529 U.S. 120 (2000) (holding that Congress had not given the FDA authority to regulate tobacco products).

state,”¹⁶ fostered by a toothless nondelegation doctrine that essentially allows an agency to legislate in Congress’s place.

Part II of this Article describes in greater detail the issue presented to the Court in *Arlington* and the majority’s decision in the case. Circuit courts had divided on the question of whether an agency should be afforded *Chevron* deference when deciding the scope of its own jurisdiction. The Court held in *Arlington* that the scope of an agency’s jurisdiction was no different than any other statutory question that an agency must decide: an agency can only ever act within the limits set forth by Congress, and *Chevron* commands that the agency receive deference in resolving any ambiguities concerning those limits.

Part III considers the dissent and concurrence, and explains that the significant issue raised by the case is not the question presented to the Court, but the distinct question of whether a court must assess, with respect to the statutory provision at issue in a particular case, whether Congress intended to delegate to the agency the authority to resolve any ambiguity in that provision. The majority concluded that the agency should receive deference, so long as Congress generally delegated to the agency the power to administer the statute through rulemaking and the agency used those procedures in reaching its interpretation of the statute. The concurrence and dissent argued that a court must ask whether Congress intended to delegate interpretive authority to the agency with respect to the particular question at issue, and the answer might vary, for example, depending upon the nature or importance of the question to the statutory scheme.

Part IV considers the implications of the case in two respects. First, the decision calls into doubt other cases that have held that the nature and importance of an interpretive question should have a bearing on the degree of deference that an agency should receive in resolving it. The D.C. Circuit’s review of the Open Internet (or “net neutrality”) rules issued by the Federal Communications Commission (“FCC”) presents a good example of the kind of case that could be significantly affected by the decision in *Arlington*.¹⁷ Second, one of the most striking features of the Chief Justice’s dissent was its long discussion of the dangers of allowing agencies untrammelled deference. One question is whether the broad interpretive authority enjoyed by agencies under *Arlington* will result in an effort to rejuvenate the nondelegation doctrine as a tool that judges can use to constrain agency action.

16. *Id.* at 1879 (Roberts, C.J., dissenting).

17. *See* Brief for Appellee/Respondents at 25–37, *Verizon v. FCC*, No. 11-1355 (D.C. Cir. filed Jan. 16, 2013) [hereinafter FCC Brief] (arguing that the FCC’s interpretation of the disputed section of the Telecommunications Act of 1996 is entitled to deference). Net neutrality refers to efforts to obtain a free, open Internet and prevent Internet providers from blocking consumers’ access to certain web content. In this way, net neutrality “seeks to preserve ISPs’ role as gateways to the Internet rather than gatekeepers.” Emily R. Roxberg, Note, *FCC Authority Post-Comcast: Finding a Happy Medium in the Net Neutrality Debate*, 37 J. CORP. L. 223, 225 (2011).

II. THE COURT'S DECISION IN *CITY OF ARLINGTON V. FCC*

As every student of administrative law knows, the *Chevron* case addressed a basic question in administrative law: whether courts should interpret a statute *de novo* or should, instead, defer to an agency's interpretation of the statute that the agency administers.¹⁸ Of course, Congress sometimes speaks unequivocally,¹⁹ and in those cases effect must be given to Congress's clear intent. But when a statute has more than one possible construction, *Chevron* directs a court to defer to the agency's choice among the various reasonable interpretations. That is, "if the statute is silent or ambiguous with respect to the specific issue, the question for the court is whether the agency's answer is based on a permissible construction of the statute."²⁰

The *Chevron* doctrine rests on a dual rationale. First, it reflects the assumption that the agency tasked with administering a statute has greater expertise than a court, and thus is better able to decide among competing policy choices.²¹ That is most obviously so when the question of statutory interpretation involves a technical or complex regulatory scheme, as such questions of interpretation often do.²² But even when not, an agency's familiarity with the regulatory backdrop allows the agency to make a more informed judgment than a court about how best to advance the purpose of the statute and Congress' intent. Second, *Chevron* reflects the assumption that an agency is more democratically accountable than the courts and is therefore better situated to make judgments about the wisdom of policy alternatives. As *Chevron* explained,

[A]n agency to which Congress has delegated policymaking responsibilities may, within the limits of that delegation, properly rely upon the incumbent administration's views of wise policy to inform its judgments. While agencies are not directly accountable to the people, the Chief Executive is, and it is entirely appropriate for this political branch of the Government to make such policy choices.²³

18. See *Chevron, U.S.A., Inc. v. Natural Res. Def. Council, Inc.*, 467 U.S. 837, 865 (1984).

19. *Id.* at 842–43 ("If the intent of Congress is clear, that is the end of the matter; for the court, as well as the agency, must give effect to the unambiguously expressed intent of Congress.").

20. *Id.* at 843.

21. *Id.* at 865.

22. *Id.*

23. *Id.* at 865.

A. *The Circuit Split Leading to Arlington*

In the years leading up to *Arlington*, Courts of Appeals had divided on whether courts should apply *Chevron* when confronted with a statute confining the scope of an agency's jurisdiction. The basic arguments on each side of the debate were first articulated by Justice Scalia and Justice Brennan in *Mississippi Power & Light Co. v. Mississippi ex rel. Moore*, a case involving the question of whether an order by the Federal Energy Regulatory Commission ("FERC") preempted certain action by the Mississippi Public Service Commission.²⁴ Although the majority did not directly address the issue, Justice Scalia and Justice Brennan both wrote separately to discuss what they viewed as the pivotal question in the case: whether FERC had authority under the Federal Power Act to issue its order.²⁵

Justice Scalia, in a concurring opinion, invoked *Chevron* and deferred to FERC's construction of the statute, concluding that FERC did have authority to issue its order.²⁶ He asserted that prior decisions of the Court had already held that a "rule of deference applies to an agency's interpretation of a statute designed to confine its authority."²⁷ Moreover, Justice Scalia argued, such a policy makes sense. Deference is "*necessary* because there is no discernible line between an agency's exceeding its authority and an agency's exceeding authorized application of its authority. To exceed authorized application is to exceed authority."²⁸ Indeed, he continued, "[v]irtually any administrative action can be characterized as either the one or the other, depending upon how generally one wishes to describe the 'authority.'"²⁹ Moreover, Justice Scalia argued, "deference is *appropriate* because . . . Congress would naturally expect that the agency would be responsible, within broad limits, for resolving ambiguities in its statutory authority or jurisdiction" and would not wish that "every ambiguity in statutory authority would be addressed, *de novo*, by the courts."³⁰

Justice Brennan, in a dissenting opinion, argued that deference to the agency was improper concerning a statute that Congress had intended to confine the scope of the agency's authority.³¹ He would have concluded, based upon his own reading of the statute, that FERC did not have authority to issue its order.³² In arguing that the "normal reasons for agency deference" do not apply when jurisdictional questions are at issue, Justice

24. 487 U.S. 354, 356–57 (1988).

25. *See id.* at 377–91.

26. *See id.* at 377–83 (Scalia, J., concurring).

27. *Id.* at 380 (Scalia, J., concurring).

28. *Id.* at 381 (Scalia, J., concurring).

29. *Id.* (Scalia, J., concurring).

30. *Id.* at 381–82 (Scalia, J., concurring).

31. *See id.* at 383–91 (Brennan, J., dissenting).

32. *Id.* at 387–88 (Brennan, J., dissenting).

Brennan distinguished between statutes defining the scope of an agency's jurisdiction and those delegating particular policy choices to an agency.³³ He reasoned that "[a]gencies do not 'administer' statutes confining the scope of their jurisdiction, and such statutes are not 'entrusted' to agencies."³⁴ Indeed, such statutes "do not reflect conflicts between policies that have been committed to the agency's care . . . but rather reflect policies in favor of limiting the agency's jurisdiction that, by definition, have not been entrusted to the agency."³⁵ Nor can an agency claim "special expertise in interpreting a statute confining its jurisdiction."³⁶ Finally, Justice Brennan rejected the assumption that Congress "intended an agency to fill 'gaps' in a statute confining the agency's jurisdiction . . . since by its nature such a statute manifests an unwillingness to give the agency the freedom to define the scope of its own power."³⁷

In the years following, a circuit split arose on this issue.³⁸ Some courts agreed with Justice Scalia and asserted that the Supreme Court had already decided the issue.³⁹ Others sided with Justice Brennan.⁴⁰ The D.C.

33. *Id.* at 387 (Brennan, J., dissenting).

34. *Id.* at 386–87 (Brennan, J., dissenting).

35. *Id.* at 387 (Brennan, J., dissenting) (citation omitted).

36. *Id.* (Brennan, J., dissenting). Although Justice Brennan did not further explain this conclusion (or cite to a particular authority), presumably his argument would be that courts, rather than agencies, are particularly well-suited to analyze and interpret statutes to discern the reach of their provisions and the jurisdiction afforded. Justice Brennan did suggest, however, that agency interpretation would not prove optimal because statutes limiting the scope of an agency's jurisdiction "may indeed conflict not only with the statutory policies the agency *has* been charged with advancing but also with the agency's institutional interests in expanding its own power." *Id.* (Brennan, J., dissenting).

37. *Id.* (Brennan, J., dissenting) (citation omitted). Thomas Merrill and Kristin Hickman argued that, although "Justice Brennan was surely right in principle, . . . Justice Scalia's critique based on the practical difficulties of defining agency action in excess of authority has been sufficiently persuasive that it has discouraged the Court from developing any scope-of-jurisdiction exception." Thomas W. Merrill & Kristin E. Hickman, *Chevron's Domain*, 89 *GEO. L.J.* 833, 910, 911 (2001). Thus, although the "Court appear[ed] to be aware of the need to police against agency aggrandizement (and abrogation), . . . it has done so primarily by exercising especially vigorous statutory interpretation at *Chevron's* step one when agencies press the limits of their authority, not by creating an exception to *Chevron* deference." *Id.*

38. *See City of Arlington*, 668 F.3d at 248 (explaining that the Supreme Court "has not yet conclusively resolved the question of whether *Chevron* applies in the context of an agency's determination of its own statutory jurisdiction, and the circuits of appeals have adopted different approaches to the issue"). The Sixth Circuit described the split as arising because the Court, "so far as we can tell, has yet to resolve the debate that Justice Scalia and Justice Brennan first waged over the point in 1988." *Pruidze v. Holder*, 632 F.3d 234, 237 (6th Cir. 2011) (citing *Mississippi Power*, 487 U.S. at 382–83, 386–87).

39. *See, e.g., Hydro Res., Inc. v. EPA*, 608 F.3d 1131, 1145–46 (10th Cir. 2010) (citing *Commodity Futures Trading Comm'n v. Schor*, 478 U.S. 833, 844 (1986) and Justice Scalia's concurrence in *Mississippi Power*); *Texas v. United States*, 497 F.3d 491, 501 (5th Cir. 2007) (citing generally *Brown & Williamson*, 529 U.S. 120); *Connecticut ex rel. Blumenthal v. U.S. Dep't of the Interior*, 228 F.3d 82, 93 (2d Cir. 2000); *P.R. Mar. Shipping Auth. v. Valley Freight Sys., Inc.*, 856 F.2d 546, 552 (3d Cir. 1988) (citing *Schor*, 478 U.S.

Circuit decided cases going both ways.⁴¹ And commentators described the issue as “[t]he most important—and vexing—question involving *Chevron*’s domain.”⁴²

B. *The Background Surrounding the Arlington Case*

The Supreme Court granted certiorari in *City of Arlington v. FCC* to resolve the split. As the majority framed the case, “[w]e consider whether an agency’s interpretation of a statutory ambiguity that concerns the scope of its regulatory authority (that is, its jurisdiction) is entitled to deference under *Chevron*.”⁴³

The case concerned the rules governing permitting for the siting of wireless telecommunication antennas. When extending wireless coverage to a particular area, network providers must construct the requisite facilities either by adding additional antennas to existing network towers or by constructing new towers altogether. Such proposals, generally referred to as “siting requests” or “siting applications,”⁴⁴ must be approved by local

at 844); *EEOC v. Seafarers Int’l Union*, 394 F.3d 197, 201 (4th Cir. 2005) (citing *Schor*, 478 U.S. at 844–47).

40. *N. Ill. Steel Supply Co. v. Sec’y of Labor*, 294 F.3d 844, 847 (7th Cir. 2002). Similarly, the Federal Circuit merely asserted that “[w]e review the Board’s legal conclusion regarding the scope of its own jurisdiction for correctness and without deference to the Board’s determination.” *Bolton v. Merit Sys. Prot. Bd.*, 154 F.3d 1313, 1316 (Fed. Cir. 1998).

41. *Compare, e.g., Am. Library Ass’n v. FCC*, 406 F.3d 689, 699 (D.C. Cir. 2005) (noting that *courts* must first determine the threshold question of whether “the agency acted pursuant to delegated authority”), and *Am. Civil Liberties Union v. FCC*, 823 F.2d 1554, 1567 n.32 (D.C. Cir. 1987) (arguing that, for *Chevron* purposes, “a pivotal distinction exists between statutory provisions that are jurisdictional in nature . . . and provisions that are managerial”), with *Bhd. of Locomotive Eng’rs v. United States*, 101 F.3d 718, 726 (D.C. Cir. 1996) (holding that petitioner’s “argument that we should adopt a less deferential standard of review because the decisions concern the scope of the Commission’s jurisdiction is without merit”), and *Okla. Natural Gas Co. v. FERC*, 28 F.3d 1281, 1284 (D.C. Cir. 1994) (similarly applying *Chevron* to jurisdictional interpretation).

42. *Merrill & Hickman, supra* note 37, at 909. Contrary to the position taken by the majority of circuits that had actually passed on the issue, many scholars contended that application of *Chevron* to jurisdictional claims was illogical. *See, e.g.,* Timothy K. Armstrong, *Chevron Deference and Agency Self-Interest*, 13 CORNELL J.L. & PUB. POL’Y 203, 206 (2004); Nathan S. Chapman & Michael W. McConnell, *Due Process as Separation of Powers*, 121 YALE L.J. 1672, 1786–88 (2012); Ernest Gellhorn & Paul Verkuil, *Controlling Chevron-Based Delegations*, 20 CARDOZO L. REV. 989, 1008–09 (1999); *Merrill & Hickman, supra* note 37, at 909–14; Lars Noah, *Interpreting Agency Enabling Acts: Misplaced Metaphors in Administrative Law*, 41 WM. & MARY L. REV. 1463, 1466 (2000); Nathan Alexander Sales & Jonathan H. Adler, *The Rest is Silence: Chevron Deference, Agency Jurisdiction, and Statutory Silences*, 2009 U. ILL. L. REV. 1497, 1532–33.

43. *City of Arlington*, 133 S. Ct. at 1866.

44. *See, e.g., id.* (referring to “siting applications”); Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B), FCC 09-99, 24 FCC Rcd. 13994, paras. 1–2 (2009) [hereinafter *Declaratory Ruling*] (referring to “siting requests” and “siting applications”).

zoning authorities. Nevertheless, to encourage construction of wireless networks, “Congress ‘impose[d] specific limitations on the traditional authority of state and local governments to regulate the location, construction, and modification’” of such towers and antennas.⁴⁵ Specifically, Congress provided that “[t]he regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government . . . shall not unreasonably discriminate among providers of functionally equivalent services; and . . . shall not prohibit or have the effect of prohibiting the provision of personal wireless services.”⁴⁶

In order to ensure that states or localities could not impede Congress’ objectives merely by refusing to act on a siting application, Congress also required in section 332(c)(7)(B)(ii) that a state or local government “act on wireless siting applications ‘within a reasonable period of time after the request is duly filed.’”⁴⁷ If a state or locality failed to do so, the aggrieved party enjoyed a right to “commence an action in any court of competent jurisdiction.”⁴⁸

Finally, Congress stated that “[e]xcept as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.”⁴⁹ Congress enacted these provisions as amendments to the existing Communications Act of 1934, section 201(b) of which provides the FCC with general rulemaking powers.⁵⁰

CTIA—The Wireless Association (“CTIA”) filed a petition with the FCC on July 11, 2008, requesting, among other things, that the Commission clarify the meaning of a “reasonable period of time.”⁵¹ In support, the record provided evidence of significant delays in various localities.⁵² The FCC favorably cited CTIA’s statistics showing that, of 3,300 pending personal wireless siting applications, “approximately 760” applications had been pending “for more than one year,” while more than 180 of those applications were “awaiting final action for *more than 3*

45. *City of Arlington*, 133 S. Ct. at 1866 (quoting *Rancho Palos Verdes v. Abrams*, 544 U.S. 113, 115 (2005)).

46. 47 U.S.C. § 332(c)(7)(B)(i) (2006).

47. *City of Arlington*, 133 S. Ct. at 1866 (quoting 47 U.S.C. § 332(c)(7)(B)(ii) (2006)).

48. 47 U.S.C. § 332(c)(7)(B)(v) (2006).

49. 47 U.S.C. § 332(c)(7)(A) (2006).

50. 47 U.S.C. § 201(b) (2006) (empowering the FCC to “prescribe such rules and regulations as may be necessary in the public interest to carry out the provisions of this chapter”).

51. *See Declaratory Ruling*, *supra* note 44, at para. 2. Although not relevant for the purposes of the *Arlington* decision, CTIA also requested that the FCC answer a related ambiguity: when a local authority will be deemed to have “failed to act” such that the aggrieved party may then commence a court action. *See id.* at para. 10.

52. *See id.* at paras. 32–36.

years.”⁵³ Relying on these figures, the FCC found that “the record shows that unreasonable delays are occurring in a significant number of cases” and, further, that the “unreasonable delays . . . have obstructed the provision of wireless services” and have proven “lengthy and costly” for wireless providers.⁵⁴ Moreover, the Commission determined that such delays “impede the promotion of advanced services and competition that Congress deemed critical in the Telecommunications Act of 1996.”⁵⁵

In response, and “[t]o provide guidance, remove uncertainty and encourage the expeditious deployment of wireless broadband services,” the Commission interpreted section 332(c)(7)(B)(ii) as establishing a rebuttable presumption governing the amount of time that is “reasonable” for a locality to respond to a siting application.⁵⁶ The FCC determined that a locality presumptively has ninety days to process a siting application seeking to collocate services, or attach a new antenna to a pre-existing tower, and 150 days to process applications for all other facilities.⁵⁷ The FCC cautioned that these time periods are only presumptions; a state or locality “will have the opportunity, in any given case that comes before a court, to rebut the presumption that the established timeframes are reasonable.”⁵⁸

The cities of Arlington and San Antonio, Texas, supported by several intervenors, sought judicial review of the Commission’s ruling before the U.S. Court of Appeals for the Fifth Circuit, arguing (among other things) not only that the FCC’s presumptive timeframes were not a reasonable interpretation of the provision requiring states and localities to act on a siting application “within a reasonable period of time after the request is duly filed,”⁵⁹ but also that the FCC should not be accorded *Chevron* deference with respect to that issue of statutory interpretation.⁶⁰ According to the challengers, the statute’s savings clause in 47 U.S.C. section 332(c)(7) showed that Congress did not intend to give the FCC authority to interpret the meaning of the timeframe requirement.⁶¹

The Fifth Circuit rejected these arguments. It first found that Congress did not unambiguously preclude the FCC from interpreting the timeframe requirement in section 332(c)(7)(B)(ii)—that is, the Fifth Circuit applied *Chevron* to the question of whether the agency enjoyed the authority to interpret the timeframe requirement.⁶² Having found that the statute was “silent on the question of whether the FCC can use its general

53. *Id.* at para. 33.

54. *Id.* at paras. 33–34.

55. *Id.* at para. 35.

56. *Id.* at para. 32.

57. *Id.* at para. 32.

58. *Id.* at para. 42.

59. 47 U.S.C. § 332(c)(7)(B)(ii) (2006).

60. *See City of Arlington*, 668 F.3d at 248.

61. *Id.* at 247.

62. *Id.* at 247–52.

authority under the Communications Act to implement section 332(c)(7)(B)'s limitations,"⁶³ the Fifth Circuit deferred to the FCC's answer to that question, which it found to be reasonable.⁶⁴ The Fifth Circuit then turned to the merits issue, namely, whether the FCC's timeframes were a reasonable interpretation of the phrase "reasonable period of time." The court found that the "time frames are based on a permissible construction of § 332(c)(7)(B)(ii) and (v) and are thus entitled to *Chevron* deference."⁶⁵

C. *The Majority Opinion*

The Supreme Court granted certiorari to address whether "a court should apply *Chevron* to . . . an agency's determination of its own jurisdiction."⁶⁶ The majority opinion, authored by Justice Scalia and joined by Justices Thomas, Ginsburg, Sotomayor, and Kagan, rejected any distinction between jurisdictional and other interpretive questions for the purposes of *Chevron* deference.⁶⁷ Echoing his concurrence in *Mississippi Power & Light*, Justice Scalia argued that the entire "premise is false, because the distinction between 'jurisdictional' and 'nonjurisdictional' interpretations is a mirage."⁶⁸ Regardless of how a particular question is framed, "the question a court faces when confronted with an agency's interpretation of a statute it administers is always, simply, *whether the agency has stayed within the bounds of its statutory authority*."⁶⁹ Whenever the agency strays beyond the bounds that Congress has prescribed, it has acted *ultra vires*—regardless of whether the "jurisdictional" label is used to describe those bounds.⁷⁰

63. *Id.* at 252.

64. *See id.* at 252–54.

65. *Id.* at 256.

66. *City of Arlington*, 133 S. Ct. at 1867–68 (quoting Petition for a Writ of Certiorari at i, *City of Arlington*, 133 S. Ct. 1863 (No. 11-1545)).

67. *Id.* at 1868. Interestingly, Justice Scalia argues at length that the case's resolution was aptly supported by many of the Court's existing precedents. Although noticeably quoting an Administrative Law Treatise—and not an opinion of the Court—for the punch line, he states that "[f]ortunately . . . we have consistently held 'that *Chevron* applies to cases in which an agency adopts a construction of a jurisdictional provision of a statute it administers.'" *Id.* at 1871 (quoting 1 RICHARD J. PIERCE, JR., ADMINISTRATIVE LAW TREATISE § 3.5, at 187 (2010)); *see generally id.* at 1871–73 (citing, among other cases, *Schor*, 478 U.S. 833, and *Brown & Williamson*, 529 U.S. 120, and concluding that "[t]he U.S. Reports are shot through with applications of *Chevron* to agencies' constructions of the scope of their own jurisdiction").

68. *City of Arlington*, 133 S. Ct. at 1868. Even more derisively, Justice Scalia depicts this as a fictitious distinction as separating "the big, important [interpretations] . . . defin[ing] the agency's 'jurisdiction'" from more "humdrum, run-of-the-mill stuff" which "are simply applications of jurisdiction the agency plainly has." *Id.*

69. *Id.*

70. *Id.* at 1879.

Prudential considerations also infused Justice Scalia's reasoning. First, he was concerned that the jurisdictional/nonjurisdictional line would become a dangerous exercise in semantics.⁷¹ Indeed, the majority worried that such an artificial dividing line would lead "[s]avvy challengers of agency action . . . [to] play the 'jurisdictional' card in every case."⁷² After all, "every new application of a broad statutory term can be reframed as a questionable extension of the agency's jurisdiction."⁷³ Such a dividing line would force judges to "waste their time in the mental acrobatics" required to divine if a particular agency interpretation is "jurisdictional" or "nonjurisdictional."⁷⁴ And "[t]he federal judge as haruspex, sifting the entrails of vast statutory schemes to divine whether a particular agency interpretation qualifies as 'jurisdictional,' is not engaged in reasoned decisionmaking."⁷⁵

Second, and worse still, allowing judges to second-guess an agency's interpretation of its authority would empower judges to engage in the very policymaking that they would deny to the agency. Distinguishing between jurisdictional and non-jurisdictional decisions would "transfer any number of interpretive decisions—archetypal *Chevron* questions, about how best to construe an ambiguous term in light of competing policy interests—from the agencies that administer the statutes to the federal courts."⁷⁶ Justice Scalia warned that some federal judges would be "tempted by the prospect of making public policy by prescribing the meaning of ambiguous statutory commands."⁷⁷ In choosing whether the limits of an agency's authority should be drawn "by unelected federal bureaucrats, or by unelected (and even less politically accountable) federal judges," Justice Scalia favored the former, who at least have expertise in the substantive area.⁷⁸

71. *Id.* at 1872–73.

72. *Id.* at 1873. As an example, the majority cited *Cellco Partnership v. Federal Communications Commission*, 700 F.3d 534 (D.C. Cir. 2012). In that case, Verizon challenged an FCC rule requiring that a cellular phone network provide roaming access to mobile-data, in addition to voice-telephone services, to a wireless subscriber from another carrier when that user travels outside his own carrier's coverage area. *Cellco Partnership*, 700 F.3d at 537. Among other arguments, Verizon sought to invoke this jurisdictional line—despite the court's assertion that circuit precedent would have required *Chevron* be applied in any event—in contending that the FCC had no statutory authority to implement those regulations at all. *Id.* at 541. The court held, however, that Title III of the act "clearly affords the Commission the ability to promulgate the data roaming rule." *Id.* (citing *Chevron*, 467 U.S. at 842–43).

73. *City of Arlington*, 133 S. Ct. at 1870.

74. *Id.*

75. *Id.* at 1871.

76. *Id.* at 1873.

77. *Id.*

78. *See id.* at 1873.

III. THE REAL QUESTION PRESENTED IN *ARLINGTON*: THE DISSENT AND THE CONCURRENCE

Strikingly, neither the concurrence by Justice Breyer, nor the dissent authored by Chief Justice Roberts and joined by Justice Kennedy and Justice Alito, defended the distinction between jurisdictional and non-jurisdictional issues.⁷⁹ Rather, as the dissent noted, the concept of “jurisdiction”—a term which the Court has described as having “many, too many, meanings”⁸⁰—obscures the real issue in the case and “leads the Court to misunderstand the argument it must confront.”⁸¹

Both the concurrence and dissent instead pressed a more fundamental question that the majority’s analysis largely omitted: whether, rather than automatically according *Chevron* deference to an agency’s interpretation of an ambiguous statute, a court must first determine for itself that Congress intended to delegate interpretive authority to the agency concerning the particular provision at issue. The Fifth Circuit had deferred to the agency on that second-order question. Yet according to the concurrence and the dissent, the question is a judicial one and no deference is appropriate: “[a] court should not defer to an agency on whether Congress has granted the agency interpretive authority over the statutory ambiguity at issue.”⁸² Binding deference is afforded under *Chevron* because agencies are given that power by Congress,⁸³ and a court must decide whether Congress “has in fact delegated to the agency lawmaking power over the ambiguity at issue.”⁸⁴

The majority opinion briefly addressed this argument, which it described as an “apparent rejection of the theorem that the whole includes all of its parts—its view that a general conferral of rulemaking authority does not validate rules for *all* the matters the agency is charged with administering.”⁸⁵ In the majority’s view, “the dissent proposes that even when general rulemaking authority is clear, *every* agency rule must be

79. See *id.* at 1875–77 (Breyer, J., concurring); *id.* at 1877–86 (Roberts, C.J., dissenting).

80. *Id.* at 1879 (Roberts, C.J., dissenting) (quoting *Union Pacific R. Co. v. Locomotive Engineers*, 558 U.S. 67, 81 (2009)).

81. *Id.* (Roberts, C.J., dissenting).

82. *Id.* at 1879–80 (Roberts, C.J., dissenting).

83. *Id.* at 1880 (Roberts, C.J., dissenting) (citing *United States v. Mead Corp.*, 533 U.S. 218, 229 (2001)) (arguing that courts “give binding deference to permissible agency interpretations of statutory ambiguities *because* Congress has delegated to the agency the authority to interpret those ambiguities ‘with the force of law’”).

84. *Id.* (Roberts, C.J., dissenting). Throughout his dissent, and in line with his more general critique of administrative agencies discussed below, the Chief Justice refers to agencies’ powers as legislative (or judicial or executive). But as the majority points out, administrative law—as required by separation of powers—*depends* upon agencies exercising only executive functions. See *id.* at 1870 n.4.

85. *Id.* at 1874.

subjected to a *de novo* judicial determination of whether *the particular issue* was committed to agency discretion.”⁸⁶

Yet, in the dissent’s view, it is a mistake to believe that the conferral of general rulemaking authority necessarily entitles the agency to deference with respect to any interpretive question arising from the statute it administers.⁸⁷ Congress’ intention may be different with respect to different parts of the statutory scheme.⁸⁸ Thus, its “delegation must extend to the specific statutory ambiguity at issue.”⁸⁹ The need to focus on the specific statutory ambiguity at issue is particularly visible in a situation where Congress has “parcel[led] out authority to multiple agencies.”⁹⁰ In such a situation, it is apparent that Congress could not have intended for each agency to interpret the statute that it administers, for multiple agencies administer the same statute and their interpretations may conflict.⁹¹ Rather, in such a situation, “the question is whether authority over the particular ambiguity at issue has been delegated to the particular agency.”⁹² “By the same logic,” the Chief Justice continued, “even when Congress provides interpretive authority to a single agency, a court must decide if the ambiguity the agency has purported to interpret with the force of law is one to which the congressional delegation extends.”⁹³ The dissenters would have remanded the case for the Court of Appeals to answer that question.⁹⁴

The majority also criticized the dissent as “offer[ing] no standards at all to guide this open-ended hunt for congressional intent,” instead inviting the court “to make an ad hoc judgment regarding congressional intent” based on a totality of the circumstances.⁹⁵ According to the majority, such an approach would “destroy the whole stabilizing purpose of *Chevron*” and foster “chaos.”⁹⁶ Justice Breyer’s concurrence offers an example, however, of how the dissent’s approach might be applied.

Justice Breyer began his concurrence with the same proposition as the dissent: “[a] reviewing judge . . . will have to decide independently

86. *Id.*

87. *Id.* at 1883 (Roberts, C.J., dissenting).

88. *Id.* (Roberts, C.J., dissenting).

89. *Id.* (Roberts, C.J., dissenting). The Chief Justice points to the decision in *Chevron* itself, finding that there “the Court did not ask simply whether Congress had delegated to the EPA the authority to administer the Clean Air Act generally” but asked “whether Congress had ‘delegat[ed] authority to the agency to elucidate a *specific provision* of the statute by regulation.”” *Id.* at 1881 (Roberts, C.J., dissenting) (quoting *Chevron*, 467 U.S. at 843–44). The majority’s answer, of course, is that a general delegation automatically confers authority on all provisions included in a particular statute. *Id.* at 1874 (“Where we differ from the dissent is in its apparent rejection of the theorem that the whole includes all of its parts . . .”).

90. *Id.* at 1883 (Roberts, C.J., dissenting).

91. *See id.* at 1883–84 (Roberts, C.J., dissenting).

92. *Id.* at 1884 (Roberts, C.J., dissenting).

93. *Id.* (Roberts, C.J., dissenting).

94. *Id.* at 1886 (Roberts, C.J., dissenting).

95. *Id.* at 1874.

96. *Id.*

whether Congress delegated authority to the agency to provide interpretations of, or to enact rules pursuant to, the statute at issue.”⁹⁷ A statutory ambiguity “is a sign—but not always a conclusive sign—that Congress intends a reviewing court to pay particular attention to (*i.e.*, to give a degree of deference to) the agency’s interpretation.”⁹⁸ And in making the assessment of whether Congress intended to delegate its authority to the agency, various “context-specific[] factors” may prove relevant: for example, whether the legal question is interstitial, whether it draws upon the agency’s expertise, whether it is important to the administration of the statute and central to the agency’s statutory duties, whether the administrative scheme is complex, and whether the agency has considered the question for a long period of time.⁹⁹ Legislative and regulatory history can also provide insight into whether Congress intended to invest an agency with the authority “to fill a gap with an interpretation that carries the force of law.”¹⁰⁰ This multi-faceted inquiry is intended “to approximate how Congress would likely have meant to allocate interpretive law-determining authority between reviewing court and agency.”¹⁰¹

Weighing these factors in the case before him, Justice Breyer identified “[m]any factors favor[ing] the [FCC’s] view” that it deserves deference in interpreting the timeframe requirement in section 332(c)(7)(B)(ii), including the statute’s language delegating broad authority, the ambiguous nature of the statute, the complexity of the subject matter, and the value of agency expertise in resolving that ambiguity.¹⁰² Although Justice Breyer acknowledged that the petitioners “point to two statutory provisions [the savings clause and the judicial review provision] which, they believe, require a different conclusion,” ultimately he concluded that “these two provisions cannot provide good reason for reaching the conclusion advocated by petitioners.”¹⁰³ Thus, he found that Congress intended the FCC to enjoy authority to interpret the timeframe requirement, and arrived at the same ultimate conclusion as the majority: the FCC deserves *Chevron* deference for its interpretation of section 332(c)(7)(B).¹⁰⁴

97. *Id.* at 1875 (Breyer, J., concurring).

98. *Id.* (Breyer, J., concurring).

99. *Id.* (Breyer, J., concurring) (citing *Barnhart v. Walton*, 535 U.S. 212, 222 (2002)).

100. *Id.* at 1876 (Breyer, J., concurring).

101. *Id.* (Breyer, J., concurring).

102. *Id.* (Breyer, J., concurring).

103. *Id.* at 1877 (Breyer, J., concurring).

104. *Id.* (Breyer, J., concurring).

IV. THE IMPLICATIONS OF *ARLINGTON*A. *Chevron Step Zero*?

Whether *Arlington* has more than passing significance depends on whether one reads the majority opinion as definitively rejecting the notion, advanced by the dissent and concurrence, that there is a “*Chevron Step Zero*”¹⁰⁵—that, prior to applying the *Chevron* framework, a court must first ask whether Congress intended to give the agency interpretive authority over the provision at issue. The battle over that question has been long-running, and in a series of cases, a majority of the Court has appeared to adopt the approach of the concurrence and dissent in *Arlington*, suggesting that the approach has remained at least viable.

In asking whether Congress intended to delegate interpretive authority to the agency, the Court has invoked two sets of distinctions. The first, which tends to arise in judicial review of agency adjudications, concerns the *nature* of the question at issue: whether it presents a pure question of statutory construction, or instead involves an aspect of policymaking or a mixed question of fact and law. For example, in *INS v. Cardoza-Fonseca*,¹⁰⁶ the Court declined to defer to the agency with respect to whether the standard governing withholding-of-removal under 8 U.S.C. section 1253(h), which requires an alien to show that he or she is *more likely than not* to be subject to persecution if removed to her home country, also applies to an application for asylum under 8 U.S.C. section 1158, which requires an alien to establish a *well-founded fear* of persecution. The Court determined that this was a “pure question of statutory construction for the courts to decide.”¹⁰⁷ The Court then rejected the Board of Immigration Appeals’ interpretation, which treated the two standards as identical, and, after employing the usual tools of statutory construction, held that Congress did not intend them to be identical.¹⁰⁸

The second set of distinctions concerns the *importance* of the question at issue: whether it is merely interstitial, or instead is a major question going to the heart of the statutory regime and the agency’s regulatory authority. Ironically, perhaps the best recent example of a case in which the Court has drawn that distinction is *FDA v. Brown & Williamson Tobacco Corp.*,¹⁰⁹ in an opinion joined by Justice Scalia that purported to apply *Chevron*. The question in that case was whether the FDA was correct in concluding that it enjoyed authority to regulate tobacco products as drugs.¹¹⁰ The statute, which defined a “drug” to include

105. See Cass R. Sunstein, *Chevron Step Zero*, 92 VA. L. REV. 187, 200–02 (2006).

106. 480 U.S. 407, 430 (1987).

107. *Id.* at 446.

108. *Id.* at 448.

109. 529 U.S. 120 (2000).

110. *Id.* at 131.

“articles (other than food) intended to affect the structure or any function of the body,”¹¹¹ appeared sufficiently broad to permit the agency’s view. Nonetheless, the majority rejected the agency’s interpretation on the ground that Congress had directly spoken to the issue and precluded the FDA from regulating tobacco products.¹¹² Its conclusion, it said, was “guided to a degree by common sense as to the manner in which Congress is likely to delegate a policy decision of such economic and political magnitude to an administrative agency.”¹¹³ This mode of analysis bears much in common with the approach advocated by the concurrence and dissent in *Arlington*. Indeed, in a notable passage at the end of the majority opinion in *Brown & Williamson*, the Court acknowledged,

[O]ur inquiry into whether Congress has directly spoken to the precise question at issue is shaped, at least in some measure, by the nature of the question presented. Deference under *Chevron* to an agency’s construction of a statute that it administers is premised on the theory that a statute’s ambiguity constitutes an implicit delegation from Congress to the agency to fill in the statutory gaps. In extraordinary cases, however, there may be reason to hesitate before concluding that Congress has intended such an implicit delegation

This is hardly an ordinary case Given th[e] history and the breadth of the authority that the FDA has asserted, we are obliged to defer not to the agency’s expansive construction of the statute, but to Congress’ consistent judgment to deny the FDA this power.¹¹⁴

*MCI Telecommunications Corp. v. American Telephone & Telegraph Co.*¹¹⁵ presents another example of a case in which the Court’s willingness to defer to an agency’s interpretation of a statute was informed by the importance of the question. That case concerned whether section 203(b) of the Communications Act of 1934—which gave the FCC discretion to “modify any requirement” under the statute—allowed the FCC to make voluntary the obligation on long distance carriers to file their rates with the agency.¹¹⁶ The Court, in an opinion authored by Justice Scalia, rejected the agency’s interpretation of the phrase “modify any requirement.”¹¹⁷ It held that “[i]t is highly unlikely that Congress would leave the determination of

111. 21 U.S.C. § 321(g)(1)(C) (1994).

112. *Brown & Williamson*, 529 U.S. at 133 (finding that Congress chose “instead to create a distinct regulatory system for scheme focusing on the labeling and advertising of cigarettes and smokeless tobacco”).

113. *Id.*

114. *Id.* at 159–60 (citations omitted).

115. 512 U.S. 218 (1994).

116. *Id.* at 225.

117. *Id.*

whether an industry will be entirely, or even substantially, rate-regulated to agency discretion—and even more unlikely that it would achieve that through such a subtle device as permission to ‘modify’ rate-filing requirements.”¹¹⁸

One key question about *Arlington*, then, is the degree to which it can be squared with the kind of analysis offered by the Court in *Brown & Williamson* and *MCI*. On the one hand, *Brown & Williamson* and *MCI* both purported to apply the *Chevron* framework. The majority in those cases viewed the importance of the question as influencing their plain language reading of the statute at “Step One” of the *Chevron* analysis—not as influencing its decision of whether to apply *Chevron* at all. Indeed, the *Arlington* majority cited both cases approvingly as examples in which *Chevron* had been applied to an “important” question concerning the scope of the agency’s authority.¹¹⁹

On the other hand, the effort to characterize *Brown & Williamson* and *MCI* as merely ordinary applications of *Chevron* is less than satisfying. Both *Brown & Williamson* and *MCI* appear to recognize that deference should not necessarily be a reflexive responsive to statutory ambiguity. Rather, by the Court’s own rationale in these cases, the nature and importance of the question should properly influence the degree of leeway that the Court accords to the agency in interpreting the statute. That is because the nature or importance of a question may inform one’s judgment of whether it is the kind of question that Congress would have wanted to give the agency freedom to resolve, or instead whether it is a question that Congress should be presumed to have decided itself. *Arlington* calls that mode of analysis into question. Indeed, Justice Scalia in *Arlington* makes fun of the notion that courts should distinguish between “the big, important” questions and the “humdrum, run-of-the-mill stuff.”¹²⁰

B. *The Open Internet Case*

The petition to review the FCC’s Open Internet Order, currently pending in the D.C. Circuit, presents a test case for how broadly to read *Arlington*. In that Order, promulgated on December 21, 2010, by a 3–2 party-line vote, the agency asserted jurisdiction to regulate Internet access providers.¹²¹ The Open Internet Order mandates, among other things, that all broadband Internet providers carry the lawful content of all edge-suppliers altered only as required by reasonable network management and,

118. *Id.* at 231.

119. *City of Arlington*, 133 S. Ct. at 1872 (*Chevron* applies even “where concerns about agency self-aggrandizement are at their apogee: in cases where an agency’s expansive construction of the extent of its own power would have wrought a fundamental change in the regulatory scheme.”).

120. *City of Arlington*, 133 S. Ct. at 1868.

121. See Preserving the Open Internet, Broadband Indus. Practices, *Report and Order*, FCC 10-201, 160 FCC Rcd. 17905, para. 1 (2010) [hereinafter *Open Internet Order*].

for fixed providers, they not unreasonably discriminate in their carriage of content.¹²²

The Open Internet Order relies on a number of statutory provisions as bases for its authority.¹²³ Most broadly, the Order asserts that Congress provided the Commission direct authority to regulate broadband Internet in section 706 of the Telecommunications Act of 1996.¹²⁴ Subsection (a) of that provision charges the Commission (as well as state utility commissions) to encourage the deployment of advanced telecommunications capabilities, such as broadband internet access, “by utilizing . . . price cap regulation, regulatory forbearance, measures that promote competition in the local telecommunications market, or other regulating methods that remove barriers to infrastructure investment.”¹²⁵ Subsection (b) similarly requires the Commission to undertake a yearly inquiry to determine if such capabilities are not being “deployed to all Americans in a reasonable and timely fashion,” and, if not, to “take immediate action to accelerate deployment of such capability by removing barriers to infrastructure investment and by promoting competition in the telecommunications market.”¹²⁶ The Order finds that advanced telecommunication capabilities are not being timely deployed, and thus invokes both subsections of 706 to support the Commission’s rules.¹²⁷

The FCC argues that section 706 provides authority for the Open Internet Order, because, the FCC asserts, the Order will encourage investment in broadband services.¹²⁸ By requiring broadband Internet access providers to provide consumer access to all edge-user content, the argument goes, consumers will have access to the most innovative content available.¹²⁹ This access will, in turn, drive up demand for more, better, and faster Internet connections and make investment in such projects more

122. *Id.* at paras. 63–68. Other rules define reasonable network management, *id.* at paras. 80–92, and set forth transparency rules requiring disclosure of the provider’s network management practices, *id.* at paras. 53–61. For a helpful discussion of the rules’ content, see generally KATHLEEN ANN RUANE, CONG. RESEARCH SERV., R40234, THE FCC’S AUTHORITY TO REGULATE NET NEUTRALITY AFTER *COMCAST V. FCC* (2013), available at <http://www.fas.org/sgp/crs/misc/R40234.pdf>.

123. The FCC relied on both direct and so-called ancillary jurisdiction. The FCC may invoke “ancillary jurisdiction” under section 4(i) of the Telecommunications Act of 1934. See 47 U.S.C. § 154(i) (2006) (“The Commission may perform any and all acts, make such rules and regulations, and issue such orders, not inconsistent with this chapter, as may be necessary in the execution of its functions.”). This authority permits the Commission to regulate new industries and activities otherwise falling outside of its general statutory mandate, so long as that authority is “necessary to ensure the achievement of the Commission’s statutory responsibilities.” *FCC v. Midwest Video Corp.*, 440 U.S. 689, 706 (1979).

124. *Open Internet Order*, *supra* note 121, at para. 122.

125. 47 U.S.C. § 1302(a) (2006).

126. 47 U.S.C. § 1302(b) (2006).

127. See *Open Internet Order*, *supra* note 121, at paras. 122–23.

128. See *id.* at para. 42.

129. *Id.* at para. 42 n.140.

economically attractive.¹³⁰ Against counterarguments that section 706 only allowed the FCC to use its *existing* statutory authority to encourage broadband deployment, the Commission points to legislative history that suggested the provision was intended to be a “fail-safe” to ensure the deployment of broadband services.¹³¹ The Commission concluded that “it would be odd” for Congress to describe that section as a “fail-safe” if it did not confer authority beyond that already in the hands of the Commission.¹³²

In addition to asserting direct authority under section 706, the Commission also asserts ancillary jurisdiction under a variety of provisions of the Communications Act of 1934.¹³³ As just one example, the Commission argued that it has authority ancillary to its Title II regulations of voice telephone (“VoIP”) services because VoIP voice services are now used interchangeably with traditional telephone services.¹³⁴ But this argument—and other similar assertions for authority in the Open Internet Order—at best supports authority for only particular applications of the Order (*e.g.* prohibiting the blocking of competing VoIP applications in the case of the Title II argument). It is likely that even an amalgamation of the different provisions cited in the Order cannot justify the full breadth of the rules the FCC adopted, at least without the assertion of some penumbra-like gloss. For that reason, the Open Internet Order is likely to stand or fall based on the FCC’s interpretation of section 706.

Arlington could have a potentially dispositive impact on whether the FCC’s reading of section 706 is upheld. The FCC’s interpretation is perhaps a permissible reading of the statute, but it is likely not one a court would adopt on *de novo* review. Among other things, the regulatory approaches explicitly mentioned in section 706(a)—price cap regulation and regulatory forbearance—are approaches for which the FCC clearly has authority from other statutory provisions, thus casting doubt on the notion that section 706 was intended to provide the agency additional authority. Likewise, as opponents have pointed out, section 706 appears to promote *deregulatory* action, making its invocation to justify a new regulatory regime an awkward fit.¹³⁵ Thus, securing deference for the Commission’s reading may be a necessary condition for the Commission to win.

130. See FCC Brief, *supra* note 17, at 37–43.

131. See *id.* at 36. See also S. REP. NO. 104-23, at 51 (1995) (describing section 706 as a “necessary fail-safe to ensure . . . accelerate[d] deployment” of broadband infrastructure); *id.* at 50 (stating that the section “intended to ensure that one of the primary objectives of the [1996 Act]—to accelerate deployment of advanced telecommunications capability—is achieved,” and that it empowered the FCC to “provide the proper incentives for infrastructure investment”).

132. *Open Internet Order*, *supra* note 121, at para. 120.

133. *Id.* at para. 122. For a balanced review of these provisions, see generally RUANE, *supra* note 122, at 19–22.

134. *Open Internet Order*, *supra* note 121, at para. 125.

135. *Id.* at paras. 145–72 (Dissenting Statement of Commissioner Robert M. McDowell); RUANE, *supra* note 122, at 16–18.

Yet the FCC's ruling draws on linguistic ambiguity to extend the agency's regulatory authority to a new field of substantial economic importance. If *Arlington* is broadly read to make that fact irrelevant in determining whether deference is warranted, then the FCC has a reasonable chance of prevailing. The Order arises from the very same agency that the *Arlington* majority described as being "unambiguously vested . . . with general authority to administer the Communications Act."¹³⁶ Congress likely understood that the FCC would draw upon its longstanding expertise on technical matters as well as its experience in administering different kinds of regulatory regimes to determine the boundaries of its authority with respect to the Internet. Thus, for example, in the *Brand X* case, the Supreme Court deferred to the FCC's ruling that broadband Internet access provided via cable modem service is an information service falling outside of the agency's Title II regulatory regime, suggesting that the FCC had substantial discretion to go either way on the issue.¹³⁷ As the Court stated, "[t]he questions the Commission resolved in the order under review involve a 'subject matter [that] is technical, complex, and dynamic.' The Commission is in a far better position to address these questions than we are."¹³⁸ If, as the *Brand X* majority suggested, Congress meant to delegate to the FCC the question whether broadband Internet access is subject to the Communications Act's Title II regulatory regime, why wouldn't Congress have delegated to the FCC the question of the extent to which section 706 allows the agency to regulate aspects of the Internet?

However, if *Arlington* is read to be consistent with *Brown & Williamson* and *MCI*—thereby allowing the court to consider the important consequences of the FCC's order in deciding whether Congress has spoken clearly to the question at issue—the result of the case is less clear. The Open Internet Order plainly implicates a question of such importance—perhaps as important to the communications industry as the issue in *Brown & Williamson* was to the tobacco industry—that one might conclude that, whatever Congress may have intended in drafting section 706, it clearly did not mean to authorize the agency to expand its regulatory authority to this new field. Indeed, if the FCC's reading of section 706 were upheld, it is hard to conceive of any regulation of the Internet that could not be similarly justified.

C. *The Nondelegation Doctrine*

One more feature of the *Arlington* decision is worthy of note, and it concerns the dissent. Rather than immediately focus on the question at issue, the Chief Justice engaged in an elongated detour criticizing the

136. *City of Arlington*, 133 S. Ct. at 1874.

137. *NCTA v. Brand X Internet Servs.*, 545 U.S. 967, 969 (2005).

138. *Id.* at 1002–03 (citations omitted) (quoting *NCTA v. Gulf Power Co.*, 534 U.S. 327, 339 (2002)).

modern administrative state as wielding authority “over our economic, social, and political activities” at a level which “[t]he Framers could hardly have envisioned.”¹³⁹ He warned that the “accumulation” of executive, legislative, and judicial power “in the same hands” has become “not an occasional or isolated exception to the constitutional plan” but “a central feature of modern American government.”¹⁴⁰ Indeed, he stated, “the citizen confronting thousands of pages of regulations—promulgated by an agency directed by Congress to regulate, say, ‘in the public interest’—can perhaps be excused for thinking that it is the agency really doing the legislating.”¹⁴¹ While the majority focused on the dangers created when “the Judiciary arrogat[es] to itself policymaking properly left” to the other branches,¹⁴² the dissent concentrated instead on “another concern [that is] no less firmly rooted in our constitutional structure. That is the obligation of the Judiciary not only to confine itself to its proper role, but to ensure that the other branches do so as well.”¹⁴³

These observations, of course, relate to the long-dormant nondelegation doctrine. That doctrine protects against a wholesale delegation of legislative authority to agencies¹⁴⁴ and requires that Congress “lay down by legislative act an intelligible principle to which the person or body authorized to [act] is directed to conform.”¹⁴⁵ The Court has largely foresworn any strong nondelegation principle and instead upheld Congress’s use of relatively vague, ambiguous terms, such as “public interest,” as sufficient to cabin agency discretion.¹⁴⁶

According to the Chief Justice, the combination of a toothless nondelegation doctrine and a broad reading of *Chevron* places in an agency’s hands “a potent brew of executive, legislative, and judicial power” that erodes the separation of powers so essential to the Framers’ constitutional design.¹⁴⁷ Indeed, Chief Justice Roberts wrote that, although “[i]t would be a bit much to describe the result as ‘the very definition of

139. *City of Arlington*, 133 S. Ct. at 1878 (Roberts, C.J., dissenting). The Chief Justice even cites to scholarly works written by Justices Breyer and Kagan as supporting his view that bureaucrats are largely unaccountable. *See id.* (quoting Elena Kagan, *Presidential Administration*, 114 HARV. L. REV. 2245, 2250 (2001) and STEPHEN BREYER, MAKING OUR DEMOCRACY WORK 110 (2010)).

140. *City of Arlington*, 133 S. Ct. at 1878 (Roberts, C.J., dissenting).

141. *Id.* at 1879 (Roberts, C.J., dissenting).

142. *Id.* at 1886 (Roberts, C.J., dissenting).

143. *Id.* (Roberts, C.J., dissenting).

144. *See Whitman v. Am. Trucking Ass’n*, 531 U.S. 457, 472 (2001) (“In a delegation challenge, the constitutional question is whether the statute has delegated legislative power to the agency.”).

145. *J.W. Hampton, Jr., & Co. v. United States*, 276 U.S. 394, 409 (1928).

146. *But see* Cass R. Sunstein, *Nondelegation Canons*, 67 U. CHI. L. REV. 315 (2000) (arguing that, although the Court no longer invokes the nondelegation doctrine itself, it has repackaged the doctrine as a series of canons of statutory construction designed to cabin the scope of agency authority in certain circumstances in the absence of a clear statement by Congress).

147. *City of Arlington*, 133 S. Ct. at 1886 (Roberts, C.J., dissenting).

tyranny,' . . . the danger posed by the growing power of the administrative state cannot be dismissed."¹⁴⁸

The last case addressing the nondelegation doctrine, *Whitman v. American Trucking*, was decided by the Court in 2001,¹⁴⁹ before the Chief Justice or Justice Alito—two of the three dissenters in *Arlington*—had joined the Court. And Justice Thomas—a member of the majority in *Arlington*—concurred in *American Trucking*, stating that “[o]n a future day, . . . I would be willing to address the question whether our delegation jurisprudence has strayed too far from our Founders’ understanding of separation of powers.”¹⁵⁰ Will the Roberts Court hasten that future day? Time will tell.

V. CONCLUSION

The Court granted certiorari in *Arlington* to decide the question of whether an agency should receive deference when interpreting the scope of its own jurisdiction. But the case ended up turning on a different question: whether, prior to applying *Chevron*, a court must determine if Congress intended to delegate to the agency the power to interpret the particular provision at issue. *Arlington* could simply be read as the latest skirmish in a long-running battle over that issue, and to leave its final resolution for another day. Or, more momentously, the case could be read to decide that issue in favor of agency deference. If the latter, then the *Arlington* decision is significant indeed. While the Supreme Court has previously modulated the degree of deference it gives to an agency depending on the nature or importance of the statutory question presented, the majority in *Arlington* appears to reject such an approach. The appeal of the FCC’s Open Internet Order currently pending in the D.C. Circuit provides a good example of the kind of case that might be affected by one’s reading of *Arlington*. The Open Internet Order extends the FCC’s regulatory authority into a new area of great economic and social importance, premised on a statutory interpretation that may be within the bounds of reasonableness, but is unlikely to be regarded as the most natural interpretation. A key issue in the case, therefore, is whether the FCC should receive full *Chevron* deference, or instead whether the court should exercise its own judgment about what Congress intended, in light of the importance of the question. If the court concludes that full *Chevron* deference is warranted, and that the agency is free to extend its authority into new regulatory domains through creative statutory interpretation, pressure will build to constrain agency action in other ways—potentially including a reinvigoration of the nondelegation doctrine.

148. *Id.* at 1879 (Roberts, C.J., dissenting).

149. *See generally* *Whitman*, 531 U.S. 457.

150. *Id.* at 487 (Thomas, J., concurring).

Articulating a Modern Approach to FCC Competition Policy

Reed E. Hundt*

Gregory L. Rosston**

TABLE OF CONTENTS

I.	INTRODUCTION	72
II.	AN INDEPENDENT AGENCY NEEDS TO EXPLAIN ITS PURPOSE	75
III.	THREE ERAS OF FCC COMPETITION POLICY	79
	<i>A. The Classic Approach</i>	79
	<i>B. The Modern Era</i>	80
	<i>C. Laissez-Faire and Beyond</i>	81
	<i>D. Changing Congressional Competition Policies</i>	84
IV.	THE MODERN MULTI-FIRM APPROACH HAS PRODUCED WIRELESS SUCCESS.....	86
V.	UPCOMING COMPETITION POLICY CHOICES.....	94
	<i>A. The Open Internet Order</i>	94
	<i>B. Maintaining the Success of Wireless</i>	97
VI.	CONCLUSION: CONSISTENT CLEAR APPLICATION OF A COMPETITION POLICY WILL STRENGTHEN THE COMMUNICATIONS SECTOR.....	100

* Reed E. Hundt serves on the boards of Intel, Level Money, Smart Sky Networks, United Negro College Fund, and CEFIA and served as the Chairman of the FCC from 1993–1997.

** Gregory L. Rosston is Senior Fellow and Deputy Director of the Stanford Institute for Economic Policy Research, and Co-Director of the Public Policy program at Stanford University. Rosston served at the FCC from 1994–1997 and again in 2011 in connection with the proposed AT&T–T-Mobile merger. He consulted for Comcast in connection with its acquisition of NBCUniversal in 2010 and is currently providing auction advice to T-Mobile.

The authors wish to thank astute and generous readers Jonathan Baker, Paul De Sa, Carlos Kirjner, Eddie Lazarus, Blair Levin, Doug Melamed, David Solomon, and Scott Wallsten, as well as the careful and thoughtful team of editors from the FCLJ. We were grateful for all their advice, took some, and bear responsibility ourselves for all errors of fact and judgment.

I. INTRODUCTION

In creating the Federal Communications Commission (“FCC” or “Commission”) in 1934, Congress gave the agency its fundamental mission: “regulating . . . to make available, so far as possible, to all the people . . . a rapid, efficient, Nation-wide, and world-wide . . . communication service with adequate facilities at reasonable charges.”¹

In the 1996 Telecommunications Act, Congress added this purpose: “promote competition and reduce regulation in order to secure lower prices and higher quality services . . . and encourage the rapid deployment of new . . . technologies.”²

In these two basic documents, as well as many other supplementing statutes, Congress told the FCC to make sure the United States has the best possible information and communications technology (“ICT”) platform. For the most part, private firms in many different markets build, operate, and constantly change that platform. To achieve its objective, the FCC acts, sometimes by “regulating,” as empowered since 1934, and sometimes by trying “[t]o promote competition and reduce regulation,” as mandated in 1996.³ In deciding what to do with respect to competition, the FCC has taken three different approaches. It has variously chosen the following:

- the *classic* role of regulating terms and conditions of sale;
- the *modern* role of using various tools to create largely deregulated, multi-firm, competitive markets; and
- the *laissez-faire* approach of believing that unregulated markets, even if monopolized, will produce the best outcome.

In this essay, we offer a short history of each of these three quite different policies. We conclude by recommending that, as new Chairman Tom Wheeler composes a new Commission, the FCC adhere as much as possible to the *modern* approach. The FCC should use its power to promote competitive markets and therefore deregulate firms that then will drive innovation, new services, and benefit consumers. However, not all markets may be amenable to this approach. Therefore, we encourage the newly assembled FCC to explain its reasoning publicly, welcome open discussion, and then consistently follow the policy it chooses for each relevant market until the law and facts suggest a policy change would better benefit the economy and society.

1. Communications Act of 1934, ch. 652, §1, 48 Stat. 1064 (codified as amended at 47 U.S.C. § 151 (2006)).

2. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (codified at scattered sections of 47 U.S.C.).

3. Communications Act of 1934, ch. 652, §1, 48 Stat. 1064; Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

Transparency and consistency give guidance to stakeholders, motivate the staff, enable effective coordination with other agencies, and provide thought leadership. Coherent, cohesive, and comprehensive application of a particular competition policy to a particular market also should aid the FCC in its many inevitable experiences in judicial review and congressional oversight. In any event, clear guidance from the FCC about its competition policy in a given market will give firms the green light to pursue strategies and tactics beneficial to the economy; at the very least, it will signal a yellow caution light to firms that want to take an action that goes against FCC competition policy, harming competition or consumers.

In 2006, we called for the articulation of a competition policy by the agency to ensure the promotion of competitive markets for communications services.⁴ We hold similar views today despite, or perhaps because of, significant changes in technology, business practices, and market conditions. The FCC can and should take various actions—including rulemaking, enforcement, merger review, and spectrum sales—to open closed markets to competition and encourage firms to create new markets. These multi-firm competitive markets will, by their nature, provide benefits to consumers and the economy, and thus should be lightly regulated, without the FCC setting terms and conditions of sale.

We concede that the *modern* approach may not be applicable to some markets in transition from monopoly to competition, or to some markets that show characteristics of natural monopoly. We think that instances of natural monopoly in telecommunications markets are few and far between, but they exist.⁵ In addition, the *modern* policy choice calls for ingenuity and restraint in crafting pro-competition rules. Nevertheless, we believe that as to most markets most of the time, this approach will unleash the combination of capitalism and technological solutions that best creates gains in productivity, national income, and general welfare.

We prefer the FCC to adopt the *classic* approach only temporarily and as a last resort, if at all. The problems with this approach include (in the view of many others who have studied the economics and political economy of regulations) the likelihood that the regulated firms have much better information than the regulator and thus make regulation more difficult and less effective, the capability of the regulated firms to capture agency sympathy and reduce agency willpower, and the significant role that the money of incumbents plays in the elected branches of government.⁶

4. Reed H. Hundt & Gregory L. Rosston, *Communications Policy for 2006 and Beyond*, 58 FED. COMM. L.J. 1, 2–3 (2006).

5. Curtis B. Toll, *Telecommunications Infrastructure Development in Pennsylvania: A Prescription For Effective Regulatory Reform*, 98 DICK. L. REV. 155, 160–63 (1993).

6. See STUART MINOR BENJAMIN ET AL., TELECOMMUNICATIONS LAW AND POLICY 197–98 (3d ed. 2011); see generally Howard A. Shelanski, *Adjusting Regulation to Competition: Toward a New Model for U.S. Telecommunications Policy*, 24 YALE J. ON REG. 55 (2007).

We believe the *laissez-faire* stance suits some markets on occasion. It may be ideal, for instance, in nascent or rapidly changing markets when technological roadmaps are unclear and bottlenecks are hard to create. However, the FCC ignores its ultimate mission if it allows *laissez-faire* to become *laissez-dormir*, with the Commission asleep at the wheel. Congress counts on the FCC to use its historical experience, technical skills, and good culture in constant pursuit of the ultimate objective: making sure America, and the world, has the best ICT platform imaginable.⁷ As a result, in some cases where the FCC lets the market work, bottlenecks and exercises of market power may develop as technology changes.⁸ In those cases, it may be beneficial for the FCC to step in with new, pro-competitive rules to ensure that consumers benefit to the extent possible. After all, competition provides both static and dynamic benefits for consumers through lower prices and increased innovation.

The purpose of this essay is to encourage all stakeholders in the FCC's mission to engage in the reasoned discussion that most benefits good decision-making at the agency. There is no shortage of important decisions in various telecommunications markets. Each decision calls for the FCC to articulate a specific competition philosophy.

As of this writing, such issues include at least the following: (1) addressing the Open Internet Order;⁹ (2) ensuring a competitive broadband market that benefits consumers and includes new services and privacy provisions;¹⁰ (3) finding a method to maximize the value of the spectrum resource (including the role of satellites);¹¹ (4) monitoring the transition to IP networks;¹² (5) determining the role of government in negotiations between content and multi-channel video distribution providers;¹³ and (6) reviewing mergers in conjunction with the antitrust agencies. The FCC can expressly state its competition policy choice in a manner that resembles the DOJ/FTC Merger Guidelines.¹⁴ Or it can reveal its policy choice on a case-

7. See Communications Act of 1934, 47 U.S.C. § 11.

8. See generally George S. Ford & Lawrence J. Spiwak, *Set It and Forget It? Market Power and the Consequences of Premature Deregulation in Telecommunications Markets*, 1 N.Y.U. J.L. & Bus. 675 (2005).

9. Preserving the Open Internet, *Report and Order*, FCC 10-201, 25 FCC Rcd. 17905 (2010) [hereinafter *Open Internet Order*].

10. Inquiry Concerning the Deployment of Advanced, Telecomms. Capability to All Americans in a Reasonable & Timely Fashion, *Ninth Broadband Progress Notice of Inquiry*, GN Docket No. 12-228, FCC 12-91, 27 FCC Rcd. 10523 (2012).

11. See, e.g., Expanding the Econ. & Innovation Opportunities of Spectrum Through Incentive Auctions, *Notice of Proposed Rulemaking*, WT Docket No. 12-268, FCC 12-118, 27 FCC Rcd. 12357 (2012).

12. Pleading Cycle Established on AT&T & NTCA Petitions, *Public Notice*, GN Docket No. 12-353, 27 FCC Rcd. 15766 (2012).

13. Amendment of the Comm'n's Rules Related to Retransmission Consent, *Notice of Proposed Rulemaking*, MB Docket No. 10-71, FCC 11-31, 26 FCC Rcd. 2718 (2011).

14. See, e.g., U.S. DEP'T OF JUSTICE & FED. TRADE COMM'N, HORIZONTAL MERGER GUIDELINES (2010) [hereinafter DOJ/FTC HORIZONTAL MERGER GUIDELINES], available at <http://ftc.gov/os/2010/08/100819hmg.pdf>. We recognize that the FTC and DOJ have critical

by-case basis. We believe a combination of both methods of expression will provide the most clarity to the FCC's many stakeholders. Reasoned explanation and consistent application amount to the forward-looking guidance much prized by investors and generally beneficial to the workings of markets.¹⁵

Each of the topics cited above involves competition. In the context of the Open Internet Order, the FCC is addressing market access, with opposing sides arguing alternatively that content providers seeking to reach consumers through an Internet access bottleneck, or that the potential for multi-firm competition in Internet access means no enduring bottleneck exists. Regardless of the point of view about competition, either the FCC (typically through its chair) states its competition policy and explains its application, or the policy is discerned by examining FCC decisions. Either way, the Commission adopts a competition framework—the question is whether this framework will be articulated persuasively, clearly, and in a manner that permits prediction.

II. AN INDEPENDENT AGENCY NEEDS TO EXPLAIN ITS PURPOSE

The Commission is an independent regulatory agency—a creature not envisioned in the Constitution or created by any Amendment.¹⁶ It is part of what is sometimes called the “Fourth Branch of Government.”¹⁷ As such, the FCC chair and commissioners can apply the competition policy of their choice and, for the reasons we elaborate on below, are not subject to exacting checks on their authority other than the all-important consideration of judicial review.

By contrast, for example, the Environmental Protection Agency (“EPA”) is not truly independent.¹⁸ The head of the EPA reports to the President.¹⁹ Its proposed rules do not go into effect without the permission of the White House.²⁰ If these were not meaningful constraints, it is likely that the EPA would exercise more authority over environmental impacts

roles in competition policy, and their decisions will complement the FCC's decisions and, in some cases, make FCC action redundant. We do not address that issue here. See Jonathan B. Baker, *Antitrust Enforcement and Sectoral Regulation: The Competition Policy Benefits of Concurrent Enforcement in the Communications Sector*, 9 COMPETITION POL'Y INT'L, Spring 2013.

15. Warren G. Lavey, *Inconsistencies in Applications of Economics at the Federal Communications Commission*, 45 FED. COMM. L.J. 437, 440–42 (1993).

16. See 44 U.S.C. § 3502(5) (2012), which contains a list of such agencies.

17. The Supreme Court has long acknowledged the constitutional novelty, and broad practical influence, of the administrative state. See, e.g., *INS v. Chadha* 462 U.S. 919, 984 (1983) (quoting *FTC v. Ruberoid Co.*, 343 U.S. 470 (1952) (Jackson, J., dissenting)).

18. Angel Manuel Moreno, *Presidential Coordination of the Independent Regulatory Process*, 8 ADMIN. L. REV. AM. U. 461, 470 (1994).

19. *Id.*

20. See, e.g., Steven Croley, *White House Review of Agency Rulemaking: An Empirical Investigation*, 70 U. CHI. L. REV. 821 (2003).

than it has done.²¹ The FCC chair is one of a maximum of five commissioners, each of whom is appointed by the President for a term, subject to Senate confirmation.²² Not more than three commissioners may come from the President's political party.²³ The agency, therefore, is intentionally designed to be composed in a bipartisan way, in the hope that it will achieve consensus on most matters. Indeed, according to an internal count done by us in 1997, more than 90% of the FCC's votes were unanimous. Such is the culture. The exceptions of course draw the most public attention, but in most circumstances the FCC draws fairly little coverage from major media. However, it attracts a great deal of scrutiny from affected stakeholders, and from members of Congress that such stakeholders or self-motivation cause to take an interest.

The President, without Senate approval, selects the Chair from among the commissioners by the simple act of writing a letter of selection.²⁴ The President cannot order the chair to take a particular regulatory or enforcement action.²⁵ The agency does not have to submit its proposed rules to the White House through the Office of Information and Regulatory Affairs ("OIRA") in the Office of Management and Budget ("OMB") for approval.²⁶ The President, typically acting through the Department of Commerce, can express in writing a preference for certain action, but by law and norms the FCC does not report to the executive or legislative branch for approval of its actions.²⁷ Congress conveys to the FCC authority to issue implementing regulations, grant or deny license transfers²⁸ (and hence in effect approve or disapprove mergers including license transfers), engage in enforcement actions,²⁹ auction spectrum,³⁰ and take many other actions important to many companies. The legislative delegation of power is often very broad.³¹ Sometimes the empowering laws require the FCC to resolve ambiguity or conflict in statutory language, or to update mandated rules as technological solutions and factual circumstances

21. See generally Nicholas Bagley & Richard L. Revesz, *Centralized Oversight of the Regulatory State*, 106 COLUM. L. REV. 1260 (2006) (giving an overview of OIRA's impact on the executive agency rulemaking process).

22. See 47 U.S.C. § 154(a) (2006).

23. *Id.*

24. *Id.*

25. See 47 U.S.C. § 154(c) (2006); 44 U.S.C. § 3502(5) (2006); see generally *Humphrey's Ex'r v. United States*, 295 U.S. 602 (1935) (describing for-cause dismissal of independent agency commissioners).

26. Moreno, *supra* note 18, at 466 n.18 ("The [FCC] does not ordinarily submit legislation or reports to OMB for clearance.").

27. See, e.g., Richard E. Wiley, "Political" Influence at the FCC, 1988 DUKE L.J. 280 (1988).

28. 47 U.S.C. §§ 301, 303 (2006).

29. 47 U.S.C. § 151 (2006).

30. See, e.g., 47 U.S.C. § 1451 (2006).

31. See, e.g., 47 U.S.C. § 303(r) (2006).

change.³² As a result, the political and policy tussles over regulations and other matters are often as hard fought as the debates over the laws.³³ Members of Congress (and especially senior members, given the power of seniority in congressional actions) try to influence FCC decisions by word, appropriations, and occasionally new legislation.³⁴ Another way that the Senate tries to influence the agency is by placing staff members or other friendly choices as commissioners.³⁵ The results are shown in the table below.

Table 1: FCC Non-Chairman Commissioners

	<u>Start Date</u>	<u>Hill Experience?</u>	<u>President's party?</u>
O’Rielly	Nov-13	Yes	
Rosenworcel	May-12	Yes	Yes
Pai	May-12	Yes	
Clyburn	Aug-09		Yes
Baker	Jul-09		
McDowell	Jun-06		Yes
Tate	Dec-05		Yes
Adelstein	Dec-02	Yes	
Martin	Jul-01		Yes
Copps	May-01	Yes	
Abernathy	May-01		Yes
Powell	Nov-97		
Tristani	Nov-97		Yes
Furchtgott-Roth	Nov-97	Yes	
Ness	May-94		Yes
Chong	May-94		

Sources: FCC website; authors.³⁶

With regard to the non-governmental influences on the FCC, stakeholders in the outcomes of an FCC action can, and usually do, appeal

32. See 47 U.S.C. § 161 (2006) (requiring the Commission to “review all regulations issued . . . that apply to the operations or activities of any provider of telecommunications service; and . . . determine whether any such regulation is no longer necessary in the public interest as the result of meaningful economic competition between providers of such service”).

33. See CHRISTOPHER H. STERLING & JOHN MICHAEL KITROSS, *STAY TUNED: A HISTORY OF AMERICAN BROADCASTING 734–42* (3d ed. 2002).

34. Harry M. Shooshan III & Erwin G. Krasnow, *Congress and the Federal Communications Commission: The Continuing Contest for Power*, 9 COMM/ENT L.J. 619, 619–21 (1987). This is especially true of senior members of Congress.

35. See *infra* Table 1.

36. *FCC Leadership*, FCC, <http://www.fcc.gov/leadership> (last visited Nov. 9, 2013); *Previous FCC Commissioners*, FCC, <http://www.fcc.gov/leadership/previous-fcc-commissioners> (last visited Nov. 9, 2013); *Commissioners from 1934 to Present*, FCC, <http://www.fcc.gov/leadership/commissioners-1934-present> (last visited Nov. 9, 2013).

to the courts of appeal for reversal.³⁷ The U.S. Court of Appeals for the District of Columbia Circuit, a common recipient of agency rulemaking appeals, is quite willing to overturn or modify agency rulemakings.³⁸ In addition, stakeholders may try to influence or sidestep the FCC by urging the Federal Trade Commission (“FTC”) or Department of Justice (“DOJ”) to exercise their authority over a particular issue.³⁹ A common meme for incumbent firms is to assert that the FCC should not have what they call “duplicative jurisdiction” over competition issues.⁴⁰ However, the FCC has a unique ability to execute its competition policies in a prospective and multifaceted way. Although it can, like DOJ or the FTC, reject or conditionally approve mergers in an effort to affect a competition policy, it can go beyond the parties to a proposed merger and issue rules applying to all participants in particular markets. In addition to affecting the number of participants in many markets, it also can promote (or discourage) competition by regulating, for instance, interconnection, mandatory service, universal service subsidies, spectrum auctions, and spectrum use conditions. In large part because the breadth of its power, the FCC must fight on many fronts to preserve its authority. For the most part, it finds ways of implementing its policies. In most important respects, the FCC is its own boss. Congress would find it quite difficult to impeach a commissioner⁴¹ or pass a law overturning an agency decision. The agency, as part of the Fourth Branch, is the most important of all the branches for the markets in its purview. In the end, timorousness is the primary check on the Commission’s discretion.

The FCC’s domain includes at least some part of the markets for broadcast television and radio, satellite, wireless, broadband, media content, communications equipment, the Internet, export and import of communications goods and services, and even, indirectly, newspapers.⁴² Somewhere between a tenth and a sixth of the American economy is in its purview.⁴³ Although technological change, access to capital, and

37. 47 U.S.C. § 402(b) (2006) (describing the rights of applicants, operators, or “any other person who is aggrieved or whose interests are adversely affected by any order of the Commission” to appeal decisions and orders of the Commission to the U.S. Court of Appeals for the District of Columbia Circuit).

38. See STERLING & KITROSS, *supra* note 33, at 734.

39. See Cody Vitello, *Network Neutrality Generates a Contentious Debate Among Experts: Should Consumers Be Worried?*, 22 LOY. CONSUMER L. REV. 513, 520–23 (2010).

40. See generally Robert E. Lee, *The FCC and Regulatory Duplication: A Case of Overkill?*, 51 NOTRE DAME L. REV. 235 (1975).

41. In 1960, Eisenhower’s FCC chair, John Doerfer, was forced to resign over taking what appeared to be bribes. See Michele Hilmes, *ONLY CONNECT: A CULTURAL HISTORY OF BROADCASTING IN THE UNITED STATES 189–90* (2d ed. 2007).

42. Kevin Ryan, *Communications Regulation—Ripe for Reform*, 17 COMMLAW CONSPECTUS 771, 793 (2009).

43. The communications sector adds \$1.455 trillion to the gross domestic product, making it the fifth largest industry in the United States. Press Release, Veronis Suhler Stevenson, *New VSS Forecast 2012-2016: U.S. Commc’ns Indus. Spending Increased 4.4%*

marketplace competition all are important to this sector, regulation enables and affects all three and so is of great concern to the sector.

III. THREE ERAS OF FCC COMPETITION POLICY

The FCC's 79-year history can be divided into three overlapping eras of regulatory philosophy, each based on a premise simplified for purposes of this essay: (1) the *classic view* (running roughly from 1934 to 1993 and occasionally appearing since then) that competition wastes resources and should be replaced by regulated monopoly; (2) the *modern view* (beginning in the 1970s and reaching its zenith in the 1990s) that multi-firm competition and ease of entry produce better outcomes; (3) and the *laissez-faire view* (flourishing in the 2000s) that regulation is a bad idea whether or not a market is competitively structured.

A. The Classic Approach

In the first era, the FCC's overarching policy approach was aligned with the philosophy of the first New Deal. It was thought that the nation had too much supply; markets needed to re-organize to reduce capacity and avoid inefficient production. Therefore, government needed to play a significant role in business decisions in the economy. Moreover, telephone service, like other networks, was thought to be a natural monopoly.⁴⁴ If two or three networks that served the same area could be consolidated into one, that one would produce the most efficient use of invested capital.⁴⁵ As a necessary corollary, the belief was that FCC should regulate the terms and conditions of sale of that network.⁴⁶ The owner should not be allowed to extract rents (monopoly profits) either by charging too much or by lowering the quality (and hence cost) of what was sold.⁴⁷ Moreover, under the classic regulatory approach, the regulator also should insist that the monopoly firm provide certain public goods or solve difficult problems like universal service that a multi-firm market might not address.⁴⁸ Adhering to the *classic view*, the FCC selected the number of firms for markets: monopoly (AT&T, cable), duopolies (early wireless), or three-firm oligopoly (broadcast networks). The FCC's regulations covered end user prices, prices between parties in a supply chain, the nature and quality of

to \$1.129 Trillion in 2011; Expected to Rise 5.2% in 2012 to Reach \$1.189 Trillion (Sept. 26, 2012), available at <http://www.vss.com/imgs/VSSForecast20122016PressRelease.pdf>. This makes the communications industry about 8.75% of the total economy \$16.62 trillion in GDP.

44. See Ryan, *supra* note 42, at 780.

45. See 47 U.S.C. § 201 (2006) (regulating rates for common carriers); BENJAMIN ET AL., *supra* note 6, at 332–41; Shelanski, *supra* note 6, at 58–59.

46. BENJAMIN ET AL., *supra* note 6, at 332–41; Shelanski, *supra* note 6, at 58–59.

47. *Id.*

48. *Id.*

service offerings, specific capital expenses, and interconnection to other networks.

B. *The Modern Era*

Starting in the 1970s, the FCC and others began to challenge the New Deal consensus. In the 1993 budget law (“OBRA ’93”), Congress gave the FCC authority to auction spectrum.⁴⁹ In doing so, it enabled the FCC to create a multi-firm wireless market, while largely abandoning regulation of the terms and conditions of sale in that industry. The 1996 Telecommunications Act had as its central operating principle the commandment to issue rules that promoted competition and to strike from the books rules that restricted competition.⁵⁰ Congress also demanded that the FCC adopt the *laissez-faire* approach to broadcast radio;⁵¹ this led to very rapid consolidation of the radio market.

The logical conclusion of a successful and permanent implementation of the *modern* approach would be that the FCC, like the state in Marxist theory, could wither away because competition would provide assurances that the benefits of communications technology would be bestowed upon the masses. Indeed, in aviation and trucking, Congress decided that neither the Civil Aeronautics Board (“CAB”) nor the Interstate Commerce Commission (“ICC”) needed to continue to exist, because transportation had become sufficiently varied and competitive to serve public interest purposes without interventions by these agencies.⁵² So it is possible that the *modern* era could lead to the *laissez-faire* era. If the FCC no longer needed to open closed or new markets, its other functions could be parceled out to other agencies. If the government still needed to auction spectrum, OMB, Treasury, or GSA could do that job. If consumers occasionally needed more information, such as cell phone alerts of dangerous weather conditions, the FTC could handle that sort of regulation. The most courageous FCC chair, under this approach, would have been the one, like Fred Kahn at the CAB, who announced that the agency could shut its doors.

49. Omnibus Reconciliation Act of 1993, Pub. L. No. 103–66, § 6002, 107 Stat. 312, 387–97 (1993).

50. Telecommunications Act of 1996, Pub. L. 104–104, 110 Stat. 56, 56 (1996) (“An Act [t]o promote competition and reduce regulation in order to secure lower prices and higher quality services for American telecommunications consumers and encourage the rapid deployment of new telecommunications technologies.”);

51. Telecommunications Act of 1996, Pub. L. 104–104, § 202, 110 Stat. 56, 110–112 (1996).

52. Thomas Gale Moore, *Moving Ahead*, REG., Summer 2002, at 6, available at <http://www.cato.org/sites/cato.org/files/serials/files/regulation/2002/7/v25n2-3.pdf>.

C. Laissez-Faire and Beyond

In the early 2000s, the Bush Administration's Commission moved at least toward final innings, if not to the last out. Aided by the D.C. Circuit, the agency moved to undo many Clinton era regulations prohibiting increased concentration and promoting competitors. Chairman Michael Powell expressly announced that "intermodal" competition existed.⁵³ Cable, broadcast, and satellite competed in video markets. Cable offered competition with the telephone network in voice communications. Telephone potentially could compete with cable in Internet access. The message was, in short, that all networks could compete with each other.

However, in reality, intermodal competition was extant in only some markets. In other markets, standard antitrust and economic analysis did not support the conclusion that actual or potential competition constrained monopoly practices. But Chairman Powell and his successor Chairman Kevin Martin seemed to adhere, for the most part, to the *laissez-faire* view.⁵⁴ Hence, they led the FCC to abandon the unbundling rules for the telephone network, approve most mergers, and remove spectrum caps.⁵⁵

Soon after President Barack Obama was inaugurated, the American Recovery and Reinvestment Act ("ARRA" or "Recovery Act") provided over \$7 billion for broadband development.⁵⁶ This astonishingly large sum—only about one percent of the total stimulus, but a very big sum for a one-time public capital expenditure on broadband—called for a competition policy choice: was the money to be spent promoting regulated monopolies or multi-firm market structures? Operating under the White House mantra of "timely, targeted, and temporary," the National Telecommunications and Information Administration ("NTIA") in the Commerce Department and Rural Utilities Service ("RUS") in the

53. Michael K. Powell, Former Chairman, FCC, Opening Remarks at the Press Conference on Digital Broadband Migration 4 (Oct. 23, 2001), available at <http://transition.fcc.gov/Speeches/Powell/2001/spmkp109.pdf>.

54. Joe Flint, *Laissez-Faire Republican is Battling the Comcast-NBC Deal*, L.A. TIMES (Apr. 27, 2010), <http://articles.latimes.com/2010/apr/27/business/la-fi-ct-martin-20100427>.

55. Although Powell followed DOJ in rejecting the DirecTV/Dish merger and Martin attempted to push for à la carte cable programming, the first followed the DOJ suit to prevent the merger and the second was neither successful nor expected to be.

56. American Recovery and Reinvestment Act of 2009, Pub. L. 111–5, div. A, tit. I, 123 Stat. 115, 118, 128; see Cecilia Kang, *FCC Broadband Proposal May Miss Out on Stimulus*, WASH. POST (Apr. 8, 2009), http://articles.washingtonpost.com/2009-04-08/news/36777239_1_stimulus-funds-stimulus-grants-broadband; see also LENNARD G. KRUGER, CONG. RESEARCH SERV., R41775, BACKGROUND AND ISSUES FOR CONGRESSIONAL OVERSIGHT OF ARRA BROADBAND AWARDS 1 (2013).

Agriculture Department were supposed to make sure the money was spent quickly, with maximum job creation.⁵⁷

The rule of “temporary” caused the NTIA and RUS to reject the idea of creating a revolving loan fund for stimulating private firm build out in rural and high cost areas.⁵⁸ Another idea rejected quickly was a race to the top auction where firms would win by providing the highest ratio of new broadband subscribers per stimulus dollar. The Department of Education had great success in its race to the top. However, in the broadband community, the idea lacked advocates, other than a group of seventy-one economists who submitted a proposal to the NTIA and RUS.⁵⁹ Instead of adopting an auction-based approach, the Obama Administration chose to conduct a “beauty contest,” using a subjective multi-factor assessment of competing grant applications to determine awards.⁶⁰ The guiding principles for disbursing Broadband Technology Opportunities Program funds included disfavoring grants that created competition with existing firms, and a requirement that the government-funded networks remain open to all content. The requirement that networks be “open” essentially operated as common carrier requirements harkening back to the FCC’s 1934–1993 regulatory regime.

In fall 2009, FCC Chairman Julius Genachowski opened a proceeding about “net neutrality,” which later led to the “Open Internet” Order.⁶¹ An unstated premise of the rulemaking appeared to be that broadband Internet access was prone to becoming a monopoly (perhaps a function of cable’s successful strategy and the Bush era’s abandonment of unbundling the telephone network) or a duopoly (such as where Verizon had deployed FiOS to compete with cable broadband).⁶² However, the FCC implied that it saw no reasonable prospect of substantial additional competition.⁶³ Therefore, the FCC needed a rule to ensure that wireline broadband was “open,” in the sense that anyone could send or receive any content.⁶⁴ The Open Internet Order requires that Internet providers refrain from discriminating among over-the-top content providers, such as by

57. Andrew Samwick, *A Better Approach to Stimulus Spending*, U.S. NEWS & WORLD REPORT (Nov. 30, 2012), <http://www.usnews.com/opinion/blogs/economic-intelligence/2012/11/30/stimulus-better-spent-on-infrastructure-not-tax-cuts>.

58. Based on personal conversations with the heads of these agencies and the National Economic Council starting during the Presidential transition period and beyond.

59. PAUL MILGROM ET AL., COMMENTS OF 71 CONCERNED ECONOMISTS: USING PROCUREMENT AUCTIONS TO ALLOCATE BROADBAND STIMULUS GRANTS 9 (2009), available at http://www.techpolicyinstitute.org/files/procurement_auctions_for_bbd_stimulus%20final.pdf. The plan was not well received in the broadband community.

60. Gregory L. Rosston & Scott J. Wallsten, *The Broadband Stimulus: A Rural Boondoggle and Missed Opportunity*, 74 OHIO ST. L.J. (forthcoming 2013).

61. Preserving the Open Internet, *Notice of Proposed Rulemaking*, FCC 09-93, 24 FCC Rcd. 13064 (2009).

62. *See id.* at paras. 33–34.

63. *See id.* at paras. 67–74.

64. *See id.* at para. 11

giving one company faster speeds or lower prices for transmission of content. An alternative rule might regulate end-user prices, although the FCC has said it has no intention to do so.⁶⁵

In its Open Internet Order, the FCC seemed to be applying *classic* regulation. During the pendency of the Open Internet proceeding, in 2009, Comcast proposed merging with NBCUniversal.⁶⁶ In approving that merger, the FCC effectively inserted net neutrality as a condition for Comcast alone.⁶⁷ However, the FCC also imposed provisions important to competing content-bundling companies that seemed to partake of the *modern* era's approach by ensuring access to Comcast's content.⁶⁸

Meanwhile, in 2010, the FCC released its National Broadband Plan.⁶⁹ The plan contained many creative ideas for delivering better access to more people, with more public goods digitally provided, as well as a number of competition ideas of the *modern* school.⁷⁰ Although the FCC did not explicitly use the Broadband Plan as a vehicle to express a preference for a certain competition policy, the very existence of planning implied a rejection of the doctrine that if network firms were left alone, they would build what people wanted and was best for society. In the end, the Commission did not use the Broadband Plan to articulate either the choice of a regulated monopoly approach to Internet access or a multi-firm market approach.

However, as to wireless, in 2011, the FCC was firmly in the *modern* era of preferring multi-firm competition when it rejected the AT&T acquisition of T-Mobile on the grounds of excess consolidation.⁷¹ Its analysis of the wireless market in that case sounded the death knell for the

65. *See id.*

66. *Comcast and GE to Create Leading Entertainment Company*, COMCAST, <http://corporate.comcast.com/news-information/news-feed/comcast-and-ge-to-create-leading-entertainment-company> (last visited Nov. 9, 2013).

67. *See* App'ns of Comcast Corp., Gen. Elec. Co. & NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licensees, *Memorandum Opinion and Order*, MB Docket No. 10-56, FCC 11-4, app. A (rel. Jan. 20, 2011), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-4A1.pdf.

68. *Id.*

69. FCC, *CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN* (2010) [hereinafter *CONNECTING AMERICA*], *available at* <http://download.broadband.gov/plan/national-broadband-plan.pdf>; American Recovery and Reinvestment Act of 2009, Pub. L. No. 111-5, § 6001(k), 123 Stat. 115, 515–16 (2009). Prior to its release, we were subject to people from around the world, including the United States criticizing the United States for “not having a broadband plan.” At least since then, we have not heard this criticism.

70. *CONNECTING AMERICA*, *supra* note 69.

71. *See* App'ns of AT&T Inc. & Deutsche Telekom AG, *Order*, DA 11-1955, 26 FCC Rcd. 16184, para. 266 (2011), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-1955A2.pdf. The Commission “conclude[d] that significant harms to competition are likely to result, primarily in the form of increased prices for consumers, reduced incentives for innovation, and decreased consumer choice.” *Id.*

transaction. It also demonstrated the agency's capability for analytical excellence.⁷²

D. Changing Congressional Competition Policies

Not rarely, Congress provides competing or changing directives concerning competition policy. In some ways this makes the FCC's job more difficult, but in others, the conflicts provide freedom for the Commission to implement policy. For example, after the Antitrust Division of the DOJ, under the antitrust titan Bill Baxter, decided (and forced AT&T to agree in 1982) that long distance could and should be competitive, but that the local telephone networks were to be regulated as monopolies,⁷³ Congress did not intervene. However, the FCC carved out data in both local and national markets as a potentially competitive market (in contrast to voice).⁷⁴ In the first Bush Administration, the FCC also aspired to enable the local telephone companies to compete against cable in pay video. In sum, in the 1980s and early 1990s, the FCC tried to employ a mixture of *modern* and *classic* approaches.

Congress changed its views on its preferred competition policy (regulated monopoly vs. multi-firm market structure) as to cable several times. In the 1984 Cable Act, Congress saw cable as a competitive force against the consolidated broadcast networks and took actions to help cable, while preserving local broadcast against the power of the networks.⁷⁵ In the 1992 Cable Act, Congress believed cable had developed substantial market power for pay video services and directed the FCC to regulate cable prices to the consumers.⁷⁶ That was a *classic* move. But at the same time, Congress ordered the FCC to make much of the content owned by cable available to satellite MVPD competition through Program Access rules, in what we would regard as a *modern* move creating a multi-firm market

72. See App'ns of AT&T Inc. & Deutsche Telekom AG for Consent to Assign Licenses & Authorizations, *Staff Analysis and Findings*, WT Docket No. 11-65, DA 11-1955 (submitted Nov. 30, 2011), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-1955A2.pdf. See also Patrick DeGraba & Gregory L. Rosston, *The Proposed Merger of AT&T and T-Mobile: Rethinking Possible*, in *THE ANTITRUST REVOLUTION* (John E. Kwoka & Lawrence J. White eds., 6th ed., 2013).

73. DOJ forced AT&T to agree to this in 1982 under the Modification of Final Judgment. *United States v. AT&T*, 552 F. Supp. 131 (D.C. Cir. 1982); see GERALD W. BROCK, *TELECOMMUNICATION POLICY FOR THE INFORMATION AGE: FROM MONOPOLY TO COMPETITION* 162 (1998).

74. BROCK, *supra* note 73, at 285.

75. Michael I. Meyerson, *The Cable Communications Act of 1984: A Balancing Act on the Coaxial Wires*, 19 GA. L. REV. 543, 546 (1985).

76. See Cable Television Consumer Protection and Competition Act of 1992 ("1992 Act"), Pub. L. No. 102-385, § 9(b), 106 Stat. 1460, 1484 (1992) (amending 47 U.S.C. §§ 532 (c)(1), (4)); see also Henry Weissmann & Eric Tuttle, *The FCC's Stalled Attempt to Breathe Life into Commercial Leased Access of Cable Television*, ENGAGE: J. FEDERALIST SOC'Y PRAC. GROUPS, Feb. 2009, at 130.

structure.⁷⁷ Then, just four years later, in 1996, Congress appeared to view the video marketplace as more competitive and ordered the FCC to curtail cable price regulation. That was rather *laissez-faire*.

Through OBRA '93, Congress gave the FCC authority to auction spectrum for the first time.⁷⁸ The auction authority was very broad in most respects—it did not tell the FCC how to auction the spectrum, and, importantly, it did not tell the FCC how to allocate the spectrum to be auctioned. OBRA '93 set forth a very aggressive timetable to conduct the auctions, but did not express a point of view on most major policy issues, except to say that minorities, women, and small businesses should be able to participate to some degree in the industry. The FCC used its discretion to introduce complex and risky simultaneous, multi-round auctions with spectrum caps in an effort to increase efficiency and competition in the provision of wireless services.⁷⁹

From the date of the AT&T break-up, the local Bell companies insisted on being able to compete in long distance and any other adjacent market to local telephony.⁸⁰ DOJ believed that the local access monopolies should not be allowed to seek market power in adjacent markets.⁸¹ However, in 1996, Congress passed the historic Telecommunications Act which allowed the local telephone companies the freedom to expand the scale and scope of their businesses, in return for granting rivals the opportunity to lease portions of their local access network at regulated rates.⁸² The leasing provision was as radical a borrowing of a monopoly network as any legislature has ever ordered. The FCC's decisions about how that would occur, and what price was to be paid, were complex and hotly contested.⁸³ The regulations, known as “unbundling,” jumpstarted expansion of competitive carriers, including Internet access start-ups, and eventually were rescinded by the Bush Administration's FCC chairs under the auspices of court mandates.⁸⁴ Rather than attempting to amend the rules to garner court approval or seeking Supreme Court review, the Commission in effect repealed portions of the 1996 Telecommunications Act, without

77. Reza Dibadj, *Toward Meaningful Cable Competition: Getting Beyond The Monopoly Morass*, 6 N.Y.U. J. LEGIS. & PUB. POL'Y 245, 254–55 (2002).

78. Evan R. Kwerel & Gregory L. Rosston, *An Insiders' View of FCC Spectrum Auctions*, 17 J. REG. ECON. 253, 254 (2000).

79. *Id.* at 253–89.

80. *See generally* Jennifer L. Rand, *The AT&T Consent Decree Revisited: Setting the Stage to Free the Baby Bells*, 59 GEO. WASH. L. REV. 1103 (1991).

81. *Id.* at 1106.

82. *See generally* Daniel F. Spulber & Christopher S. Yoo, *Toward A Unified Theory of Access to Local Telephone Networks*, 61 FED. COMM. L.J. 43 (2008).

83. *Id.* at 51–57.

84. *See* Jeffrey A. Eisenach et al., *An Event Analysis Study of the Economic Implications of the FCC's UNE Decision: Backdrop for Current Network Sharing Proposals*, 17 COMMLAW CONSPECTUS 33, 33 n.1 (2008).

the approval of Congress.⁸⁵ Interestingly, the Congress and the FCC saw their unbundling policies adopted in many other countries.⁸⁶

More recently, Congress adopted one of the recommendations of the National Broadband Plan and gave the FCC authority to conduct what has become known as the “Broadcast Incentive Auction.”⁸⁷ Congress gave the FCC broad discretion about how to structure the details of the auction, but set parameters on the FCC’s ability to repack broadcasters after the auction, and included several other provisions that to some extent attempt to micromanage the auction process and post-auction market structure.⁸⁸

Through all the eras of debate about competition policy, the one continuous theme has been the clamor in the industry to understand (and endorse, dispute, or bar the application of) the FCC’s choice of competition policy. Firms want to understand what actions will be allowed and what will be barred so that they can embark on business plans with some assurance that the FCC will not alter their calculations of risk and reward through regulatory intervention.

IV. THE MODERN MULTI-FIRM APPROACH HAS PRODUCED WIRELESS SUCCESS

As early as in the work of Ronald Coase, economists have been arguing against the FCC’s management of industries.⁸⁹ In 1959, Coase famously made the case for privatizing spectrum in the way that ultimately led to the spectrum auctions more than thirty years later.⁹⁰ The general view among these economists was that competition, even if not the textbook model of perfect competition, could protect consumers better than a monopoly regulatory framework with its attendant weaknesses that tended to stultify innovation and favor incumbent firms.⁹¹ The late 1970s brought the deregulation of the trucking, rail, and airline industries, and the pursuit of the AT&T monopolization case.⁹² The success of deregulation and the new competition in long-distance services provided support for the

85. James B. Septa, *Deregulating Telecommunications in Internet Time*, 61 WASH. & LEE L. REV. 1063, 1096–97 (2004).

86. Jerry A. Hausman et al., *Are Regulators Forward-Looking? The Market Price of Copper Versus the Regulated Price of Mandatory Access to Unbundled Loops in Telecommunications Networks*, 61 FED. COMM. L.J. 199, 200 (2008).

87. FCC, THE BROADCAST TELEVISION SPECTRUM INCENTIVE AUCTION, available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-318455A1.pdf.

88. *Id.*

89. Thomas W. Hazlett, *Assigning Property Rights to Radio Spectrum Users: Why Did FCC License Auctions Take 67 Years?* 41 J.L. & ECON. 529, 530 (1998).

90. See generally Ronald H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1 (1959); Hazlett, *supra* note 89, at 529.

91. Hazlett, *supra* note 89, at 533.

92. James Peoples, *Deregulation and the Labor Market*, 12 J. ECON. PERSP. 111, 112 (1998).

view that competition could benefit consumers. The logical result would be for regulators to set rules to promote competition, entry, and innovation rather than attempting to set retail prices for incumbent monopolists and pursue social goals within an anticompetitive framework.

The FCC thus has acted with the belief that some regulations are necessary to promote entry into markets historically closed to competition, *i.e.*, the path to deregulation ran through regulatory action. That slight paradox has flummoxed many people, especially in Congress. Nevertheless, at the core of the *modern* approach is the notion of regulating in minimal, pro-competitive ways so as to achieve policy goals without limiting competition, or setting rates to consumers and returns to investment.

The *modern* approach recognizes that, for the markets within the FCC's jurisdiction, technological change is unpredictable and rapid. Therefore, legislation should express goals and grant authority to the regulator, and regulation should be both precise and capable of adaption to changed circumstances. Sunset provisions, indices, benchmarks, and fact-based measurement are all useful tools for minimizing regulation in rapidly changing markets while maintaining a commitment to competition. At all times, the FCC should consider the possibility that adjacent market entry, divided technical leadership, or groundbreaking technological solutions will do a better job opening that market to competition than will an FCC rule. In other words, the FCC can be pro-competitive but decide on a case-by-case basis whether to be proactive in implementing rules to force markets open to more competition.

A worthwhile case to examine is the wireless marketplace, which shows the power of facilitating entry and promoting competition through rules that prevent exclusionary conduct.⁹³ As discussed below, in the 1980s, the FCC chose duopoly as the competition policy for wireless telephony.⁹⁴ In the 1990s, the FCC transitioned wireless to a multi-firm market structure with no price regulation—a plan still favored today.⁹⁵ In the 2000s, the FCC began to move to *laissez-faire*.⁹⁶ In 2010–2012, the FCC and DOJ moved back to promoting multi-firm market structure. For the future, the new Commission must decide which competition policy framework it will adopt.

93. Among various other important illustrations of the *modern* approach are program access and pole attachment rules.

94. Paul Shoning, *Convergence and Competition*, 7 J. ON TELECOMM. & HIGH TECH. L. 139, 143 (2009).

95. *See id.* at 144.

96. *See, e.g.*, Spectrum Aggregation Limits for Commercial Mobile Radio Servs., *Report and Order*, FCC 01-328, 16 FCC Rcd. 22668, 22668 paras. 1–2 (2001) (relaxing spectrum caps).

In 1984, the FCC began assigning reallocated spectrum from broadcast television for mobile telephone services.⁹⁷ At the time, no one knew how important mobile communications would become. The FCC, under the *classic* approach, initially proposed to give a single firm, the incumbent wireline telephone company, a monopoly on cellular service with 40 MHz of spectrum.⁹⁸ After pressure from DOJ and others to increase the possibility of competition, the FCC split the 40 MHz into two licenses, reserving one for the incumbent local telephone company and the second for a new entrant.⁹⁹ The FCC allowed mobile phone service, but set a single analog standard and prohibited dispatch service on the cellular spectrum because it feared such use would be “inefficient.”¹⁰⁰ Despite these restrictions, cellular use advanced much more rapidly than predicted, and by 1989 the FCC had identified microwave spectrum that it could reallocate to provide additional cellular service and, potentially, competition to the duopoly providers.

The FCC did not make the new Personal Communications Service (“PCS”) spectrum available until Congress passed OBRA ’93. In that Act, Congress created a new regulatory framework for Commercial Mobile Radio Services, authorized the FCC to assign licenses via auctions, and set stringent timelines for the implementation of the auctions for the PCS spectrum licenses.¹⁰¹ While Congress set broad guidelines, the FCC had several decisions to make about how to move forward with the new spectrum allocation.

The FCC defined PCS very broadly—it did not prescribe services that could be offered and it did not mandate specific technology.¹⁰² In a

97. See U.S. GEN. ACCOUNTING OFFICE, GAO/RCED-92-220, TELECOMMUNICATIONS: CONCERNS ABOUT COMPETITION IN THE CELLULAR TELEPHONE SERVICE INDUSTRY 14 (1992) [hereinafter TELECOM COMPETITION CONCERNS], available at <http://archive.gao.gov/d33t10/147125.pdf>.

98. See Inquiry Relative to the Future Use of the Frequency Band 806–960 MHz, *Second Report and Order*, FCC 74-470, 46 F.C.C.2d 752, para. 12 (1974), *reconsideration granted in part*, 51 F.C.C.2d 945, *clarified*, 55 F.C.C.2d 771 (1975), *aff’d sub nom.* Nat’l Ass’n of Regulatory Util. Comm’rs, 525 F.2d 630 (D.C. Cir. 1976).

99. See Inquiry into the Use of the Bands 825–845 MHz and 870–890 MHz for Cellular Comm’ns Sys., *Report and Order*, FCC 81-161, 86 F.C.C.2d 469, para. 15 (1981); *Competition in the Cellular Telephone Service Industry: Hearing Before the Subcomm. on Oversight & Investigations of the H. Comm. on Commerce*, 104th Cong. 13 n.5 (1995) (statement of John H. Anderson, Jr., Director of Telecommunications Issues, GAO).

100. Reed E. Hundt & Gregory L. Rosston, *Spectrum Flexibility Will Promote Competition and the Public Interest*, IEEE COMM’CNS MAG., Dec. 1995, at 41. For a more complete discussion of the path to cellular service, see Gregory L. Rosston, *An Economic Analysis of the Effects of FCC Regulation on Land Mobile Radio* (Aug. 1994) (unpublished Ph.D. dissertation, Stanford University) [hereinafter Land Mobile Radio Dissertation].

101. See generally Omnibus Budget Reconciliation Act of 1993, Pub. L. No. 103-66, tit. VI, 107 Stat. 312, 379-401.

102. See 47 C.F.R. § 24.5 (2012) (defining personal communications services as “[r]adio communications that encompass mobile and ancillary fixed communication that provide services to individuals and businesses and can be integrated with a variety of competing networks.”).

1997 paper, Rosston and Steinberg outlined the argument for the flexible allocation decisions: with competition, flexibility for operators allows them to configure their services to meet the demands of consumers and to have the incentives to offer new services.¹⁰³

In addition to the flexible service rules, the FCC set spectrum caps in the auction that prevented the incumbent cellular carriers from buying specified large blocks of the new PCS licenses in their region.¹⁰⁴ These spectrum caps ensured that every region would have at least four licensees after the first broadband PCS auctions ended in 1995.¹⁰⁵ Without such caps, it is possible that the incumbents would have acquired the licenses in part to preclude additional competition. The auction worked well and consumers benefitted from substantial price declines and an array of new and innovative wireless products and services resulting from vigorous competition in the wireless space.

The introduction of at least two new competitors to the duopoly cellular market illustrates the potential benefits of competition. Previously, with only two providers, wireless prices were very high and usage was low.¹⁰⁶ In 1994, before the auction, the average bill was \$56 for 119 minutes of use for about \$0.47 per minute.¹⁰⁷ Immediately upon entry, the new entrants caused prices to drop dramatically as they fought to acquire both market share from the incumbents and new customers from those who had not yet subscribed to wireless.¹⁰⁸ Five years later, the average revenue per minute had been cut in half, to \$0.22.¹⁰⁹

Wireless has now become the primary medium of communication in the United States and the world, just as the Internet is the chief medium of information exchange.¹¹⁰ Both wireless and Internet markets stand as

103. See Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 FED. COMM. L.J. 87, 99–103 (1997). We intended this paper to be a Commission Policy statement, but because we could not obtain the votes of enough commissioners, it was released as a staff working paper.

104. The FCC had PCS-specific spectrum caps limiting any provider to 40 MHz of PCS spectrum. In addition, it adopted a 45 MHz CMRS spectrum cap. Since the cellular licensees had 25 MHz of spectrum (they were each awarded an additional 5 MHz of spectrum in 1986 with little fanfare or debate), they could buy two of the 10 MHz PCS licenses, but were not allowed to buy a 30 MHz PCS license in their region. Implementation of Sections 3(n) and 332 of the Communications Act, FCC 94–212, *Third Report and Order*, 9 FCC Rcd. 7988, paras. 238, 263 (1994).

105. *Id.* at para. 264. The C block auction that began in late 1995 should have ensured a fifth provider with at least 25 MHz of spectrum in every area, but failed to do so quickly because of the bankruptcy protection for some bidders.

106. See TELECOM COMPETITION CONCERNS, *supra* note 97, at 22–25.

107. Annual Report & Analysis of Competitive Market Conditions with Respect to Commercial Mobile Servs., *Eleventh Report*, FCC 06-142, 21 FCC Rcd. 10947, app. A, tbl. 10 (2006).

108. *Id.*

109. *Id.*

110. See PEW RESEARCH CTR., GLOBAL ATTITUDES PROJECT, GLOBAL DIGITAL COMMUNICATION: TEXTING, SOCIAL NETWORKING POPULAR WORLDWIDE 2 (2011), *available*

extremely powerful evidence of the benefits of the *modern* approach that jump-started their success stories. However, in these, as in many markets, maturation gives rise to proposed consolidation attempts that threaten over-consolidation. Any *laissez-faire* policy must always be contingent; government cannot safely say that any market is guaranteed to be forever competitive.¹¹¹

The success of the wireless market was not merely the result of increasing the amount of spectrum available for PCS licenses, ensuring a competitive number of firms, and instituting flexible use rights.¹¹² Competing against an entrenched incumbent provider can require regulatory intervention to ensure that a new entrant can get a foothold as well. For example, wireless would not have become a viable alternative to traditional wireline telephone service without a rule to facilitate interconnection with the wireline network dominated by large incumbents.¹¹³ Prior to the Telecommunications Act of 1996, state regulators set local connection rates above cost for termination on the incumbent wireline network to keep monthly local telephone rates low. For example, it was typical for a cellular company to pay three cents per minute to terminate a call on the wireline network.¹¹⁴ In contrast, when calls went from the wireline network and were terminated on the wireless network, a typical payment might be on the order of one cent per minute. With a typical local calling volume of 1,000 minutes per month for a household, and most of those calls going from wireless (which had comparatively few subscribers) to wireline phones (which almost everyone had), a three-cent-per-minute expense would put the monthly service cost of using a wireless phone as a landline replacement at \$30 before the wireless firm could start to cover its own network costs.¹¹⁵ As a result, wireless networks charged high per minute fees, and consumers did not see wireless as a replacement for landline service. That was the intention of the wireline firms.

The 1996 Telecommunications Act permitted the FCC to change the interconnection rules. It required that “transport and termination” of traffic be “reciprocal.”¹¹⁶ Incumbent wireline telephone companies made the

at <http://www.pewglobal.org/files/2011/12/Pew-Global-Attitudes-Technology-Report-FINAL-December-20-2011.pdf>; see also Reed E. Hundt, *The Internet as “The Common Medium,”* 19 MEDIA L. & POL’Y 143, 143–44, 146–48 (2010).

111. See U.S. GOV’T ACCOUNTABILITY OFFICE, GAO-10-779, ENHANCED DATA COLLECTION COULD HELP FCC BETTER MONITOR COMPETITION IN THE WIRELESS INDUSTRY 10 (2010), available at <http://www.gao.gov/new.items/d10779.pdf>.

112. This is not to say that those aspects were not important and did not lead to immediate benefits.

113. See 47 U.S.C. § 251 (2006).

114. See Implementation of the Local Competition Provisions in the Telecommunications Act of 1996, *First Report and Order*, FCC 96-325, 11 FCC Rcd. 15499, para. 1082 (1996) [hereinafter *Local Competition Order*].

115. See *id.*

116. 47 U.S.C. §§ 251, 252 (2006). The phrase “transport and termination” refers to the connection fees charged for connecting a call to an end user on a network.

argument that three cents one way and one cent the other way was “reciprocal” so that there was no need to change any rules or payments. Because this pattern of payments would insulate the wireline companies from competition, the FCC interpreted the word “reciprocal” in the legislation as synonymous with “symmetric.”¹¹⁷ Therefore, if the Incumbent Local Exchange Carrier (“ILEC”) charged a high price for its termination, it would also have to pay a high price for its outgoing calls.¹¹⁸

The reduction in termination payments—from three cents per minute to a fraction of a penny a minute—allowed facilities-based local competitors like wireless companies and cable companies to compete with the ILECs; the sea change ushering in facilities-based competition would not have occurred had the ILECs been able to pay a low rate for their outgoing traffic and charge a much higher rate for incoming traffic. Wireless carriers were able to take advantage of the much lower and symmetric termination payments and began to offer new services like “free nights and weekends” in addition to the mobile-to-mobile calling that avoided the wireline termination payments altogether.¹¹⁹ Ultimately, the reduction in termination payments contributed to AT&T’s ability to offer the Digital One Rate in 1998, which started the move to big packages of minutes usable anywhere in the country and also to VoIP services that compete with the ILECs.¹²⁰

The reciprocity rule illustrated the use of regulation to promote multi-firm competition. The ILECs apparently did not foresee the change in demand due to the Internet.¹²¹ They focused their attention on the rules for the pricing of unbundled network elements although mandating symmetric termination charges made an enormous difference in competition for facilities-based providers. Once the ILECs, with the view that interconnection would involve voice services primarily terminating on their networks, set a high termination price, innovative Competitive Local Exchange Carriers (“CLECs”) signed contracts with dial-up Internet Service Providers like AOL that received incoming calls and made

117. See *Local Competition Order*, *supra* note 114, at paras. 1085–91, 1094–95 (1996).

118. See *id.*

119. See Antoinette Cook Bush, John Beahn, & Mick Tuesley, *Convergence and Competition—At Last*, 57 FED. COMM. L.J. 183, 184 (2005) (“Developments in bucket pricing plans, free nights and weekends, text messaging, ringtones, music downloads, mobile gaming, and video and Internet-capable phones all took place in the absence of intrusive regulation.”).

120. Cf. *id.*

121. The Telecommunications Act of 1996 was also hailed as a grand bargain between rivals long-distance and local telephone companies. By providing the carrot of long-distance entry to the local carriers, Congress forced the local carriers to open their local networks to competition. Removal of these barriers also tore down the artificial distinction between local and long-distance telephone calls that remained in place after their foundation had evaporated due to dramatic decreases in the cost of transmitting calls over long distance.

virtually no outgoing calls.¹²² As a result, the above-cost termination payments went to the CLECs and the ILECs found themselves paying out much larger amounts than they had anticipated.¹²³ ILECs subsequently reduced the rates for symmetric termination, while fighting for and eventually getting the FCC to change the rules to allow for different rates for dial-up internet access, but ISPs had already gotten a big leg up on the ILECs in the race to define Internet access in the first, critical, dial-up era.¹²⁴ The reduction in termination charges greatly increased and accelerated the capability of wireless and VoIP companies to provide voice telephony service in competition with the incumbent telephone companies.

The technological advances in wireless, broadband, and VoIP led to different parties with different interests vying for influence in Congress and at the FCC. Some of these newly interested parties pushed for low-cost interconnection, and the resulting changes in regulation that promoted the interests of these new competitors led to an increased diversity of competition that in turn has lessened the need for traditional monopoly regulation through its reduction of horizontal monopoly power.¹²⁵

Wireless penetration grew rapidly from the PCS auctions in 1995 through the end of the century.¹²⁶ With the election of George W. Bush in 2000, Michael Powell moved from being a Commissioner to being Chairman of the FCC.¹²⁷ In that role, he abolished the 45 MHz CMRS spectrum cap and instituted a case-by-case approach to spectrum transactions:

[W]e will “sunset” the spectrum cap rule effective January 1, 2003[;] . . . permit the Commission to consider, in conjunction with [DOJ], substantive and processing guidelines for the Commission's case-by-case review of transactions that would raise concerns similar to those that the spectrum cap was designed to address[;] . . . raise the spectrum cap to 55 MHz in

122. See Kasey A. Chappelle, *The End of the Beginning: Theories and Practical Aspects of Reciprocal Compensation for Internet Traffic*, 7 *COMMLAW CONSPECTUS* 393, 397-98 (1999).

123. *Id.*

124. *Id.*

125. Harris, Rosston, and Teece argued that with advances in local telephone competition, ultimately the only regulation would possibly be to ensure competitive interconnection charges. See Land Mobile Radio Dissertation, *supra* note 100; David J. Teece, *Telecommunications in Transition: Unbundling, Reintegration, and Competition*, 1 *MICH. TELECOMM. & TECH. L. REV.* 47 (1995), available at <http://www.mtflr.org/volone/teece.pdf>; Robert G. Harris, *Meddling Through: Regulating Local Telephone Competition in the United States*, *J. ECON. PERSP.*, Fall 1997, at 93.

126. Theodore Rappaport, A. Annamalai, R.M. Buerer, & William H. Tranter, *Wireless Communications: Past Events and a Future Perspective*, 40 *IEEE COMM'NS. MAG.*, May 2002, at 148.

127. Michael Powell, *NAT'L CABLE & TELECOMMS. ASS'N*, <http://www.ncta.com/who-we-are/leadership/bio/169>.

all markets during the transition period[;] . . . [and] eliminate the cellular cross-interest rule in Metropolitan Statistical Areas (MSAs), while retaining it in Rural Service Areas (RSAs).¹²⁸

It could be argued that there had been substantial change in the wireless marketplace over the previous few years—enormous growth, changes in pricing plans, and (as described above) the implementation of procompetitive termination payments that reduced the cost of wireless service tremendously. In addition, there was a move to allocate more spectrum to Commercial Mobile Radio Service.¹²⁹ Rosston and Topper document the subsequent change in wireless competition over the next several years.¹³⁰

With additional CMRS spectrum, there is no doubt that any fixed numerical cap should be increased. But the question remains: when would caps be appropriate? One key advantage of the spectrum cap over a case-by-case review of licensing transactions surfaces in spectrum auctions. The FCC has settled on the use of a simultaneous auction framework that allows firms to compete for licenses and pursue backup strategies if other licenses become relatively too expensive.¹³¹ Unlike a post hoc case-by-case analysis of aggregation limits, a spectrum cap provides a bright-line limit for bidders to follow in planning their acquisition strategies, thereby reducing uncertainty in expanding their spectrum holdings. Spectrum aggregation concerns would be addressed in a consistent manner, instead of trying to determine whether it makes sense to deny an auction winner the benefits of victory after the close of an auction.¹³² As a result, spectrum caps make more sense in an auction context than for non-auction situations where there are fewer interrelated transactions occurring simultaneously.

The success of the wireless marketplace shows the power of competition. But it also shows that the FCC has significant power to promote efficient competition that can benefit consumers.

128. Spectrum Aggregation Limits for Commercial Mobile Radio Servs., *Report and Order*, FCC 01-328, 16 FCC Rcd. 22668, paras. 1–2 (2001)

129. Annual Report & Analysis of Competitive Mkt. Conditions with Respect to Commercial Mobile Services, *Thirteenth Report*, DA 09-54, 24 FCC Rcd. 6185 (2009).

130. Gregory L. Rosston & Michael D. Topper, *An Antitrust Analysis of the Case for Wireless Network Neutrality 2* (Stanford Inst. for Econ. Pol’y Research, Discussion Paper No. 08-040, 2009), available at <http://www.stanford.edu/group/siepr/cgi-bin/siepr/?q=system/files/shared/pubs/papers/pdf/08-040.pdf>

131. See *About Auctions*, FCC, http://wireless.fcc.gov/auctions/default.htm?job=about_auctions&page=2 (last visited Oct. 18, 2013).

132. This might require re-running the entire auction to get the efficient outcome.

V. UPCOMING COMPETITION POLICY CHOICES

A. *The Open Internet Order*

The wireless story leads to the present. The FCC seems committed to a proactive competition policy in wireless,¹³³ with the corollary that it sees no need for rate regulation or behavioral regulation in that sector.¹³⁴

The Commission's relatively consistent approach to a competition policy for wireless can be most readily contrasted with the policy for wireline broadband service.¹³⁵ Many questions about the FCC's approach to broadband internet access remain, chief among them: Does the FCC prefer, or can it in fact promote, multi-firm competition in broadband Internet access, or should it instead choose for that market either a *classic* or *laissez-faire* competition policy? When the D.C. Circuit issues a decision on Verizon's challenge to the FCC's Open Internet Order, the court will be asking the new FCC, composed of four commissioners who did not vote on those rules, whether they will choose to fight for, change, or abandon the rules.¹³⁶ The FCC response to the Court's decision will be tantamount to selecting a competition policy for wireline broadband.

The Open Internet Order itself did not articulate a competition policy or even a framework for assessing competition issues. Indeed, the rules allowed carriers to impose data caps and usage-based pricing.¹³⁷ Both practices in some circumstances might enhance welfare gains. They might, in other situations, amount to inappropriate monopolistic practices. The rule did not discuss the metrics the FCC would use to decide if caps and usage-based pricing should be barred. In any event, the D.C. Circuit may or may not permit the FCC to consider such rate regulation under the auspices of an Open Internet. The FCC may have to decide that broadband Internet access is to be treated as a regulated monopoly and declare it to be a "telecommunications service" under Title II, suitable for "common carrier" classification. Or it may elect, instead, to seek ways to create more robust multi-firm competition in wireline broadband Internet access. It also might find ways to help wireless provide more effective competition in broadband Internet access.

In any case, the FCC will need to decide what problem of competition it is trying to solve. In our view, the FCC's competition

133. *E.g.*, Annual Report & Analysis of Competitive Mkt. Conditions with Respect to Mobile Wireless, Including Commercial Mobile Servs., *Fourteenth Report*, FCC 10-81, para. 1 (2010), available at www.fcc.gov/14report.pdf.

134. U.S. GOV'T ACCOUNTABILITY OFFICE, GAO-10-34, TELECOMMUNICATIONS: FCC NEEDS TO IMPROVE OVERSIGHT OF WIRELESS PHONE SERVICE 23 (2009); 42 U.S.C. § 203 (2006).

135. We do not think that at this point in time the FCC will declare that wireless is a competitive substitute for wireline broadband.

136. *See Verizon v. FCC*, No. 11-1355 (D.C. Cir. argued Sept. 9, 2013).

137. *Open Internet Order*, *supra* note 9, at para. 72.

analysis should start with recognizing that broadband networks have two sides: sender and receiver. There is a rich economic literature on “two-sided markets.”¹³⁸ A network owner can charge either or both sides. The credit card business provides a useful analogy: a credit card company can charge the cardholder and/or the restaurant that takes the card. A two-sided network owner determines its charges based on the relative elasticity of demand (which can also be a function of network size).¹³⁹ Typically a credit card company gives away cards to get a user base, then charges restaurants a commission when cardholders pay for meals with their cards.¹⁴⁰ Similarly, a broadband network operator might charge a low price to users and a high price to content sellers until it had a large user base. Conversely, a network might be able to provide such good access that it could charge high prices to end users, say for example, if it had very high-speed mobile service relative to all of its competitors.

Yet not all content is of equal value to the network owner. ESPN is said to be considering paying wireless carriers to allocate more bandwidth to carry ESPN’s content.¹⁴¹ The carriers might well garner new revenue from the upstream, content side of their networks by ensuring quality just as FedEx and the USPS provide priority delivery of packages. Nor are all broadband customers of equal value to access network owners. Access providers are seeking to price discriminate among customers through usage caps, time of day pricing, and other marketing programs. While such arrangements may treat customers differently depending on their elasticities, it is not clear whether such arrangements harm or help efficiency overall.

The FCC needs to put in place a framework for all of its decisions so that companies will understand how such arrangements will be evaluated. Without clear guidance, like that provided by the DOJ/FTC merger guidelines,¹⁴² firms will not know how the FCC will judge their actions. Uncertainty about the framework might lead some firms to eschew certain practices that would be beneficial and cause other firms to adopt harmful practices with the view that they might be allowed to proceed, or that their actions will set a precedent that will make it harder for the FCC to condemn their actions.

Without deciding all issues in advance, and with attention to the actual facts of any dispute, the FCC has many reasons to retain jurisdiction over arrangements on both sides of the network. For example, if wireless carriers treated PBS worse than ESPN, many would argue that the FCC

138. See, e.g., Marc Rysman, *The Economics of Two-Sided Markets*, 23 J. ECON. PERSP. 125 (2009).

139. *Id.* at 129.

140. *Id.* at 128.

141. See Karl Taro Greenfield, *ESPN: Everywhere Sports Profit Network*, BLOOMBERG BUSINESSWEEK (Aug. 30, 2012), <http://www.businessweek.com/articles/2012-08-30/espn-everywhere-sports-profit-network>.

142. See DOJ/FTC HORIZONTAL MERGER GUIDELINES, *supra* note 14, at 2–3.

should intervene to ensure that at least some non-profit educational content can reach consumers as quickly, with as high a quality level as sports.¹⁴³ On the other hand, if the FCC used regulation to require networks to unbundle and separately offer ESPN and PBS, either as pay video or as over-the-top content, consumers might well be worse off.¹⁴⁴

None of these questions about two-sided networks are easy. Nor are they unusual. Applying their 1993 experience of regulating the cable pay video industry to the issue of regulating the cable broadband network in 2009, the FCC can draw three lessons:

- Regulating price or content in broadband will produce the same firestorm of lobbying against the FCC that it had experienced in 1993, with probably the same result that obtained in 1996 when cable companies persuaded Congress to undo almost all regulation of its business.
- Creating opportunities for adjacent market entry against any dominant broadband network is a productive avenue. In the case of cable broadband, that means using regulations to promote new entry and expanded offerings from competitive providers, such as wireless access. In this connection, special access reform and spectrum licensing and availability are vital.
- It is important to limit efforts by any access monopolist to entrench its position by gaining exclusive access to content. This is reflected in conditions imposed on the Comcast acquisition of NBCUniversal, and historically in the program access rules that allowed satellite MVPDs to gain a foothold in competition with cable television systems.

The history of the last four years for the FCC could have been much different had it been guided from the beginning of the Obama Administration by a clear regulatory philosophy coupled with a detailed analysis of the competitive structure of the markets in its broad jurisdiction.

143. For another example of a potentially problematic practice within a vertically integrated firm, see Kevin J. O'Brien, *Speed Limits on Data Downloads*, INT'L HERALD TRIB., May 13, 2013, at 14 ("The Deutsche Telekom [data caps] proposal is controversial not only because it would impose the nation's first comprehensive download limits on landline broadband service; Deutsche Telekom also plans to exempt from the limits the traffic generated by its own Internet television service, Entertain. At the same time, the operator does not plan to exempt the traffic of rival services, like YouTube, from Google; iTunes, from Apple; or Facebook.").

144. For a good discussion of these issues, see generally *Economics of Media*, MRUNIVERSITY, <http://mruniversity.com/courses/economics-media> (last visited Nov. 16, 2013). Another scenario where the FCC may someday be asked to intervene would be where a content provider blocks access to its websites from broadband customers of an MVPD with which it is having a dispute over payment for video programming, but allows access from other broadband providers with competing video services.

If the FCC had stated in 2009 that network neutrality applied only to dominant firms, for example only to cable where it was the dominant Internet access provider, then the rules would not have seemed so intrusive and retrograde. Moreover, because it wanted to clear the way toward closing its acquisition of NBCUniversal, Comcast might have led the cable industry in stipulating to the rules.¹⁴⁵ With a clear definition of how it would determine “dominance,” the FCC then would have been able to link market power with network neutrality.

As individual disputes arise in this domain and in other areas of its authority, the FCC could study the specific facts and develop a body of case-by-case decisions that amount to competition doctrine. Of course, the case-by-case decisions should be governed by an overall competition framework, much as Associate Attorney General Baxter’s revisions to the Merger Guidelines in the 1980s have influenced the case law governing antitrust enforcement.¹⁴⁶

B. Maintaining the Success of Wireless

The other big battleground where the FCC must clarify its competition policy is the wireless marketplace. The National Broadband Plan endorsed the idea of an incentive auction, where the Commission would use market forces to transition spectrum from broadcast television to wireless mobile use.

In 2012, Congress authorized the FCC to implement this spectrum repurposing through a reverse incentive auction. Subparagraph (A) of section 6404 of the incentive auction legislation states that “the Commission may not prevent a person from participating in a system of competitive bidding” under proper procedures and conditions.¹⁴⁷ But it also empowers the FCC to set a generally applicable rule for ownership of spectrum by adding that “[n]othing in subparagraph (A) affects any authority the Commission has to adopt and enforce rules of general applicability, including rules concerning spectrum aggregation that promote competition.”¹⁴⁸ The latter clause once again reaffirms the FCC’s role as a competition agency. At the least it must be read as calling on the FCC to consider a general rule, screen, or aggregation principle. The FCC’s

145. Ultimately, Comcast agreed to myriad conditions on its ability to prioritize carriage of different content to gain approval of its acquisition. *See generally* App’ns of Comcast Corp., Gen. Elec. Co. & NBC Universal, Inc. for Consent to Assign Licenses and Transfer Control of Licensees, *Memorandum Opinion and Order*, MB Docket No. 10-56, FCC 11-4 (rel. Jan. 20, 2011).

146. *See* William E. Kovacic, *The Modern Evolution of U.S. Competition Policy Enforcement Norms*, 71 ANTITRUST L.J. 377, 435 (2003) (arguing that the 1982 Guidelines “changed the way the U.S. courts and enforcement agencies examine mergers”).

147. Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6404(17)(A), 126 Stat. 155, 230 (2012).

148. *Id.* § 6404(17)(B).

inevitable decision on this issue will reveal an antitrust philosophy. But should that rule come before or after the next spectrum auction?

As discussed above, it would introduce unacceptable inefficiencies to hold an auction and then afterwards determine if the winner can be permitted to buy the spectrum licenses. Surely bidders ought to know going into an auction whether they can or cannot close on the volume of spectrum they try to buy. Resurrecting spectrum caps would increase certainty about the ability to acquire spectrum in an auction.

Another problem is that, in the incentive auction legislation, the House put more constraints on the FCC's auction authority than Congress has ever done. Further, Congress required the agency to use auction proceeds for specific purposes, such as funding a public safety network.¹⁴⁹ But the legislation does not tell the FCC what competition policy to follow. Once again, the agency has the challenging role of being, in all important respects, on its own.

The FCC is moving forward to implement this complex two-sided auction, which may occur in 2014 or 2015.¹⁵⁰ In the first part of this auction, known as the "reverse auction," broadcasters will bid the amount of money they would accept to cease broadcasting or to move to a different spectrum band (e.g., from UHF to upper or lower VHF channels, or from upper VHF to lower VHF).¹⁵¹ Once the FCC determines the amount of money required to pay off the broadcasters for vacating a certain amount of spectrum, it will then hold a "forward auction," in which blocks of wide-area, flexible-use licenses are put up for sale.¹⁵² When this auction concludes, the FCC will compare the revenue generated by the forward auction to the revenue requirement from the reverse auction—potentially including money for public safety, relocation, and other costs¹⁵³—to see if the auction will "clear."¹⁵⁴ That is, if net revenue is sufficient, the auction will close, and the participants will transfer money and spectrum.

149. The funding for public safety is not limited to the broadcast incentive auction—proceeds from other auctions, such as the H Block (1915–1920 MHz and 1995–2000 MHz) auction that the FCC has proposed to hold in 2014, possibly in advance of the broadcast incentive auction, would also count toward the revenues to fund public safety.

150. Expanding the Econ. & Innovation Opportunities of Spectrum Through Incentive Auctions, *Notice of Proposed Rulemaking*, FCC 12-11827, FCC Rcd. 12357, para. 10 (2012) [hereinafter *Incentive Auction NPRM*].

151. *Id.* at para. 84.

152. *Id.* at para. 5.

153. *Id.* at paras. 26–31.

154. See Michael Selkirk, *Voluntary Incentive Auctions and the Benefits of Full Relinquishment*, 91 TEX. L. REV. 1561, 1576 (2013) (citing Middle Class Tax Relief and Job Creation Act Pub. L. No. 112-96, § 6403(c), 126 Stat. 227-28), available at <http://www.texasrev.com/wp-content/uploads/Selkirk.pdf> (“[I]f the total amount of the proceeds from the forward auction are not greater than the sum of (1) the total amount of compensation to be awarded to successful reverse auction bidders, (2) the costs of conducting the forward auction, including repacking costs, and (3) the relocation costs associated with relocated

If not, the FCC will reduce the spectrum target and continue the reverse auction to clear fewer broadcasters in each area, leading to a lower revenue target. Then, the FCC will resume the forward auction with a smaller amount of spectrum available. Presumably, the price per MHz-pop¹⁵⁵ will increase, but because of the smaller amount of spectrum available, the total revenue may increase or decrease. The revenues will again be compared to the revenue requirement, and the process will continue until the clearing rule is met or until there is little or no spectrum left to auction.¹⁵⁶

The incentive auction is an example of an attempt to use market forces to move spectrum from one constrained use to a more highly valued use.¹⁵⁷ Television has created large consumer surplus, but with over-the-air television watched by a very small minority of households, the consumer welfare benefits of the marginal over-the-air television station are likely to be small relative to the benefits from additional spectrum for flexible use.¹⁵⁸ Congress may have intervened if the FCC had used regulation to mandate a transition. Rather than exercising its regulatory power, the FCC (and the Administration) chose instead to seek legislation that permits the FCC to create a market for, in effect, the sale of broadcast licenses to wireless carriers on a voluntary basis.

The Commission's choices about the Open Internet Order and competition in the Incentive Auction will provide an indication of its overall competition policy framework. However, other decisions as well would benefit from a consistent competition policy framework. The Commission should proactively think through as many of the issues in advance rather than making reactive decisions about the issues solely when proposed mergers cause them to arise.

broadcasters, then no spectrum will be relinquished or reallocated, and the FCC will assign no new flexible licenses.”).

155. An MHz-pop, or a megahertz pop, “refers to one megahertz of bandwidth passing one person in the coverage area in a spectrum license.” Saul Hansell, *Verizon Licks Its Cheap Megahertz Pops*, N.Y. TIMES (Mar. 21, 2008, 6:49 PM), <http://bits.blogs.nytimes.com/2008/03/21/verizon-licks-its-cheap-megahertz-pops>.

156. See *Incentive Auction NPRM*, *supra* note 150, at para. 5.

157. See Julius Genachowski, Chairman, FCC, Remarks at the Georgetown Ctr. for Bus. & Pub. Policy, (Nov. 7, 2011), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-310876A1.pdf (“In November 2010, the Commission initiated a rulemaking focused on . . . pav[ing] the way for incentive auctions—a market-based approach to reallocate spectrum to its most valued use.”).

158. See FCC OMNIBUS BROADBAND INITIATIVE, SPECTRUM ANALYSIS: OPTIONS FOR BROADCAST SPECTRUM 15–19 (2010), available at <http://download.broadband.gov/plan/fcc-omnibus-broadband-initiative-%28obi%29-technical-paper-spectrum-analysis-options-for-broadband-spectrum.pdf> (charting decline of broadcast television and discussing economic importance of repurposing spectrum for mobile broadband).

VI. CONCLUSION: CONSISTENT CLEAR APPLICATION OF A COMPETITION POLICY WILL STRENGTHEN THE COMMUNICATIONS SECTOR

Michael Porter states that the only right economic goal for a government is a high and rising standard of living for *all* citizens.¹⁵⁹ Broadband, by itself, is not a goal. It is a means to an end; similarly, policies promoting increasing broadband access are strategic only if they represent a commitment of political and economic capital to achieve a particular goal.

As set forth by Hundt and Levin in 2012, expansion of broadband penetration and bandwidth could be the means to achieve a high and rising standard of living.¹⁶⁰ That could follow, for example, if broadband efficiently conveyed faster, better, and cheaper public goods (like education and health care) to everyone in the country. Broadband might also affect the economy in other ways: it could accelerate the velocity of money and trade, or the volume of entrepreneurship, and it could enhance productivity gains. The FCC must know the goals it seeks. It must then choose the means to achieve those goals. Our recommendation is to explore the full potential of the *modern* approach to competition policy as a means to achieve the chosen goals.

For example, some might believe that the FCC should increase welfare by increasing the scope and scale of public goods broadband can digitally deliver.¹⁶¹ Another view could be that the private goods and services, such as those that Netflix or Amazon video offer, more than suffice to increase the penetration, bandwidth and the value of broadband access.¹⁶² To implement either of these views, the FCC needs to develop and articulate a point of view on competition in not only access markets, but also markets for digital goods and services.

We know many of the current FCC employees. We know and respect former chairs Genachowski, Clyburn, and current Chairman Wheeler and other commissioners. This is a very able, upstanding, honest, well-informed group, based on our personal knowledge of their skills and reputation in the community. If we had their jobs, we would not know exactly what to do. We are sufficiently officious, however, to suggest that there are better and worse ways to decide what to do.

Historically, the FCC has made several moves to encourage competition by setting the rules of the road and then letting the marketplace work. Increasing the amount of spectrum with caps to prevent excessive concentration, ensuring that new entrants are able to connect with

159. MICHAEL E. PORTER, *THE COMPETITIVE ADVANTAGE OF NATIONS* 6 (1990).

160. *See generally* REED HUNDT & BLAIR LEVIN, *THE POLITICS OF ABUNDANCE* (2012).

161. *Id.*

162. *Id.*

incumbent networks, and assuring new entrants access to content are three historical examples of FCC action that facilitated entry and competition.

Here are some reasonably workable ways to come to a decision. First, as Chairman Genachowski often said, decisions should be driven by data.¹⁶³ In a town where global warming is not the subject of consensus, one might suspect that all data is regarded as dubious or politicized. But this is not typically the case on the eighth floor; the FCC has usually made decisions based on a widely accepted understanding of facts. A competition policy depends first on facts, not law. In fact, markets can be dangerously consolidated, robustly competitive, or fall somewhere in between.¹⁶⁴ Learning the facts about where a market stands, and is likely to move, is an essential first step. Each market is its own story. All markets deserve the same sort of analysis, but in each market, that analysis should lead to a coherent and predictable set of competition policy decisions.

Second, it is important to have a perspective on consolidation. Market forces and appropriate rules can enable firms to enter and exit, but the FCC can and should protect against anticompetitive mergers. In 1994, Michael Porter told us in a meeting in the Chairman's office at the FCC to make sure we auctioned at least enough licenses to let at least one fail in every market because only then would we know we had auctioned enough to achieve maximum competition. That actually is more or less what we did, although by accident and by dint of some strange doings in bankruptcy court.¹⁶⁵ His axiom is worth remembering, even if it should not necessarily be applied exactly as he put it.

Third, standing up for competition usually turns out to be the same as standing up for entrepreneurship, innovation, the little guy who wants to get big, the spirit of rivalry, and the right of people to make what they can of themselves rather than be told by the government what they can or cannot accomplish. In most businesses, government does not limit the number of entrants. The FCC should remember that.

It should also remember that it does not have a crystal ball that works better than the forecasting done, for instance, by financial analysts or technology firms in the United States. Everyone can miss product and market shifts. The genius and devil of technology is its unpredictability. Therefore, assuring a robustly competitive structure is the alpha and omega of policy for every market. As long as the FCC makes certain that multiple firms can compete in old markets or can try to create new ones, then the agency will have provided effective guidelines and fulfilled its statutory role in "promot[ing] competition and reduc[ing] regulation in order to secure lower prices and higher quality services . . . and encourag[ing] the

163. See FCC Process Reform: Hearing Before the Subcomm. on Comm'n's and Technology of the H. Comm. on Energy and Commerce, 112th Congress 15–16 (2011) (statement of Julius Genachowski, Chairman, FCC).

164. See Rosston & Steinberg, *supra* note 103, at 88.

165. See *FCC v. NextWave Pers. Commc'ns Inc.*, 537 U.S. 293 (2003).

rapid deployment of new . . . technologies.”¹⁶⁶ As long as the FCC makes certain that anyone can come in and do something insanely great in any market, then the agency will have been a fine umpire, rules-maker, guideline-drawer, and contributor to the wellbeing of these United States.

166. Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

Lessons from Google Fiber: Why Coordinated Cost Reductions to Infrastructure Access are Necessary to Achieve Universal Broadband Deployment

Holly Trogdon*

TABLE OF CONTENTS

I.	OVERVIEW.....	105
II.	THE ROAD TO GOOGLE FIBER.....	110
	<i>A. Universal Broadband: A Call to Action</i>	110
	<i>B. Why Rights-of-Way Matter if Universal Service is to Become a Reality</i>	113
	<i>C. Google Fiber as a Case Study: Eliminating Rights-of-Way Fees</i>	114
III.	FEDERAL ACTION TO REDUCE INFRASTRUCTURE ACCESS COSTS.....	117
	<i>A. Dig Once: Congressional and Executive Action</i>	118
	<i>B. The Impact of a Dig Once Policy</i>	120
	<i>C. Responses to the FCC’s Rights-of-Way Inquiry</i>	120
IV.	A COORDINATED APPROACH TO COST REDUCTIONS.....	122
	<i>A. What the FCC Can Do to Incentivize Deployment</i>	123
	1. The FCC Does Not Have Authority Under Section 253(a) to Preempt Rights-of-Way Matters Relating to Broadband	

* J.D. Candidate, The George Washington University Law School, January 2014. The author gives special thanks to the *FCLJ* Production Team and everyone who provided the support necessary to make it through the Note-writing process. The views expressed in this article are the personal views of the author alone and are not attributable to any former or current employers.

Deployment Unless It Redefines “Telecommunications Services”	124
2. While Section 706(b) Arguably Allows the FCC to Preempt Rights-of-Way Matters Related to Broadband, It Should Not Act Beyond Its Authority Under Section 253 .	127
3. The FCC Should Provide Resources for Service Providers and Local Governments.....	130
<i>B. Congress Should Expand the FCC’s Jurisdiction to Collect Meaningful Data to Assist with Deployment</i>	<i>132</i>
<i>C. States Should Consider Revising Rights-of-Way Policies to Provide Certainty to Providers, Including “Dig Once” Policies</i>	<i>134</i>
V. CONCLUSION.....	137

I. OVERVIEW

Residents of Kansas City are over the rainbow. In 2011, Google announced after a competitive selection process¹ that Kansas City would become the first test site for its experimental project: Google Fiber.² Google agreed to build, operate, and maintain a fiber-to-the-home network in Kansas City, boasting speeds of up to one gigabit per second.³ The service delivered to residents in Kansas City will be provided at speeds faster than the FCC's 2015 goal for households,⁴ at a cost to consumers of only \$70 a month.⁵

Google Fiber's publicity thrusts the challenge of obtaining rights-of-way access to build out infrastructure for broadband deployment to the forefront of the public policy debate.⁶ The publicity of the Google Fiber project attracted FCC Commissioner Ajit Pai to communicate the FCC's need to "remove barriers to infrastructure investment" in order to promote "job creation and economic growth."⁷ Commissioner Pai's comments came

1. GOOGLE INC., REQUEST FOR INFORMATION: GOOGLE FIBER FOR COMMUNITIES (Feb. 10, 2010), *available at* http://www.ipaloalto.com/pdf/Google_Fiber_for_Communities_021010.pdf; *see* James Kelly, *Next Steps for Our Experimental Fiber Network*, GOOGLE BLOG (Mar. 26, 2010), <http://googleblog.blogspot.com/2010/03/next-steps-for-our-experimental-fiber.html> (noting that "1,100 community responses and more than 194,000 responses from individuals" were received in response to Google's Request for Information).

2. Milo Medin, *Ultra High-Speed Broadband is Coming to Kansas City, Kansas*, GOOGLE BLOG (Mar. 30, 2011), <http://googleblog.blogspot.com/2011/03/ultra-high-speed-broadband-is-coming-to.html>. Kansas City, Missouri, was announced just less than two months later. Milo Medin, *Everything's Up to Date in Kansas City*, GOOGLE FIBER BLOG (May 17, 2011), <http://googlefiberblog.blogspot.com/2011/05/everythings-up-to-date-in-kansas-city.html>. For the purposes of this Note, projects in both cities will be referred to as "Kansas City," irrespective of state. Note that as of March 2013, Google also entered into an agreement with bordering city Olathe. Rachel Hack, *Google Fiber is Coming to Olathe, Kansas*, GOOGLE FIBER BLOG (Mar. 19, 2013), <http://googlefiberblog.blogspot.com/2013/03/google-fiber-is-coming-to-olathe-kansas.html>.

3. DEVELOPMENT AGREEMENT, FINAL EXECUTION VERSION 5, 7 (2011), *available at* <http://www.netcompetition.org/wp-content/uploads/Google-Kansas-Agreement1.pdf>. In addition to residential service, Google promised connections to 300 city and governmental locations. *Id.* at 7.

4. FCC, CONNECTING AMERICA: THE NATIONAL BROADBAND PLAN 9 (2010) [hereinafter NATIONAL BROADBAND PLAN], *available at* <http://download.broadband.gov/plan/national-broadband-plan.pdf>.

5. This cost represents only the price for Internet, not Internet and TV service. The cost for an Internet and TV bundle is \$120 per month. GOOGLE FIBER, <https://fiber.google.com/about/> (last visited Jan. 31, 2012).

6. While rights-of-way approval is needed to access buildings, poles, and railroads, this Note primarily focuses its solutions on roads, by reference to dig once policies.

7. Ajit Pai, Commissioner, FCC, Opening Remarks of Commissioner Ajit Pai at the Telecommunications & E-Commerce Committee Roundtable of the U.S. Chamber of Commerce (Sept. 14, 2012) [hereinafter *September 14 Remarks of Comm'r Pai*], *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0914/DOC-316277A1.pdf.

just days after he visited the project's site, noting the importance for "states and local communities to adopt broadband-friendly policies when it comes to rights-of-way management."⁸ Commissioner Pai encouraged others to take the demonstrated success of the Kansas City–Google partnership and use it to inform how they could "streamline their own rights-of-way management processes," mentioning that the city's attractive policies were the reason Google chose it for its innovative project.⁹

Commissioner Pai announced that the FCC should play a role in developing "model regulations, guidelines, or best practices for rights-of-way management that facilitate fiber deployment while safeguarding legitimate government interests."¹⁰ He emphasized that streamlining rights-of-way management is necessary for "21st century challenges" like broadband deployment.¹¹ In fact, Google publicly stated that one of the reasons it chose Kansas City was because "the City's leadership and utility moved with efficiency and creativity."¹² Part of the agreement between Kansas City and Google included providing Google complete access to Kansas City's rights-of-way.¹³

One would think that with a company as large as Google, Kansas City would be able to collect fees for the unlimited access it gave to Google, but in fact, Kansas City waived all fees to its rights-of-way.¹⁴ Those following the project noted that the concessions Kansas City provided were more than just an example of the effects of deregulation on the market, but instead were an actual taxpayer subsidy, and further observed that these subsidies are necessary to incentivize deployment.¹⁵ Others claim that Google would have still paid Kansas' rights-of-way fees, but selected the city because it eliminated "*unnecessary costs and delay*," in the deployment process.¹⁶ Regardless of their characterizations of why

8. Ajit Pai, Commissioner, FCC, Statement of Commissioner Ajit Pai on His Visit to Kansas City's Google Fiber Project (Sept. 5, 2012), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0905/DOC-316114A1.pdf.

9. *Id.*

10. *Id.*

11. *Id.*

12. *Field Hearing on Innovation and Regulation Before the H. Comm. on Oversight and Gov't Reform*, 112th Cong. 3 (2011) [hereinafter *Testimony of Milo Medin*], *available at* http://oversight.house.gov/wp-content/uploads/2012/01/TestimonyofMiloMedin_1.pdf (testimony of Milo Medin, Vice President of Access Services, Google Inc.).

13. This included access to roads, poles, and buildings. DEVELOPMENT AGREEMENT, *supra* note 3, at 4.

14. *Id.* at 1, 4.

15. Timothy B. Lee, *How Kansas City Taxpayers Support Google Fiber: Google Fiber Isn't Exactly a Free-Market Success Story*, ARS TECHNICA (Sept. 7, 2012, 8:00 AM), <http://arstechnica.com/tech-policy/2012/09/how-kansas-city-taxpayers-support-google-fiber/> ("When a city offers a private company access to those resources for free, it's forgoing an opportunity to raise revenue. The implicit subsidy is even clearer when taxpayers, rather than Google, pay to hire extra city staff to supervise the project.").

16. Fred Campbell, *Market Demand Knocks Down Regulatory Barriers in Kansas City Fiber Deployment*, ARS TECHNICA (Sept. 27, 2012, 1:25 PM), <http://arstechnica.com/>

Google chose Kansas City, observers agree that more needs to be done to encourage investment in infrastructure to deploy high-speed broadband technology.¹⁷ Certainly, rights-of-way fees make up only one part of costs that providers like Google face when engaging in deployment projects.

With the spotlight on Google Fiber, the FCC is in a perfect position to utilize the lessons learned from the Google–Kansas City partnership to evaluate what can be done to encourage Internet service providers (“ISPs”) to upgrade their existing networks or deploy new networks where access is lacking. Earlier this year, Julius Genachowski, then FCC Chairman, called for at least one city in every state to have a gigabit community,¹⁸ echoing the National Broadband Plan’s goal of “affordable access of at least [one] gigabit . . . broadband service to anchor institutions such as schools, hospitals and government buildings.”¹⁹ Additionally, if the FCC wishes to achieve its goal of universal service,²⁰ it must take heed of Commissioner Pai’s statement that rights-of-way management plays a vital role in broadband deployment projects.²¹

Before the FCC acts, however, it must consider a variety of issues. The FCC has three players at its doorstep: ISPs, consumers, and local government.²² First, ISPs have called for greater deregulation of rights-of-way access in order to increase certainty that they can access existing infrastructure swiftly.²³ Second, consumers want faster broadband speeds at

business/2012/09/market-demand-knocks-down-regulatory-barriers-in-kansas-city-fiber-deployment/ (emphasis added) (“It infers too much to conclude that in-kind subsidies are required to build competitive fiber networks merely because Google objected to unreasonable fees and regulations and accepted the support offered by Kansas City.”).

17. *Id.* (“Google Fiber indicates that we should be encouraging private firms to build competitive networks without government subsidy whenever possible and rely on explicit subsidies only when necessary.”); Lee, *supra* note 15 (“[W]e should acknowledge the possibility that it simply doesn’t make economic sense for private firms to build new fiber networks without taxpayer subsidies.”).

18. Press Release, FCC, FCC Chairman Julius Genachowski Issues Gigabit City Challenge to Providers, Local, and State Governments to Bring at Least One Ultra-Fast Gigabit Internet Community to Every State in U.S. by 2015: FCC’s Broadband Acceleration Initiative to Foster Gigabit Goal (Jan. 18, 2013) [hereinafter *FCC’s Broadband Acceleration Initiative*], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0118/DOC-318489A1.pdf.

19. NATIONAL BROADBAND PLAN, *supra* note 4, at xiv.

20. *See id.* at 135–36.

21. Statement of Commissioner Ajit Pai on His Visit to Kansas City’s Google Fiber Project, *supra* note 8.

22. *See* Henry M. Littlefield, *The Wizard of Oz: A Parable on Populism*, 16 AM. Q. 1 (Spring 1964), available at <http://www.jstor.org/stable/2710826>.

23. *E.g.*, Reply Comments of Google Inc. at 40, A National Broadband Plan for Our Future, FCC GN Docket No. 09-51 (rel. July 21, 2009) [hereinafter *Reply Comments of Google Inc.*], available at <http://apps.fcc.gov/ecfs/document/view?id=7019917558>. Many commenters, including Google, urged the FCC to reduce barriers to wireless deployment, including reducing and/or eliminating zoning and rights-of-way barriers for municipal networks and commercial deployments, and clarifying timelines in the wireless facilities zoning approval process. *See, e.g., id.*

reasonable prices.²⁴ Lastly, states have not abandoned the fight that rights-of-way represent a property interest,²⁵ and the federal government should not impose restrictions on states' ability to impose fees beyond cost for access,²⁶ especially when states serve the interests of their residents through decisions to approve enhancements to existing networks.²⁷

If it does act, the FCC will also have to keep in mind recent initiatives by the executive branch, the current state of Congress, and future judicial scrutiny of its authority. The Obama administration has called for more efficiency in federal processes, including implementation of a "dig once" policy to coordinate broadband deployment with other road and utility projects.²⁸ While it appears unlikely that Congress will make drastic expansions to the scope of the FCC's jurisdiction to regulate broadband given the current state of political division and other more pressing initiatives,²⁹ appropriate congressional action would play a vital role in

24. Joel Gurin, *More on Speed: Just How Satisfied Are Customers*, OFFICIAL FCC BLOG (June 2, 2010), <http://www.fcc.gov/blog/more-speed-just-how-satisfied-are-customers>.

25. Frederick E. Ellrod III & Nicholas P. Miller, *Property Rights, Federalism and the Public Rights-of-Way*, 26 SEATTLE U. L. REV. 475, 483–85 (2003) [hereinafter Ellrod] (asserting that "the public rights-of-way belong to the community, and neither a private company nor the federal government can use that property without the owner's permission").

26. See e.g., *TWC of Oregon v. City of Portland*, 452 F. Supp. 2d 1084, 1099–1101 (D. Or. 2006) (finding that a 5% fee is "fair and reasonable compensation" and that "compensation" is not limited to actual cost); Ellrod, *supra* note 25, at 500 (noting that reading section 253 to prevent local communities from charging fair market value would result in an unconstitutional taking). *But see* Thomas W. Snyder & Walter Fitzsimmons, *Putting a Price on Dirt: The Need for Better Defined Limits on Government Fees for the Use of the Public Right-of-Way Under Section 253 of the Telecommunications Act of 1996*, 64 FED. COMM. L. J. 137, 160–66 (2011) (noting that section 253 should be read to prohibit revenue-generating fees on public right of ways and limit fees to management costs and any other proven economic value); Reply Comments of the Am. Cable Ass'n at 9, *Acceleration of Broadband*, FCC WC Docket No. 11-59 (rel. Sept. 30 2011) [hereinafter *Reply Comments of ACA*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021712335> ("Many government and private entities seem to approach requests for access to facilities or crossings as opportunities for revenue-generation rather than recovery of 'administrative and other specifically identifiable costs.'").

27. E.g., NAT'L ASS'N OF TELECOMM. OFFICERS & ADVISORS, INTRODUCTION TO NATOA'S BROADBAND PRINCIPLES 3–4 (June 2008), available at <http://www.natoa.org/Documents/BroadbandPreamble%26Principles.pdf>.

28. Exec. Order No. 13,616, 77 Fed. Reg. 36,903 (June 20, 2012) [hereinafter *Executive Order Accelerating Broadband Infrastructure Deployment*], available at <http://www.gpo.gov/fdsys/pkg/FR-2012-06-20/pdf/2012-15183.pdf>.

29. See Matthew Lasar, *Congress: It's Time to Rewrite the Telecommunications Bible*, ARS TECHNICA (May 25, 2010, 9:25 AM), <http://arstechnica.com/tech-policy/2010/05/congress-its-time-to-rewrite-the-telecommunications-bible/> (addressing the need in 2010 for Congress to revise the Telecommunications Act in light of the FCC's regulatory actions regarding broadband). For example, gun control legislation was a primary issue for Congress and the Obama administration in early spring 2013. See, e.g., Peter Baker, *Months After Massacre, Obama Seeks to Regain Momentum on Gun Laws*, N.Y. TIMES (Mar. 28,

stimulating our economy.³⁰ Although Congress was unsuccessful in passing a mandatory “dig once” policy,³¹ it still has a meaningful role to play in supporting rights-of-way reform.

As the FCC takes steps to achieve universal service, it should be mindful that although access to rights-of-way is necessary for deployment, management of rights-of-way requires a delicate balance between federal regulation and states’ rights.³² Further, as evidenced by Google Fiber, elimination of state and local rights-of-way fees is not itself sufficient to encourage universal broadband deployment.³³ This Note addresses why a coordinated approach to reducing costs related to infrastructure access for broadband deployment is necessary and will help the FCC move closer to its goal of universal service. It argues that the FCC should refrain from a one-size-fits-all regulatory approach to rights-of-way, and instead should encourage broadband deployment by improving resources available for state and local governments. This will necessarily require Congress and the states to support the FCC’s effort through related initiatives. Section II of this Note surveys the current status of broadband deployment, the importance of infrastructure access in achieving universal service, and why elimination of rights-of-way fees does not achieve that goal. Section III examines current federal policies fostering broadband deployment through rights-of-way policy. Section IV explains why coordinated action is necessary to reduce costs to access infrastructure for broadband deployment. Lastly, this Note proposes various cost-saving solutions by the FCC, Congress, and states, which can pave the way to cost reductions that

2013), <http://www.nytimes.com/2013/03/29/us/politics/obama-makes-impassioned-plea-for-gun-control.html>.

30. See generally HAL J. SINGER & JEFFREY D. WEST, FIBER-TO-THE HOME COUNCIL, ECONOMIC EFFECTS OF BROADBAND INFRASTRUCTURE INVESTMENT AND TAX INCENTIVES FOR BROADBAND DEPLOYMENT (2010), available at <http://www.ftthcouncil.org/p/cm/ld/fid=44&tid=76&sid=67> (noting the significant economic benefit of broadband investment).

31. See H.R. 1695, 112th Cong. § 2 (2011) [hereinafter H.R. 1695]; S. 1939, 112th Cong. § 2 (2011) [hereinafter S. 1939].

32. E.g., Comments of the City of Lafayette, Cal. at 1, Acceleration of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, FCC WC Docket No. 11-59 (rel. June 13, 2012) [hereinafter *Comments of the City of Lafayette*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021922511> (“It would be dangerous to the public, and harmful to communities, to attempt to develop federal rules that prevented localities from fully considering the impact of installations, or modifications to installations in the right-of-way.”); Comments of Intergovernmental Advisory Comm. at 5, Acceleration of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, FCC WC Docket No. 11-59 (rel. Mar. 16, 2012) [hereinafter *Comments of IAC*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021901497> (“The Commission must respect the fact that while we recognize the importance of broadband to the future of our communities, it is but one of multiple responsibilities and obligations we face, and our task is to balance the promotion of broadband deployment and adoption with these other responsibilities.”).

33. *Infra* Part II.C.

will assist the FCC in achieving universal high-speed broadband deployment.

II. THE ROAD TO GOOGLE FIBER

A. *Universal Broadband: A Call to Action*

The FCC called for universal broadband service for all Americans in its National Broadband Plan in 2010.³⁴ In its 2012 broadband report, the FCC estimated that nearly “[n]ineteen million Americans [still] live where fixed broadband networks do not reach; 14.5 million of those live in rural America.”³⁵ But it is not just rural Americans that are without a critical benefit³⁶: only 40% of Americans with access to broadband possess speeds deemed sufficient by the FCC.³⁷ Additionally, 142 million Americans rely on mobile connections,³⁸ which also require a “robust and reliable underlying wireline network.”³⁹ Even in metropolitan areas, wireline broadband infrastructure in the United States lags behind other countries, which affects its economic competitiveness.⁴⁰ The challenge for consumers

34. NATIONAL BROADBAND PLAN, *supra* note 4, at 135.

35. Inquiry Concerning the Deployment of Advanced Telecomm. Capability, *Eighth Broadband Progress Report*, FCC 12-90, GN Docket No. 11-121, para. 5 (2012) [hereinafter *Eighth Broadband Progress Report*], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0827/FCC-12-90A1.pdf.

36. This Note assumes that universal high-speed broadband service is a goal worth attaining. For arguments to the contrary, see George S. Ford & Lawrence J. Spiwak, *Justifying the Ends: Section 706 and the Regulation of Broadband*, PHOENIX CTR. POLICY PERSPECTIVES No. 13-01, Feb. 25, 2013, at 3 (remarking that ubiquitous broadband may not be reasonable).

37. *Eighth Broadband Progress Report*, *supra* note 35, at Table 17. As of June 2011, the adoption rate for the United States as a whole was 64% for fixed broadband at speeds of at least 768 kbps/200 kbps. *Id.*

38. INDUS. ANALYSIS & TECH. DIV., WIRELINE COMPETITION BUREAU, FCC, INTERNET ACCESS SERVICE: STATUS AS OF DECEMBER 31, 2011 3 (Feb. 2013), available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0207/DOC-318810A1.pdf.

39. W. TELECOMM. ALLIANCE, WIRELESS SERVICE DEPENDS ON ROBUST WIRELINE NETWORKS, available at <http://w-t-a.org/wp-content/uploads/2010/07/Advantages-of-Wireline-Network-011011.pdf>; see also Comments of the U.S. Telecomm. Ass’n at 6, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter *Sept. 2012 Comments of US Telecomm.*], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018033> (“Whether the consumer’s device is connected to a mobile wireless tower, a WiFi hot spot, or plugged into a fixed network, wireline expansion is required in order to accommodate wireless data traffic . . .”).

40. NATIONAL BROADBAND PLAN, *supra* note 4, at 4; *Eighth Broadband Progress Report*, *supra* note 35, at para. 5; BENJAMIN LENNETT, SARAH J. MORRIS & GRETA BYRUM, NEW AM. FOUND., UNIVERSITIES AS HUBS FOR NEXT-GENERATION NETWORKS 3 (2012), available at http://newamerica.net/sites/newamerica.net/files/policydocs/Universities%20as%20Hubs%20for%20Next-Generation%20Networks_3.pdf.

is not only obtaining access,⁴¹ but also possessing access at speeds that are affordable.⁴²

Even Google acknowledges that “[w]hile it is necessary that broadband infrastructure be available to all Americans, mere availability is not sufficient.”⁴³ As many businesses move to online platforms, robust and widespread access assists in connecting low-income residents with economic opportunities.⁴⁴ Access means more opportunities to telework for seniors and individuals with disabilities.⁴⁵ It means more jobs and increased property values, as more businesses are attracted to areas with high connectivity.⁴⁶ It also means increased educational opportunity for students, both at school and at home, training them for the future: a digital economy.⁴⁷ While many subscribers of broadband have seen improvements in speed, nothing comes close to what Google Fiber offers.⁴⁸

The call to action for universal high-speed service is not new. In 1999, FCC Chairman William Kennard stated that the FCC would “[p]romote the development and deployment of high-speed Internet

41. While some commenters, such as Verizon, rejected this assertion by claiming that people have access to *wireless* broadband, the capabilities and available uses of wireless broadband differ from that of fiber because of data caps and lower speeds. See Comments of Verizon at 14, Concerning the Deployment of Advanced Telecommunications Capability, FCC WC Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter *Comments of Verizon*], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018156> (“Indeed, with a population of 316.7 million in the United States with 96.65 percent of the U.S. population having access to high-speed broadband, including wireless broadband, NTIA’s most recent data reflect that fewer than four percent of residents lack access to broadband service with download speeds in excess of the Commission’s benchmark.”).

42. *Eighth Broadband Progress Report*, *supra* note 35, at para. 5.

43. *Reply Comments of Google Inc.*, *supra* note 23, at 14.

44. See CHARLES M. DAVIDSON & MICHAEL J. SANTORELLI, ADVANCED COMM’NS LAW & POLICY INST., BROADBAND AND THE EMPIRE STATE: TOWARD UNIVERSAL CONNECTIVITY IN NEW YORK 5 (2012), available at <http://nysbroadband.ny.gov/assets/documents/ACLPRReporteSeptember2012.pdf>.

45. See CAL. BROADBAND TASK FORCE, THE STATE OF CONNECTIVITY: BUILDING INNOVATION THROUGH BROADBAND 13 (2007), available at http://www.cio.ca.gov/broadband/pdf/CBTF_FINAL_Report.pdf.

46. See Elise Ackerman, *How Kansas Won the Google Fiber Jackpot and Why California Never Will*, FORBES (Aug. 4, 2012, 7:14 PM), <http://www.forbes.com/sites/eliseackerman/2012/08/04/how-kansas-won-the-google-fiber-jackpot-and-why-california-never-will/>.

47. Cynthia Lane, *High-Speed Fiber: A Huge Opportunity for Kansas City Students*, GOOGLE FIBER BLOG (Aug. 13, 2012), <http://googlefiberblog.blogspot.com/2012/08/high-speed-fiber-huge-opportunity-for.html>.

48. See OFFICE OF ENG’G & TECH., CONSUMER & GOVERNMENTAL AFFAIRS BUREAU, FCC, 2013 MEASURING BROADBAND AMERICA: A REPORT ON CONSUMER WIRELINE BROADBAND PERFORMANCE IN THE U.S. 52 (Feb. 2013), available at <http://transition.fcc.gov/cgb/measuringbroadbandreport/2013/Measuring-Broadband-America-feb-2013.pdf>. For example, Verizon Fiber offers 300 Mbps speeds in select locations, while the cable industry “intends to extend its service to rates beyond 100 Mbps.” *Id.*

connections to all Americans.”⁴⁹ To do this, he called on the FCC to “continue to streamline its operations [and] eliminate unnecessary regulatory burdens.”⁵⁰ That same year the FCC began to issue reports on the status of deployment to Americans.⁵¹ Five years later in 2004, President George W. Bush called for *all* Americans to have broadband by 2007.⁵² President Bush supported deregulation of “legacy regulations” to spur innovation and increase capital for investment in fiber-to-the-home deployment.⁵³ But by 2010, the FCC estimated that nearly 100 million Americans were still without access.⁵⁴

Fast forward to 2013, and Chairman Kennard’s wish from 1999 still has not been fulfilled. Although progress has been made,⁵⁵ the longstanding goal of universal broadband service has not been reached.⁵⁶ Despite current speeds and the 19 million without access,⁵⁷ some ISPs and industry associations are satisfied that broadband is being deployed in a “reasonable and timely manner”⁵⁸ contrary to the FCC’s determination.⁵⁹

49. FCC, CHAIRMAN KENNARD’S AGENDA FOR THE FCC FOR 1999 (Jan. 7, 1999), available at <http://transition.fcc.gov/Speeches/Kennard/Statements/stwek901.html>.

50. *Id.*

51. *See, e.g., Eighth Broadband Progress Report, supra* note 35, at para. 1.

52. Memorandum on Improving Rights-of-Way Management Across Federal Lands to Spur Greater Broadband Deployment, 40 WEEKLY COMP. PRES. DOC. 696 (Apr. 26, 2004), available at <http://www.gpo.gov/fdsys/pkg/WCPD-2004-05-03/pdf/WCPD-2004-05-03-Pg696.pdf#page=1>.

53. WHITE HOUSE, A NEW GENERATION OF AMERICAN INNOVATION 11 (Apr. 2004), available at http://www.eclac.cl/iyd/noticias/pais/6/31456/EEUU_doc_1.pdf.

54. NATIONAL BROADBAND PLAN, *supra* note 4, at 3.

55. *Eighth Broadband Progress Report, supra* note 35, at para. 136 (“Private industry is continuing to build out broadband and has invested significantly into broadband networks to date.”).

56. *Id.* at para. 135 (“The nation’s deployment gap remains significant and is particularly pronounced for Americans living in rural areas and on Tribal lands.”).

57. *Id.* at para. 5.

58. *Comments of Verizon, supra* note 41, at 3; *Comments of CTIA—The Wireless Ass’n at 4, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Sept. 2012 Comments of CTIA], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018076>; Comments of Comcast at 3, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7022018162>; Sept. 2012 *Comments of US Telecomm., supra* note 39, at 13. *But see* *Comments of the Nat’l Ass’n of Telecomm. Officers and Advisors at 2, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Comments of NATOA], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018052>; Comments of the Fiber-to-the-Home Council at 14, Concerning the Deployment of Advanced Telecommunications Capability, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012) [hereinafter Comments of FTTHC], available at <http://apps.fcc.gov/ecfs/document/view?id=7022018101>.**

59. NATIONAL BROADBAND PLAN, *supra* note 4, at 135; *see* Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 § 706 (codified at 47 U.S.C. § 1302 (2006)).

B. Why Rights-of-Way Matter if Universal Service is to Become a Reality

Before addressing the goal of universal service, ISPs must be able to obtain access to rights-of-way.⁶⁰ Gaining access to rights-of-way is necessary for ISPs to utilize poles, conduits, ducts, roads, and power lines to build out infrastructure to deploy broadband.⁶¹ For purposes of this Note, the total cost ISPs must expend to access infrastructure is comprised of two parts: fees charged by state and local governments to a service provider to allow it to use rights-of-way; and actual costs related to building out infrastructure, including navigating the rights-of-way approval process. There is much debate as to whether state and local rights-of-way fees should reflect market-based value or be limited to actual cost for use,⁶² but it would be hard to find anyone who would argue against reductions of actual cost to access infrastructure.

Deploying broadband can be cost prohibitive for ISPs in both rural and urban areas, depending on the cost to build and consumer demand.⁶³ For example, it costs a tremendous amount of money to deploy fiber, which is a one-time capital outlay.⁶⁴ The FCC estimates that “deploying a mile of fiber can easily cost more than \$100,000,” and that the largest element of cost associated with deployment is the expense of burying fiber in the ground.⁶⁵ In fact, it is estimated that approximately 70–80% of the cost of deploying fiber underground is spent on the physical labor of trenching

60. A right-of-way is a property interest owned by the state or locality, and ISPs obtain an easement to use that interest through fees paid for access. Ellrod, *supra* note 25, at 482; Jennifer Amanda Krebs, *Fair and Reasonable Compensation Means Just That: How § 253 of the Telecommunications Act Preserves Local Government Authority Over Public Rights-of-Way*, 78 WASH. L. REV. 901, 904 (2003).

61. See NATIONAL BROADBAND PLAN, *supra* note 4, at 114, 109.

62. See generally Ellrod, *supra* note 25, at 489-500; Christopher R. Day, *The Concrete Barrier at the End of the Information Superhighway: Why Lack of Local Rights-of-Way Access Is Killing Competitive Local Exchange Carriers*, 54 FED. COMM. L.J. 461, 488 (2002).

63. NATIONAL BROADBAND PLAN, *supra* note 4, at 171.

64. See *Sept. 2012 Comments of US Telecomm.*, *supra* note 39, at 5 (“The wireline portion of broadband provider capital expenditures remains the largest component of broadband investment. . . . In 2011 wireline companies still contributed the most capital at [forty-one] percent, followed closely by [forty] percent for wireless and then cable at [nineteen] percent.”).

65. NATIONAL BROADBAND PLAN, *supra* note 4, at 114. Similarly, the FCC estimates that “the collective expense of obtaining permits and leasing pole attachments and rights-of-way can amount to 20% of the cost of fiber optic deployment.” *Id.* at 109. See also Guatham Nagesh, *House Dems Want Cost Estimate for ‘Dig Once’ Broadband*, HILLICON VALLEY (July 26, 2011, 10:29 AM), <http://thehill.com/blogs/hillicon-valley/technology/173537-house-dems-want-analysis-of-laying-fiber-optic-cable-along-highways#ixzz2Ki3VSZ8Q>.

roads to lay the conduit.⁶⁶ Additionally, it can be significantly more expensive to dig up and then repair an existing road to lay fiber.”⁶⁷

The high cost of actual deployment affects the United States’ ability to achieve the goal of universal service in several ways. First, the lower the population density of a given area, the more expensive it is to deploy fiber.⁶⁸ This means that the fewer the subscribers, the fewer individuals available for the ISP to recoup its investments.⁶⁹ Specifically in rural areas, service may not be affordable if ISPs pass along the increased per capita cost to consumers.⁷⁰ Second, if the cost to access infrastructure is high in a given area, ISPs may not find it profitable to deploy, regardless of whether the area is rural.⁷¹ Lastly, if the cost to trench existing roads is too prohibitive, or the rights-of-way process too costly, existing ISPs may not initiate service upgrades in non-rural areas.⁷² Clearly, eliminating unnecessary costs surrounding the rights-of-way process or build-out of infrastructure is important to the challenge of obtaining universal service.

C. Google Fiber as a Case Study: Eliminating Rights-of-Way Fees

It is too early to measure the success of Google Fiber’s business model on a national scale,⁷³ but the FCC has already noted the project’s

66. ALCATEL-LUCENT, DEPLOYING FIBER-TO-THE-MOST-ECONOMIC POINT 6 (2007), available at http://www.alcatel.hu/wps/DocumentStreamerServlet?LMSG_CABINET=Docs_and_Resource_Ctr&LMSG_CONTENT_FILE=Other/23168_DeployFiber_wp.pdf; see also Stacey Higginbotham, *The Economics of Google Fiber and What It Means for U.S. Broadband*, GIGAOM (July 26, 2012, 3:52 PM), <http://gigaom.com/2012/07/26/the-economics-of-google-fiber-and-what-it-means-for-u-s-broadband/> (“It’s accepted that one of the most costly elements of building out a fiber network is the physical labor associated [with it]. . . . Google has already strung cable on power lines throughout Kansas City and lowered those costs by working with the local utility and AT&T to get access to the utility poles without having to pay high fees.”).

67. See U.S. DEP’T OF TRANSP., TELECOMMUNICATIONS HANDBOOK FOR TRANSPORTATION PROFESSIONALS 41 (2004), available at http://ops.fhwa.dot.gov/publications/telecomm_handbook/telecomm_handbook.pdf.

68. See David Talbot, *When Will the Rest of Us Get Google Fiber?*, MIT TECH. REV. (Feb. 4, 2013), <http://www.technologyreview.com/news/510176/when-will-the-rest-of-us-get-google-fiber/>.

69. See *id.*

70. COLUMBIA TELECOMM. CORP., BROADBAND IN GARRETT COUNTY: A STRATEGY FOR EXPANSION AND ADOPTION 13, 16 (May 1, 2012), available at <http://www.garrettcountry.org/dotcom/files/GarrettCountyBroadbandReport.pdf> (“[A]bsent extremely costly public subsidy . . . it is almost impossible for the public sector to dramatically change that economic calculus.”).

71. See *id.* at 13, 16.

72. *Id.* at 9–10, 12.

73. See Scott Canon, *Google Fiber’s Gigabit Gamble Has Implications Far Beyond KC*, KAN. CITY STAR (Sept. 24, 2012), <http://www.kansascity.com/2012/09/24/3832330/google-fibers-gigabit-gamble-has.html> (noting in an interview with Fiber-to-the-Home Council’s Matthew Render that the Google Fiber project may not be profitable); Haydn Shaughnessy, *Google Fiber and Google Glass Could Also Come to Nothing*, FORBES (Apr. 26, 2013 12:26 PM), <http://www.forbes.com/sites/haydnshaughnessy/2013/04/26/google->

impact on Kansas City.⁷⁴ As it stands now, Google Fiber has had new businesses clicking their heels to get into Kansas City.⁷⁵ Not only are Google and Kansas City confident that the new network will attract economic development,⁷⁶ they are hopeful that the project will bring enhanced educational opportunities to students⁷⁷ and help to bridge the “digital divide” by increasing digital literacy in the community.⁷⁸

Despite Google’s belief that ubiquitous access is a goal worth striving for,⁷⁹ Google has not yet been able to deploy to all residential homes in Kansas City.⁸⁰ Google made a decision not to deploy service to “fiberhoods”⁸¹ in which sufficient consumer demand for the service was not present.⁸² Google predetermined the percentage of homes within each “fiberhood” necessary for preregistration—in some instances only 5%, and

fiber-and-google-glass-could-also-come-to-nothing/2/ (indicating that Google’s investment in three cities may not be a sound business strategy).

74. *FCC’s Broadband Acceleration Initiative*, *supra* note 18, at 2.

75. See Cyrus Farivar, *Google Fiber is Live in Kansas City, Real World Speeds at 700Mbps*, ARS TECHNICA (Nov. 13, 2012, 8:35 PM), <http://arstechnica.com/business/2012/11/google-fiber-is-live-in-kansas-city-real-world-speeds-at-700-mbps/> (noting that a group of entrepreneurs arrived in Kansas City seeking fiber eligible homes); Ben Palosaari, *With Google Putting Fiber in Austin, Kansas City Startup Village Confronts an Uncertain Future*, PITCH (Apr. 30, 2013), <http://www.pitch.com/kansascity/kansas-city-startup-village-google-fiber/Content?oid=3214898&showFullText=true> (discussing the expansion of the “Kansas City Startup Village”).

76. Matt Dunne, *Answers to Your Town Hall Questions – Part II*, GOOGLE FIBER BLOG (June 15, 2011), http://googlefiberblog.blogspot.com/2011/06/answers-to-your-town-hall-questions_15.html.

77. Lane, *supra* note 47.

78. Kenneth Carter, *The State of Broadband Internet Access in Kansas City*, GOOGLE FIBER BLOG (June 22, 2012), <http://googlefiberblog.blogspot.com/2012/06/state-of-broadband-internet-access-in.html>. *But see* Mary Sanchez, *Google Spreads, But Issue of Digital Divide Remains*, KAN. CITY STAR (Mar. 20, 2013), <http://www.kansascity.com/2013/03/20/4133131/as-google-spreads-issue-of-digital.html>. This does not mean, however, that low-income residents would not have access to Internet at public institutions such as libraries, schools, or other community hubs. *Id.* See also Karl Bode, *Low Income Kansas City Residents Left in Google Fiber Dust*, DSL REPORTS (Aug. 29, 2012), <http://www.dslreports.com/shownews/Low-Income-Kansas-City-Residents-Left-in-Google-Fiber-Dust-120967> (noting that subscriber rates for low income neighborhoods were low).

79. See Comments of Google at 1, 5, A National Broadband Plan for Our Future, FCC GN Docket No. 09-51 (rel. June 8, 2009) [hereinafter *June 8 Comments of Google*], available at <http://apps.fcc.gov/ecfs/document/view?id=6520220241>.

80. See *Frequently Asked Questions – Fiberhoods*, GOOGLE FIBER, <https://fiber.google.com/help/> (last visited July 11, 2013) (“We will be able to include you in a future rally, but for now we can’t commit to building in your fiberhood. If you pre-registered for service you’ll receive a refund of your \$10 pre-registration fee within ten days of when we publish the final list of qualified fiberhoods.”).

81. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“A fiberhood is a portion of [Kansas City] that includes about 250-1,500 households.”).

82. Interview with Derek Slater, Policy Analyst, Google Inc. (Sep. 4, 2013), see *Bryant Community*, GOOGLE FIBER, <https://fiber.google.com/cities/kck/#header=check&fiberhood=knsskskenf04> (last visited July 11, 2013) (“During the summer 2012 rally, this fiberhood did not get enough pre-registrations to qualify for Google Fiber.”).

in others 25%⁸³—and decided whether it would deploy.⁸⁴ By requiring preregistration, Google avoided building out infrastructure until it was assured that a large enough consumer base wanted the product.⁸⁵ It does not take a calculator to understand the basic mathematics behind a company's decision to deploy, regardless of whether demand or profitability are driving factors of its motivation. In order to recoup an investment, there must be enough subscribers who are willing to pay the stated service fees for an investment to be considered worthwhile.⁸⁶ For fiberhoods that initially failed to meet preregistration targets, Google has not yet committed to come back any time soon.⁸⁷

The Google Fiber case suggests that even if a city eliminates all of its rights-of-way fees, the cost of deploying fiber, coupled with the uncertainty of a large enough base of willing and able consumers to pay for the service, creates a financial disincentive for even large and prominent companies to deploy service to all residents.⁸⁸ Additionally, if a company as large and with as much capital as Google failed to deploy fiber to those fiberhoods despite *some* residents having a desire for it,⁸⁹ what does that mean for smaller start-ups who may wish to bring fiber to smaller and more rural communities?⁹⁰ More importantly, what does Google Fiber mean for the

83. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“A fiberhood is a portion of [Kansas City] that includes about 250-1,500 households.”).

84. See Anna-Maria Kovacs, *Rational Broadband Investment: Why the FCC's New Task Force is a Good Step Forward*, FIERCE TELECOM (Dec. 11, 2012), <http://www.fierce-telecom.com/story/rational-broadband-investment-why-fccs-new-task-force-good-step-forward/2012-12-11#ixzz2GJ7qarzu>; ANUPAM BANERJEE & MARVIN SIRBU, TOWARDS TECHNOLOGICALLY AND COMPETITIVELY NEUTRAL FIBER TO THE HOME (FTTH) INFRASTRUCTURE 9–10, available at http://www.andrew.cmu.edu/user/sirbu/pubs/Banerjee_Sirbu.pdf (“[T]he cost of trenching or making poles ready to deploy fiber is prohibitively high for one to go back and retrofit fiber as more homes subscribe to the service.”).

85. See *Frequently Asked Questions – Basics*, GOOGLE FIBER, <https://fiber.google.com/help/> (last visited Jan. 21, 2013) (“So, in those fiberhoods that are more complicated to build, we wanted to make sure that enough residents want Fiber service.”); Kovacs, *supra* note 84.

86. See DAVIDSON & SANTORELLI, *supra* note 44, at 25 (“[P]ockets of unserved areas persist because no business case exists for service providers to extend their networks to these areas.”).

87. *Frequently Asked Questions – Fiberhoods*, *supra* note 80 (“[F]or now we can't commit to building in your fiberhood.”). But see Fred Bauters, *Brad Feld, Startup Village Get Second Chance at Google Fiber*, SILICON PRAIRIE NEWS (Mar. 15, 2013), <http://www.siliconprairienews.com/2013/03/brad-feld-startup-village-get-second-chance-at-google-fiber> (extending the application date two weeks for at least one fiberhood).

88. See BANERJEE & SIRBU, *supra* note 84, at 9–11.

89. Carter, *supra* note 78 (noting that roughly 25% of Kansas City's population was not using the Internet; of those not using the internet, 28% said it was because they were without a computer or it was too expensive).

90. See *Testimony of Milo Medin*, *supra* note 12 (“If regulations create disincentives for a large, well-established companies [sic] like Google, just imagine the impact on small and medium-sized enterprises, including the next generation of entrepreneurs who are just getting started.”).

FCC's goal of universal service? Because uncompensated access to rights-of-way does not necessarily lead to universal broadband deployment, the policy focus should be on realizing cost reductions in the deployment process. Cutting costs in the deployment process can serve to offset government subsidies to ISPs or consumers that will be necessary for the FCC to achieve universal broadband service.⁹¹

III. FEDERAL ACTION TO REDUCE INFRASTRUCTURE ACCESS COSTS

Efforts have been made or are currently underway to reduce infrastructure access costs. Outlining these efforts provides helpful background to understand the solutions detailed in Section IV. They include stalled federal legislation, the creation of committees by way of Executive Order, and FCC Notice of Inquiry and recent announcements. The impetus for most of these efforts stemmed from the FCC's goals outlined in its National Broadband Plan.

In the plan, the FCC acknowledged that rights-of-way fees among localities lead to inconsistencies for providers, but focused mostly on solutions in other areas to reduce the cost of deployment.⁹² Proposed initiatives included the following: detailing a timeline and process for initial access and subsequent disputes, improvement of data on location and availability of rights-of-way, coordination of processes at the state and federal level, and creating a joint task force to craft best practices.⁹³ In fact, Google launched Google Fiber to meet some of the plan's goals through use of "creative ways," such as implementing fiber deployment test beds, incorporating broadband conduit in public works projects, focusing on community hub broadband deployment, and reducing barriers to wireless deployment.⁹⁴ One recommendation in the FCC's plan that Google

91. See *Reply Comments of Google Inc.*, *supra* note 23, at 10 ("While supply may be the primary focus . . . the analysis also must include demand-side issues."); Connect America Fund, *Report and Order and Further Notice of Proposed Rulemaking*, FCC 11-161, para. 20 (2011) [hereinafter *Connect America Fund Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-161A1.pdf (discussing the FCC's establishment of the Connect America Fund, which will provide funding for broadband). This Note does not attempt to address the effect the CAF might have on universal service in the long-term or who may be the appropriate party or parties for the FCC to subsidize.

92. NATIONAL BROADBAND PLAN, *supra* note 4, at 113.

93. *Id.*

94. *Reply Comments of Google Inc.*, *supra* note 23, at 38–40, 743; Richard Whitt, *Experimenting with New Ways to Make Broadband Better, Faster, and More Available*, GOOGLE FIBER BLOG (Feb. 10, 2010), <http://googlefiberblog.blogspot.com/2010/02/experimenting-with-new-ways-to-make.html>; Richard Whitt, *Google Submits Initial Comments Supporting a National Broadband Plan*, GOOGLE PUBLIC POLICY BLOG (June 8, 2009, 4:06 PM), <http://googlepublicpolicy.blogspot.com/2009/06/google-submits-initial-comments.html>.

supported was a “dig once” policy.⁹⁵ The plan called for Congress to enact “dig once” legislation, requiring that the U.S. Department of Transportation (“DOT”) make federal financing of road projects contingent on joint trenching to lay broadband conduit.⁹⁶

A. *Dig Once: Congressional and Executive Action*

In May of 2009, before the FCC released its plan, Representative Anna G. Eshoo (D–CA) introduced the Broadband Conduit Deployment Act (“the Act”).⁹⁷ Referred to as “dig once” legislation, the Act would have satisfied one of the plan’s recommendations.⁹⁸ Reintroduced in 2011,⁹⁹ the proposed bill would have amended the general highways provision of the United States Code¹⁰⁰ and included a mandate whereby DOT would require states to install broadband conduit as part of an included highway construction project.¹⁰¹ The Act would have given DOT discretion to determine the “appropriate number of broadband conduits” to ensure that multiple providers could be accommodated, taking into account existing conduits and potential demand of the nearby locations.¹⁰² It would have allowed DOT to engage in rulemaking to establish standards to carry out such a feat, as well as provide states with a waiver.¹⁰³ In establishing standards, the Act would have required DOT to coordinate with the FCC to determine demand and existing broadband access.¹⁰⁴

Rep. Eshoo urged former Secretary of Transportation Ray LaHood, who supported her efforts, to formally adopt a “dig once” policy for federal highway efforts.¹⁰⁵ In alignment with her desire for more robust

95. NATIONAL BROADBAND PLAN, *supra* note 4, at 114.

96. *Id.*

97. Broadband Conduit Deployment Act, H.R. 2428, 111th Cong. (2009) [hereinafter H.R. 2428], available at <http://www.gpo.gov/fdsys/pkg/BILLS-111hr2428ih/pdf/BILLS-111hr2428ih.pdf>. The next month, Sen. Amy Klobuchar (D–MN) sponsored and presented the same bill in the Senate. Broadband Conduit Deployment Act, S. 1266, 111th Cong. (2009) [hereinafter S. 1266], available at <http://www.gpo.gov/fdsys/pkg/BILLS-111s1266is/pdf/BILLS-111s1266is.pdf>.

98. NATIONAL BROADBAND PLAN, *supra* note 4, at 114.

99. H.R. 1695, *supra* note 31; S. 1939, *supra* note 31. The Acts were largely the same as the 2009 versions, and the House and Senate bills were almost identical. See H.R. 2428, *supra* note 97; S. 1266, *supra* note 97. The only addition in the 2011 Act was an added “access” provision that read as follows: “[t]he Secretary shall ensure that any requesting broadband provider has access to each broadband conduit installed pursuant to this section, on a competitively neutral and nondiscriminatory basis, for a charge not to exceed a cost-based rate.” H.R. 1695, *supra* note 31.

100. 23 U.S.C. §§ 301–329 (2006).

101. H.R. 2428, *supra* note 97; S. 1266, *supra* note 97.

102. H.R. 2428, *supra* note 97, at § 330(b).

103. *Id.*

104. *Id.*

105. Rep. Eshoo Urges Department of Transportation to Implement Cost-Saving Measures to Expand Broadband, CONGRESSWOMAN ANNA G. ESHOO (Dec. 1, 2011), http://eshoo.house.gov/index.php?option=com_content&task=view&id=1111&Itemid=100067.

infrastructure, Eshoo touted the bill as one that would provide taxpayers “with the best value,” because no longer would there be a need to tear up roads solely for the purpose of laying conduit.¹⁰⁶ In addition, she advocated for the bill on the basis that it would “reduce barriers to deployment [and] increase investment and competition for broadband.”¹⁰⁷ After the legislation was referred to committee, Eshoo asked the U.S. Government Accountability Office (“GAO”) to conduct an internal study of the effects of dig once legislation.¹⁰⁸

Before GAO could release its findings, and before the bills died in committee,¹⁰⁹ President Obama issued two Executive Orders. President Obama’s first Executive Order (the “Federal Permitting Order”) called for more efficient and effective federal permitting and review processes.¹¹⁰ The President detailed a need for “timelines and schedules for completion of reviews,” and “early and active consultation” with stakeholders “to avoid conflicts or duplication of effort” among federal agencies.¹¹¹ The purpose of the Federal Permitting Order was to reduce the time necessary for providers to complete the federal permitting and review process to access rights-of-way, through disclosure of information on the process and expectations of various federal agencies.¹¹² The Federal Permitting Order also established a steering committee comprised of members of the FCC and various other agencies (including DOT).¹¹³ The committee was tasked with developing a permitting and review performance plan, and by May 31, 2013, implementing best practices for federal, state, local, and tribal government coordination.¹¹⁴

President Obama’s second Executive Order (the “Broadband Infrastructure Order”) directed DOT “to work with state and local governments to help them develop and implement best practices on matters such as establishing dig once requirements.”¹¹⁵ The Broadband Infrastructure Order defined dig once requirements as those “designed to

106. *The Jobs Deficit*, CONGRESSWOMAN ANNA G. ESHOO (Aug. 24, 2011), http://eshoo.house.gov/index.php?option=com_content&view=article&id=1048:the-jobs-deficit&catid=6:e-newsletters&Itemid=100219.

107. *Id.*

108. U.S. GOV’T ACCOUNTABILITY OFFICE, BROADBAND CONDUIT REPORT: GAO 12-687R 1 (2012) [hereinafter BROADBAND CONDUIT REPORT], available at <http://www.gao.gov/assets/600/591928.pdf>.

109. *S. 1939*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/s1939> (last visited Sept. 28, 2013); *H.R. 1695*, GOVTRACK.US, <http://www.govtrack.us/congress/bills/112/hr1695> (last visited Sept. 28, 2013).

110. Exec. Order No. 13,604, 77 Fed. Reg. 18,887 (Mar. 22, 2012) [hereinafter *Executive Order Improving Performance of Federal Permitting and Review*], available at <http://www.gpo.gov/fdsys/pkg/FR-2012-03-28/pdf/2012-7636.pdf>.

111. *Id.*

112. *Id.*

113. *Id.* at 18,888.

114. *Id.* at 18,889–90.

115. *Executive Order Accelerating Broadband Infrastructure Deployment*, *supra* note 28, at 36,905.

reduce the number and scale of repeated excavations for the installation and maintenance of broadband facilities in rights-of-way.”¹¹⁶

B. *The Impact of a Dig Once Policy*

Days after President Obama issued the Federal Permitting Order, GAO released its report on the impact of a mandatory federal dig once policy.¹¹⁷ Based on its findings, GAO noted that a mandatory dig once policy could result in unused conduit, reduced funding available for highway projects, increased administrative costs for state DOTs and local governments due to maintenance and leasing programs, and conflict with state and local deployment policies.¹¹⁸ However, the noted benefits included a decrease in the frequency of highway construction, lower installation costs, an increase in access and reliability of networks, and reduced time needed to deploy fiber.¹¹⁹

The largest benefit of a dig once policy, regardless of whether it is implemented at the federal or local level, is the potential cost savings.¹²⁰ If the overall cost of digging up roads can be shared among all the project’s parties, installation costs for areas that require long stretches of fiber needed for middle mile architecture could be significantly reduced.¹²¹ This would be especially important for rural, sparsely populated areas.¹²² If ISPs could repay local governments who have invested in conduit for the road project, local government costs to deploy broadband would decrease.¹²³

C. *Responses to the FCC’s Rights-of-Way Inquiry*

As the idea of a dig once policy was being floated through Congress, the FCC, through a Notice of Inquiry, sought to determine what actions it could take to reduce deployment costs and increase access to rights-of-way by asking what barriers existed to infrastructure investment.¹²⁴ Not

116. *Id.*

117. *See* BROADBAND CONDUIT REPORT, *supra* note 108.

118. *Id.* at 7.

119. *Id.* at 4.

120. *Testimony of Milo Medin, supra* note 12, at 3 (“By installing conduit any time construction is going on, the cost of that construction is amortized over all projects that later utilize the conduit, reducing costs dramatically.”).

121. BROADBAND CONDUIT REPORT, *supra* note 108, at 4.

122. DAVIDSON & SANTORELLI, *supra* note 44, at 25.

123. *See* BROADBAND CONDUIT REPORT, *supra* note 108, at 5.

124. Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, *Notice of Inquiry*, FCC 11-51, paras. 2, 7 (2011) [hereinafter FCC 2011 NOI], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-11-51A1.pdf; 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, *Ninth Broadband Progress Notice of Inquiry*,

surprisingly, most of the responses from ISPs focused largely on removing regulatory barriers that hindered their access to rights-of-way.¹²⁵ The bulk of the opposition was aimed at regulations that slowed the deployment process.¹²⁶ For ISPs, each day spent waiting to acquire access to rights-of-way to begin deployment means another day of costs and no revenue.

Most ISPs asserted that the deployment process was unpredictable and lengthy due to compliance with various federal and state or local regulations.¹²⁷ Examples of regulations or processes that slowed deployment included unreasonable fees on rights-of-way¹²⁸ and lack of standardized application forms.¹²⁹ Moreover, even if ISPs were able to receive access to rights-of-way and initiate a deployment project, there was no formal mechanism to resolve a dispute if one arose, often leading to additional delays.¹³⁰ The industry largely viewed existing regulations as unnecessary “hoops” to jump through, calling on the FCC to exercise its authority to eliminate any unnecessary barriers to deployment.¹³¹

The ISPs proposed a variety of solutions, including master agreements, a standard process for rights-of-way approval with a point of contact and clear responsibilities for respective agencies, a consolidated

FCC 12-91, paras. 2, 19–20, 22 (2012) [hereinafter Ninth Broadband Progress NOI], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-12-91A1.pdf.

125. E.g., Written Ex Parte Presentation of Wireless Internet Service Providers Ass’n at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Aug. 6 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021996892> [hereinafter *Ex Parte Comments of WISPA*]; Ex Parte Communication of CTIA The Wireless Ass’n at 6, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. July 25, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7021993700> [hereinafter *July 2012 Ex Parte Comments of CTIA*]; *Reply Comments of ACA*, supra note 26, at 3.

126. E.g., *Comments of Verizon*, supra note 41, at 27.

127. *Ex Parte Comments of WISPA*, supra note 125, at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Aug. 6 2012); *July 2012 Ex Parte Comments of CTIA*, supra note 125, at 2, 4–5; Ex Parte Communication of NextG Networks, Inc. at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. Feb. 3, 2012) [hereinafter *Comments of NextG*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021858363>; Written Ex Parte Communication of PCIA—The Wireless Infrastructure Ass’n at 2, Acceleration of Broadband Deployment, FCC WC Docket No. 11-59 (rel. July 18, 2012) [hereinafter *July 2012 Comments of PCIA*], available at <http://apps.fcc.gov/ecfs/document/view?id=7021990194>; *Reply Comments of ACA*, supra note 26, at 7.

128. *Comments of FTTHC*, supra note 58, at 15; *Reply Comments of ACA*, supra note 26, at 9, 18–19.

129. *Comments of Verizon*, supra note 41, at 29.

130. *Reply Comments of ACA*, supra note 26, at 7.

131. See *Comments of Verizon*, supra note 41, at 26–27; Comments of PCIA—The Wireless Infrastructure Ass’n and the DAS Forum at 3–4, 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, FCC GN Docket No. 12-228 (rel. Sept. 20, 2012), available at <http://apps.fcc.gov/ecfs/document/view?id=7022018270>; *Comments of FTTHC*, supra note 58, at 16 (“We are in the midst of rewiring America with fiber, and the Commission has an important role to play in removing barriers that thwart progress.”).

database of all available rights-of-way, and a voluntary mediation process.¹³² Several ISPs urged the FCC to engage in rulemaking to clarify when fees for rights-of-way are fair and reasonable within section 253(c),¹³³ the statute governing the FCC's role in state and local authority of rights-of-way, and to utilize its preemption authority to resolve disputes in favor of providers.¹³⁴

However, states were most concerned about ISPs' interference with rights-of-way via new construction and without consideration of local interests when increasing existing broadband speeds to consumers.¹³⁵ States argued that in many instances, the approval of rights-of-way is a uniquely local decision based on a myriad of community interests.¹³⁶ They rejected the notion that existing regulations served as a complete impediment, and suggested that engaging in more collaborative relationships between local governments and ISPs could help increase access to broadband Internet.¹³⁷ This is precisely the approach Google took in working with Kansas City.¹³⁸

IV. A COORDINATED APPROACH TO COST REDUCTIONS

With past federal efforts and the Google Fiber project in mind, it is essential that the FCC, Congress, and the states work together to create a coordinated policy on broadband infrastructure access. To a certain extent, the task force and committees created by President Obama's Executive

132. *Ex Parte Comments of WISPA*, *supra* note 127, at 3 (noting the need for master agreements, standardized processes, and known point person); *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 3, 5 (noting the need for master agreements, standardized processes, and known point person); *Comments of IAC*, *supra* note 32, at 6 (suggesting voluntary mediation).

133. 47 U.S.C. § 253(c) (2006) ("Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.").

134. *Reply Comments of ACA*, *supra* note 26, at 18; *Comments of NextG*, *supra* note 127, at 2.

135. *See generally Comments of NATOA*, *supra* note 58, at 10 (noting that efforts by industry to limit local government deployment of municipal broadband networks disadvantages underserved communities given that many Americans live in areas where municipal networks provide faster speeds of service at a lower cost than private operators are willing to provide); *Comments of FTTHC*, *supra* note 58.

136. *See Comments of the City of Lafayette*, *supra* note 32, at 1 ("While the FCC can serve an important role as a clearinghouse for information, it should avoid seeking to regulate what is necessarily a local review process that must be based upon the facts specific to particular installations."); *Comments of NATOA*, *supra* note 58, at 8 (noting the importance of planning around anchor institutions and hot spots).

137. *See Comments of IAC*, *supra* note 32, at 4 ("Together, they agreed on a process to create a 'one stop shop' operation whereby the network owner could, through one simplified application, obtain a permit to site facilities in any of the ten cities.").

138. Medin, *Ultra-High Speed Broadband is Coming to Kansas City, Kansas*, *supra* note 2.

Orders are a step in the right direction in achieving cost reductions. However, their recommendations will not change the status quo unless Congress, the FCC, and states take active steps to implement them. Cost reductions to broadband deployment benefit everyone. If states can improve the efficiency of their processes and provide certainty to the process of deployment, they can reduce up-front costs associated with time and labor in commencing a deployment project. If ISPs can realize savings at the deployment phase, they are in a better position to pass those savings along to consumers, potentially making service more affordable. Additionally, the FCC and Congress can help states and ISPs achieve these savings without aggressive regulatory mandates that interfere with a states' ability to collect fees for rights-of-way. The FCC can make forward progress while preserving the proper balance between federal and state objectives. Lowering deployment costs for ISPs should not be done at the expense of eroding localized management of rights-of-way.¹³⁹

A. *What the FCC Can Do to Incentivize Deployment*

Although sections 253 and 706 of the Telecommunications Act are plausible bases of authority for the FCC to rely on to preempt state and local broadband rights-of-way matters,¹⁴⁰ the FCC should refrain from doing so and instead engage in voluntary and educational initiatives that lead to efficiency and increased cost savings for government, ISPs, and potentially consumers. Moreover, these initiatives should incentivize the behavior the FCC seeks (speedy deployment) without sacrificing the consideration of legitimate and substantial community interests.¹⁴¹ The FCC should not ignore the state and local property interest inherent in rights-of-way management and should not take broad regulatory action to come up with a one-size-fits-all approach.¹⁴² Because of the sensitive local issues in dealing with rights-of-way, policies should respect states' ability to protect community interests.¹⁴³ By and large, the FCC has maintained a

139. Insofar as this has any effect on a state providing competitively neutral access to other service providers, this Note does not attempt to explore the consequences of a second market entrant who attempts to replicate what Google Fiber did in Kansas City.

140. 47 U.S.C. § 253 (2006); 47 U.S.C. § 1302 (2006).

141. See WILLIAM H. LEHR ET. AL, MEASURING BROADBAND'S ECONOMIC IMPACT 12, 13 (Dec. 2005) ("They can, for instance, help predict potential benefits obtainable from government investments that directly or indirectly subsidize broadband deployment or use.").

142. For the opposing opinion, taken by service providers, see *Comments of Verizon*, *supra* note 41, at 25 ("In contrast, a piecemeal, localized approach of state or local regulation would eliminate those efficiencies and increase costs and would undermine widespread deployment and adoption of broadband.").

143. See Edward Feser, *Encouraging Broadband Deployment from the Bottom Up*, 37(1) J. OF REGIONAL ANALYSIS & POL'Y 69, 69 (2007) (discussing how a "bottom-up" and narrowly tailored approach to fill broadband deployment gaps at the local level is more

deregulatory position on broadband,¹⁴⁴ and should continue to refrain from engaging in regulatory measures unless and until Congress speaks.

1. The FCC Does Not Have Authority Under Section 253(a) to Preempt Rights-of-Way Matters Relating to Broadband Deployment Unless It Includes Broadband in the Definition of “Telecommunications Services”

Section 253(a) governs the FCC’s role in state and local authority of rights-of-way. It states that “no State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate *telecommunications service*.”¹⁴⁵ However, a service categorized by the FCC as “information service”¹⁴⁶ is not a “telecommunications service”¹⁴⁷ under the Act’s Title II common carrier regulations, to which section 253 belongs.¹⁴⁸ The FCC has classified broadband Internet access as an information service, and thereby exempt from these regulations, cable broadband, wireless broadband, and facilities-based wireline broadband.¹⁴⁹

favorable than a large-scale regulatory strategy that “seeks to address all broadband concerns in a comprehensive fashion.”).

144. Jeremy D. Lemon, *Reclassifying Broadband Internet Access: Who Cares What Congress Wants Anyway?*, 6 LIBERTY U.L. REV. 137, 147-48 (2011) (internal citations omitted) (“In sum, no part of broadband Internet access has ever been regulated as a telecommunications service even though Internet access has a telecommunications component. Rather, the FCC has interpreted the Communications Act and the Telecommunications Act to mean that broadband Internet access should be regulated as an information service, subject only to the FCC’s ancillary jurisdiction under Title I.”).

145. 47 U.S.C. § 253(a) (2006) (emphasis added).

146. 47 U.S.C. § 153(20) (2006) (“The term “information service” means the offering of a capability for generating, acquiring, storing, transforming, processing, retrieving, utilizing, or making available information via telecommunications, and includes electronic publishing, but does not include any use of any such capability for the management, control, or operation of a telecommunications system or the management of a telecommunications service.”).

147. 47 U.S.C. § 153(43) (2006) (“The term “telecommunications” means the transmission, between or among points specified by the user, of information of the user’s choosing, without change in the form or content of the information as sent and received.”); 47 U.S.C. § 153(46) (“The term “telecommunications service” means the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available directly to the public, regardless of the facilities used.”).

148. Appropriate Regulatory Treatment for Broadband Access to the Internet Over Wireless Networks, *Declaratory Ruling*, FCC 07-30, paras. 3–4 (2007) [hereinafter *Wireless Declaratory Ruling*], available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-30A1.pdf (citing Nat’l Cable & Telecomms. Ass’n v. Brand X Internet Servs., 545 U.S. 967 (2005)).

149. *Wireless Declaratory Ruling*, *supra* note 148, at para. 5; Appropriate Framework for Broadband Access to the Internet Over Wireline Facilities, *Report and Order and Notice*

Additionally, section 253(a) is qualified by two “safe harbor” provisions,¹⁵⁰ which state that

nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis . . . requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of *telecommunications services*, and safeguard the rights of consumers;¹⁵¹ [and]

nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from *telecommunications providers*, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.¹⁵²

If the FCC determines that a state or local government has “permitted or imposed any statute, regulation, or legal requirement” in violation of section 253(a), it possesses preemptive authority “to correct such violation or inconsistency,”¹⁵³ unless the action falls under sections 253(b) or (c). Notably, these safe harbor provisions explicitly reference applicability to telecommunications service providers.¹⁵⁴

In its Notice of Inquiry to Accelerate Broadband Deployment, the FCC proposed a number of rulemaking and adjudicatory options to remove barriers to broadband deployment.¹⁵⁵ Of relevance here, the FCC argued that it retained authority under section 253 to interpret both: what “has the effect of prohibiting” an entity from providing *telecommunications service*, and what is “fair and reasonable compensation” with respect to rights-of-

of Proposed Rulemaking, FCC 05-150, paras. 5–6 (2005), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-150A1.pdf; see generally Brief for Appellee at 5–10, *Verizon v. FCC*, No. 11-1355 (D.C. Cir. Jan. 16, 2013) [hereinafter Brief for Appellee], available at http://transition.fcc.gov/Daily_Releases/Daily_Business/2013/db0207/DOC-318819A1.pdf (describing the FCC’s classification decisions).

150. Ellrod, *supra* note 25, at 478; *BellSouth Telecomm., Inc. v. Town of Palm Beach*, 252 F.3d 1169, 1187–88 (11th Cir. 2001) (“The first and most basic reason for interpreting (b) and (c) as safe harbor provisions is that, reading (a), (b), and (c) together, it is the only interpretation supported by the plain language of the statute [I]t is not possible to read these subsections as pronouncing separate limitations that a state or local government could ‘violate.’”).

151. 47 U.S.C. § 253(b) (2006) (emphasis added).

152. 47 U.S.C. § 253(c) (2006) (emphasis added); see also Ellrod, *supra* note 25, at 478.

153. 47 U.S.C. § 253(d) (2006).

154. 47 U.S.C. § 253(b), (c) (2006).

155. See FCC 2011 NOI, *supra* note 124, at 18.

way fees.¹⁵⁶ The practical impact of such a proposal would be similar to the FCC's recent "shot clock" ruling.¹⁵⁷ The "shot clock" ruling was predicated upon CTIA's petition,¹⁵⁸ which asked the FCC to clarify the relevant portion of the statute governing local zoning approval of wireless siting facilities.¹⁵⁹ Section 332 states that a state or local government must "act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request."¹⁶⁰ The FCC defined a "reasonable period of time" to process siting applications under the statute as 90 days or less.¹⁶¹ A state that exceeds the 90-day limit is deemed to have failed to act, and triggers the statute of limitations period for an ISP to seek judicial review.¹⁶² In its petition, CTIA also asked for the FCC to preempt, under section 253(a), any local ordinances and state laws that automatically require an ISP to obtain a variance before siting facilities.¹⁶³ However, the FCC denied considering CTIA's request under section 253 based on insufficient evidence of a particular controversy.¹⁶⁴

If the FCC were to attempt to regulate rights-of-way for the purposes of deploying broadband under section 253, it should think twice.¹⁶⁵ In order for section 253 to apply to rights-of-way matters involving broadband deployment, it would require the FCC to redefine "telecommunications services" to include broadband.¹⁶⁶ Under a plain reading of section 253, and in accordance with the FCC's exclusion of broadband from the category of telecommunications services, the FCC does not have authority to preempt state and local laws prohibiting the provision of *information services* under section 253(a). Section 253 only extends to rights-of-way matters concerning telecommunications services and does *not* include those affecting broadband. Corroborating this view, the First Circuit has rejected

156. See FCC 2011 NOI, *supra* note 124, at 17 ("Thus, we believe the Commission has broad general rulemaking authority that would allow it to issue rules interpreting sections 253 and 332."); 47 U.S.C. § 253(a), (c) (2006); *Chevron v. NRDC*, 467 U.S. 837, 844 (1984); *City of Arlington v. FCC*, 133 S. Ct. 1863 (2013).

157. To Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review, *Declaratory Ruling*, FCC 09-99, para. 37 (2009) [hereinafter *Shot Clock Ruling*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-09-99A1.pdf.

158. CTIA Petition for Declaratory Ruling at 1 (July 11, 2008) [hereinafter *Shot Clock Petition*], available at http://files.ctia.org/pdf/080711_Shot_Clock_Petition.pdf; see 47 U.S.C. § 332(c)(7)(B)(ii) (2006).

159. 47 U.S.C. § 332(c)(7) (2006).

160. 47 U.S.C. § 332(c)(7)(B)(ii) (emphasis added).

161. *Shot Clock Ruling*, *supra* note 157, at paras. 45, 49.

162. *Id.* at paras. 37, 49.

163. *Shot Clock Petition*, *supra* note 158, at 35.

164. *Shot Clock Ruling*, *supra* note 157, at para. 67.

165. See FCC 2011 NOI, *supra* note 124, at 17.

166. See *id.* at 18 (citing *Brand X*, 545 U.S. 967 (holding that telecommunications services did not include information services based on the FCC's interpretation)).

an argument that used section 253 to try to impose liability on an information service provider.¹⁶⁷

2. While Section 706(b) Arguably Allows the FCC to Preempt Rights-of-Way Matters Related to Broadband, It Should Not Act Beyond Its Authority Under Section 253

In addition to section 253,¹⁶⁸ the FCC retains authority under section 706(b) to “remove barriers to infrastructure investment” when it determines that “advanced telecommunications capabilities” are not “being deployed to *all* Americans in a reasonable and timely manner.”¹⁶⁹ Unlike the Title II common carrier provisions, the term “advanced telecommunications capability” is statutorily defined “without regard to any transmission media or technology, as high-speed, switched, broadband telecommunications capability that enables users to originate and receive high-quality voice, data, graphics, and video telecommunications using any technology.”¹⁷⁰

The FCC has determined that under section 706(b), advanced telecommunications capabilities are being deployed in a reasonable and timely manner when universal broadband service at four megabits per second download speed and one megabit per second upload speed is realized.¹⁷¹ If this threshold were met, the FCC’s obligations and authority to act would theoretically end under section 706(b), unless it redefined “advanced telecommunications capability.”¹⁷² But so long as the FCC continues to find that universal service of broadband is not being deployed, it possesses rulemaking and adjudicatory authority to remove barriers to infrastructure investment.¹⁷³ The concern here is not how the FCC defines

167. *Liberty Cablevision of Puerto Rico, Inc. v. Caguas*, 417 F.3d 216, 224 (1st Cir. 2005) (“[W]e reject the municipalities’ argument that Liberty’s provision of cable modem service renders it liable for fees as a “telecommunications provider” under the Telecommunications Act.”). This Note does not argue that action by the FCC if it chose to include broadband in the definition of “telecommunications services” under section 253 would be improper. Any such action would be subject to a test of reasonableness under principles of *Chevron. Arlington*, 133 S.Ct. at 1869–71.

168. *See Connect America Fund Order*, *supra* note 91, at para. 70, n.95 (stating that section 706 is an independent source of authority).

169. 47 U.S.C. § 1302 (2006); *Eighth Broadband Progress Rpt.*, *supra* note 35, para. 137 n.356 (emphasis added) (noting that “the language of the statute requires the Commission to make its determination regarding all Americans”).

170. 47 U.S.C. § 1302(d)(1) (2006).

171. NATIONAL BROADBAND PLAN, *supra* note 4, at 135; FCC 2011 NOI, *supra* note 124, at 32; *Eighth Broadband Progress Report*, *supra* note 35, at 62 (“[T]he standard against which we measure our progress is universal broadband deployment.”).

172. *See* 47 U.S.C. § 1302(b) (2006).

173. *Eighth Broadband Progress Report*, *supra* note 35, at 55–58; Ninth Broadband Progress NOI, *supra* note 124, at 3–4. *But see* Ninth Broadband Progress NOI, *supra* note 124, at 6 (recommending that the FCC “review and reset” the benchmark every few years).

“advanced telecommunications” under section 706, but whether it uses its obligation to remove barriers as a basis to preempt local rights-of-way authority.¹⁷⁴ In its Ninth Broadband Progress Notice of Inquiry, the FCC sought comment on how it could utilize its authority under section 706 to accelerate broadband deployment.¹⁷⁵ Specifically, it asked what the “relevant limitations on the Commission’s authority” under section 706 were.¹⁷⁶ Because section 706(b) appears to confer broad authority,¹⁷⁷ the FCC could arguably regulate broadband related rights-of-way matters under this section, rather than relying on section 253. By relying on section 706(b) authority, the FCC could achieve the same outcome it intended under section 253.¹⁷⁸

However, the FCC should not use its authority under 706(b) to act beyond the bounds of section 253. Although the decision as to which section it claims its authority under matters to the FCC,¹⁷⁹ as far as states are concerned, rights-of-way are rights-of-way regardless of whether they are accessed for the purpose of providing information services or

174. If Google Fiber stands for the proposition that high-speed fiber is financially plausible to deploy, presumably the FCC could define advanced telecommunications as one-gigabit fiber networks. At that point, deployment would not be “reasonable and timely,” and the FCC could continue to act to remove barriers. See 47 U.S.C. § 1302(b) (2006); Zach Walton, *Time Warner Cable Increases Speeds Near Kansas City, Could Be in Response to Google Fiber*, WEBPRONNEWS (Jan. 31, 2013), <http://www.webpronews.com/time-warner-cable-increases-speeds-near-kansas-city-could-be-in-response-to-google-fiber-2013-01> (“It won’t be long before we start to see ISPs either competing for the first time in their existence or being left behind because they refused to innovate and compete with new technologies.”).

175. Ninth Broadband Progress NOI, *supra* note 124, at 22.

176. *Id.*

177. *Cf. Preserving the Open Internet, Report and Order*, FCC 10-201, para. 121 (2010) [hereinafter *Open Internet Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-10-201A1.pdf (citing *Ad Hoc Telecomms. Users Comm. v. FCC*, 572 F.3d 903 (D.C. Cir. 2009) (discussing the FCC’s statutory authority granted by section 706(a) as “broad,” but “not unfettered”); Brief for Appellee, *supra* note 149, at 29 (internal citations omitted) (“Verizon argues that Section 706(a) should be read to allow the FCC to use only authority already granted in other statutory provisions. That claim has no basis in – and is certainly not mandated by – the statutory text Instead, Section 706(a) delegates to the Commission the authority to use ‘other regulating methods that remove barriers to infrastructure investment.’ By its terms, that command is not tied to other ‘specifically-enumerated’ regulatory mechanisms.”).

178. *Cf. Open Internet Order, supra* note 177, at para. 123 (discussing section 1302(b)’s grant of additional authority for the FCC to take actions such as enforcing open Internet principles); Amanda Leese, *Net Transparency: Post-Comcast FCC Authority to Enforce Disclosure Requirements Critical to “Preserving the Open Internet”*, 11 NW. J. TECH. & INTELL. PROP. 81, 98 (2013) (“Under this Comcast standard, it seems that FCC authority available through the *Brand X* interpretation of Section 706 may not, in isolation, provide sufficient authority to implement the Rules. However, in light of the *Brand X* standard of review, it also seems that the negative treatment in Comcast of authority granted through Section 706 should not vitiate ancillary authority that Section 706 may lend to FCC enforcement of the transparency requirement in the Rules.”).

179. *See id.*

telecommunications services.¹⁸⁰ The FCC's Open Internet Order, which is currently being challenged by Verizon in the D.C. Circuit, is relevant insofar as it provides guidance on the FCC's understanding of its authority under section 706(b). There, the FCC relied on section 706(a) as a basis for promulgating regulations geared towards net neutrality.¹⁸¹

In the Open Internet Order, the FCC stated that “[s]ection 706(a) authorizes the Commission . . . to take actions, within their subject matter jurisdiction and *not inconsistent with other provisions of law*, that encourage the deployment of advanced telecommunications capability by any of the means listed in the provision.”¹⁸² While the D.C. Circuit has not determined whether the FCC acted properly under section 706(a), the FCC suggests that its power under section 706(b) is limited *at least* to the extent that any regulatory actions it takes conflicts with other provisions of the Telecommunications Act.¹⁸³

If the FCC were to use section 706(b) to “remove barriers to infrastructure investment” by defining what “has the effect of prohibiting” an entity to provide information services for rights-of-way or what is “fair and reasonable compensation” with respect to rights-of-way fees, it could make a plausible argument that any interpretation would not be inconsistent with section 253 because that section does not regulate information services.¹⁸⁴ However, the underlying premise of section 253 is based on Congress' recognition that the FCC has a limited role over localized decisions about property rights.¹⁸⁵ To the extent the FCC wishes to engage in rulemaking under 706(b), it should not act beyond what is presently proscribed by the text of section 253, unless and until Congress and the FCC determine the appropriate framework for regulation of broadband.¹⁸⁶ This would include refraining from intervening in local rights-of-way fee

180. Ellrod, *supra* note 25, at 533.

181. *Open Internet Order*, *supra* note 177, at para. 120.

182. *Id.* at para. 119.

183. *Id.*

184. *Id.* at para. 120; Telecommunications Act of 1996, 47 U.S.C. § 253(a), (c) (2006); *Chevron*, 467 U.S. at 844; *Arlington*, 133 S. Ct. 1863.

185. Ellrod, *supra* note 25, at 533 (“The lengthy debate regarding the preservation of local rights, and [Congress’] ultimate inclusion in the 1996 Act, demonstrates that the 1996 Act embodies a deliberate policy decision by Congress to protect local communities’ property rights and the central democratic value of federalism.”); William Malone, *Access to Local Rights-of-Way: A Rebuttal*, 55 FED. COMM. L.J. 251, 255 (2003) (“It is apparent from the course of the legislative bill that the purpose dominating the enactment of Section 253(c) was largely the preservation of existing local rights and responsibilities with respect to local rights-of-way.”); *but see* Day, *supra* note 62, at 467 (“The legislative history underpinning Section 253 suggests that Congress intended for local governments to have a limited role in controlling rights-of-way usage by telecommunications providers.”).

186. See TILLMAN L. LAY, TAKING ANOTHER LOOK AT FEDERAL/STATE JURISDICTIONAL RELATIONSHIPS IN THE NEW BROADBAND WORLD 36–37 (2011), *available at* http://www.nrri.org/pubs/telecommunications/NRRI_Broadband_Relations_Sept11-15.pdf.

decisions, which as some commenters have addressed, implicates both a taking under the Fifth Amendment¹⁸⁷ and concerns of federalism.¹⁸⁸

With respect to eliminating barriers to infrastructure access, there are other measures that can be utilized to facilitate interactions like those between Google and Kansas City without exercising regulatory force. The FCC is arguably not the best party to make specialized and local decisions regarding the use of the rights-of-way. States are. Despite the need to give deference to states, however, the FCC can still play an important role in reducing costs in the deployment process.

3. The FCC Should Provide Resources for ISPs and Local Governments

If ISPs and local governments have equal access to information about rights-of-way and infrastructure access, policymakers can better determine the appropriate long-term solution to close the gap between those who have high-speed connections, and those who have no connection at all. Generally, states should have little problem accepting the FCC's role as a resource center for best practices on the deployment process,¹⁸⁹ so long as the advice the FCC provides represents a balance of interests.

The need for online resources appears evident, at least at first blush. For example, the FCC and the National Telecommunications and Information Administration ("NTIA") currently host a number of highly technical resources.¹⁹⁰ But if a community were interested in building out a gigabit broadband infrastructure, where would it start? Unfortunately, many resources have fallen into neglect and have not been updated for years. Certainly there are association resources such as the National Association of Telecommunications Officers and Advisors ("NATOA"), but its guide on rights-of-way principles has not been updated since 1998.¹⁹¹ The National Conference of State Legislators lists brief synopses of information on cities that have developed broadband task forces, but

187. Ellrod, *supra* note 25, at 500; Krebs, *supra* note 60, at 912–15; Malone, *supra* note 185, at 258–59.

188. Ellrod, *supra* note 25, at 502–03.

189. See *Comments of the City of Lafayette*, *supra* note 32, at 1 (“[T]he FCC can serve an important role as a clearinghouse for information.”); *Comments of IAC*, *supra* note 32, at 1 (“We urge the Commission to work with us to better understand the local, state and tribal role in promoting broadband within our communities, and to support us in our efforts to make these goals attainable.”); *Sept. 2012 Comments of CTIA*, *supra* note 58, at 24 (“By advising local agencies on their roles and responsibilities, and on best practices in tower siting, the FCC will help ensure that the timing of local approvals is regular, predictable, and minimized.”).

190. *E.g.*, FCC TOOLS, <http://www.fcc.gov/tools> (last visited Mar. 4, 2013); NTIA, NATIONAL BROADBAND MAP, <http://www.broadbandmap.gov> (last visited Mar. 4, 2013).

191. See NATOA, LOCAL GOVERNMENT PRINCIPLES RELATING TO RIGHTS-OF-WAY MANAGEMENT AND COMPENSATION (2007), available at http://www.natoa.org/documents/Local_Government_Principles_Relating_to_Rights-of-Way.pdf.

does not contain a resource that would tell a state or locality how to go about creating a task force, and what should be considered in its formation.¹⁹² The National Association of Regulatory Utility Commissioners (“NARUC”) prepared a report on promoting broadband through access to rights-of-way in 2002, over ten years ago.¹⁹³ The Council of State Governments (“CSG”) has not published anything about broadband since 2011.¹⁹⁴ Lastly, the National Association of Counties lists its policy statements on the state of broadband deployment, but lacks any resources on model county programs as it relates to broadband adoption, with the exception of one case study regarding Maryland’s use of BTOP and ARRA funds.¹⁹⁵ None of the resources contain information on gigabit communities, fiber to the home technology, or more advanced capabilities like those that Google provided to Kansas City. Although the Fiber to the Home Council recently issued an instructive paper on “Becoming a Fiber-Friendly Community,”¹⁹⁶ it is not nearly as comprehensive as it could be.¹⁹⁷

In light of Google Fiber’s success, would ISPs take a different stance on what an ISP deems to be a “best practice”? Would state and local governments be prone to giving providers more certainty in fees and timelines? And would providers be more flexible if they were able to increase the number of residents who were willing to pay for access? As far back as 2010, the FCC’s Technical Advisory Council (“TAC”), of which Google is a member, recommended to the FCC that an “online deployment coordination system” be created to “provide advance notification of planned infrastructure projects.”¹⁹⁸ The use of such a system would be to

192. State Broadband Task Forces, Commissions, or Authorities and Other Broadband Resources, NAT’L CONFERENCE OF STATE LEGISLATURES (June 21, 2012), <http://www.ncsl.org/issues-research/telecom/state-broadband-task-forces-commissions.aspx>.

193. NAT’L ASS’N OF REGULATORY UTIL. COMM’RS, PROMOTING BROADBAND ACCESS THROUGH PUBLIC RIGHTS OF WAY AND PUBLIC LANDS (2002), *available at* http://www.naruc.org/Publications/row_summer02.pdf.

194. Knowledge Center: Broadband, COUNCIL OF STATE GOVERNMENTS (Mar. 4, 2013), <http://knowledgecenter.csg.org/kc/view-policy-areas/825>.

195. Achievement Award Search, NAT’L ASS’N OF COUNTIES, <http://www.naco.org/programs/recognition/Pages/AchievementAwardSearch.aspx> (accessed by searching for Information Technology) (last visited Mar. 4, 2013).

196. David St. John, BECOMING A FIBER-FRIENDLY COMMUNITY (May 2013), *available at* <http://www.ftthcouncil.org/p/bl/et/blogaid=214&source=1>.

197. FTTH states “[local governments or their affiliates] should adopt clear, predictable rules for providers to attach their wires and equipment across to these poles on a fair [sic], reasonable, and competitively neutral basis.” *Id.* at 4. However, FTTH provides no clarity as to what makes a policy clear, predictable, and competitively neutral, to provide a starting point for a community to begin to develop those policies. Nor does it list the personnel resources necessary to accomplish each of the goals set forth in the paper to becoming a “Broadband Friendly” community.

198. Memorandum from Tom Wheeler, Chair, Tech. Advisory Council, to FCC Comm’rs 2 (Apr. 22, 2011), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-306065A1.pdf.

partner providers with localities who had existing rights-of-way projects, thus resulting in partnership for increased cost savings.¹⁹⁹

Recently, former Chairman Genachowski announced the “Gigabit City Challenge,” in which the FCC called for at least one city in every state to deploy a one-gigabit network.²⁰⁰ To assist communities in this endeavor, he proposed “a new online clearinghouse of best practices to collect and disseminate information about how to lower the costs and increase the speed of broadband deployment nationwide.”²⁰¹ This proposal is a logical solution in the short-term to accelerate deployment and increase collaborative relationships between local governments and ISPs, at least until Congress and the FCC determine the best long-term policy solutions via legislation or rulemaking.

But before the FCC establishes an online clearinghouse like the one former Chairman Genachowski proposed, it should issue a Notice of Inquiry and determine what specific toolkits would be useful for both public and private parties. It should also be mindful of the competing interests of consumers, ISPs, and local governments in determining what a “best practice” will represent, and to whom. In providing information on best practices, the FCC should attempt to be as neutral as possible, highlighting areas of competing interest where local governments and ISPs may need to work hardest in negotiations to achieve a mutually beneficial result. If the FCC can establish a reputation through its online clearinghouse as being willing to promote true partnerships between the public and private sectors, perhaps parties would be more likely to work together in the broadband deployment process rather than resorting to legal action or adjudication through the FCC in the event of a dispute. And perhaps cost savings could be achieved.

B. Congress Should Expand the FCC’s Jurisdiction to Collect Meaningful Data to Assist with Deployment

As mentioned, the FCC’s authority depends at least in part on its characterization of reasonable and timely deployment.²⁰² Before it can do so, Congress must expand the FCC’s ability to collect information on the deployment of broadband, which can, at least in the short-term, bridge the gap to deployment.

Google was able to make a meaningful decision on where it would deploy because of access to information.²⁰³ It gathered useful data about the community, terrain, current programs in existence related to broadband adoption, and important figures regarding rights-of-way fees on a city-by-

199. *Id.*

200. *FCC’s Broadband Acceleration Initiative*, *supra* note 18.

201. *Id.*

202. *See* 47 U.S.C. § 1302(b) (2006).

203. *See* GOOGLE INC., REQUEST FOR INFORMATION, *supra* note 1.

city basis.²⁰⁴ The receipt of valuable information was the first step for Google to evaluate the feasibility of deployment in each community it was interested in approaching for its pilot project.

At present, the FCC has the authority to conduct surveys on the availability of broadband.²⁰⁵ While the statute calls for data collection on international comparison of broadband service capability, consumer usage, and census data,²⁰⁶ its usefulness after almost five years may have reached its limit. The rough percentages of broadband adoption and deployment nationwide are known, and now the challenge to overcome is connecting ISPs with communities that desire high-speed broadband. What is needed is more readily accessible and practical, localized data similar to that in which Google relied on to evaluate where to begin negotiations for its gigabit project—voluntary data provided by communities.²⁰⁷ This included information about facilities and resources, number of conduits, methods of calculating rights-of-way fees, and demographic data.²⁰⁸

In theory, every service provider could issue a request for information like Google's and obtain data from localities that are willing to provide it. Instead, Congress should expand the FCC's jurisdiction as it relates to collecting data of this kind. Since the data would be provided by states, not providers, it would not be confidential.²⁰⁹ This would assist ISPs in making deployment decisions, as well as provide states with a resource to compare their regulations and practices with other jurisdictions. This expansion would allow the FCC to play a vital role in serving as an information hub for ISPs, states, and even Congress, as it determines its long-term broadband policy. It would also be in line with the Obama Administration's push for more "open government."²¹⁰ To that end, it would also fulfill one of the goals outlined in Obama's Federal Permitting Order, which recommends utilizing technology to aid in the permitting process²¹¹ and supplementing the efforts of the Working Group by publishing online "comprehensive and current information" on access to

204. *Id.* at 10–11, 15–16.

205. Broadband Data Improvement Act of 2008, Pub. L. No. 110–385, 122 Stat 4096 § 103 (codified at 47 U.S.C. § 1303 (2012)).

206. *Id.*

207. See GOOGLE INC., REQUEST FOR INFORMATION, *supra* note 1.

208. *Id.*

209. See *Ctr. for Pub. Integrity v. FCC*, 505 F. Supp. 2d 105 (D.C. Cir. 2007) (holding that some FCC broadband data is a trade secret subject to an exemption from Freedom of Information Act disclosures); see also Benjamin W. Cramer, *The Nation's Broadband Success Story: The Secrecy of FCC Broadband Infrastructure Statistics*, 31 HASTINGS COMM. & ENT. L.J. 339, 357–364 (2009).

210. See WHITE HOUSE OPEN GOVERNMENT INITIATIVE, <http://www.whitehouse.gov/open> (last visited Mar. 27, 2013).

211. See *Executive Order Improving Performance of Federal Permitting and Review*, *supra* note 110, at 18,889.

infrastructure for broadband deployment.²¹² In fact, there have been efforts in Congress to amend and consolidate the reporting obligations of the FCC,²¹³ implying that at least some legislators are interested in streamlining the FCC's reporting requirements. This suggests that Congress might be amenable to revisiting the FCC's scope of authority as it relates to data collection.

To support the FCC's reporting requirements, Congress could require states to provide supplemental information in addition to what is already currently required under their responsibilities to DOT. A state already must prepare a rights-of-way operations manual describing its policies and procedures.²¹⁴ The FCC could partner with DOT to obtain and publish this information in a way that would assist service providers in deployment decisions and coordinate state efforts on reporting. A measure such as this may put a burden on states to find additional staff or resources to handle the reporting. However, the requirement would hopefully encourage centralization and streamlining of rights-of-way information on behalf of states and eventually become part of routine practices. Moreover, it could encourage states to utilize technology to disseminate information at a local level. The FCC may also be able to engage in more pointed policy decisions that would hopefully benefit states in the long run.

C. States Should Consider Revising Rights-of-Way Policies to Provide Certainty to Providers, Including "Dig Once" Policies

Commissioner Pai was correct when he suggested that states should streamline their own right-of-way management processes.²¹⁵ It is in a state's best interest to review and evaluate its own rights-of-way policies. After review, changes can be made that would attract more ISPs to deploy broadband the way Kansas City did with Google. Deployment is a two-way street. The onus should be shared by ISPs and states to change their respective policies. If we respect a provider's right to conduct business and earn revenue, we must respect a state's right to protect community interests. However, in making its policies more attractive, a state does not

212. *Executive Order Accelerating Broadband Infrastructure Deployment*, *supra* note 28, at 36,904.

213. FCC Consolidated Reporting Act of 2012, H.R. 3310, 112th Cong. (2012), available at <http://www.gpo.gov/fdsys/pkg/BILLS-112hr3310rfs/pdf/BILLS-112hr3310rfs.pdf>; FCC Consolidated Reporting Act of 2011, S. 1780, 112th Cong. (2011), available at <http://www.gpo.gov/fdsys/pkg/BILLS-112s1780is/pdf/BILLS-112s1780is.pdf>.

214. 23 C.F.R. § 710.201 (2013) (requiring state DOTs to provide a "manual describing its right-of-way organization, policies, and procedures" that is to be certified every five years). For an example of these manuals, see VA. DEP'T OF TRANSP., RIGHT OF WAY MANUAL OF INSTRUCTIONS (3d ed. Aug. 25, 2011), available at http://www.virginiadot.org/business/resources/Right_of_way/RW_Manual02132012_TechRev.pdf, and UTAH DEP'T OF TRANSP. RIGHT OF WAY DIV., OPERATIONS MANUAL (Jan. 2011), available at <http://www.udot.utah.gov/main/uconowner.gf?n=200601261554381>.

215. *See September 14 Remarks of Comm'r Pai*, *supra* note 7.

have to completely overhaul its regulations or give up autonomy to manage its rights-of-way. There are simple things that can be accomplished to achieve cost savings without sacrificing a state's role of protecting the public welfare. And by doing so, states may be able to create something similar to the interaction between Google Fiber and Kansas City—a solid foundation that a private company and public entity can build upon.

First, states should consider voluntarily implementing permit decision deadline provisions regarding approval of its rights-of-way. As it exists currently, only six states have a decision deadline provision formally enacted.²¹⁶ One of them happens to be Kansas.²¹⁷ Voluntary deadline provisions provide ISPs with certainty as to whether or not they can proceed with their project, and when.²¹⁸ Deadlines also help in planning to anticipate overall deployment timeframes, and thus total cost associated with the project.²¹⁹ In order for states to commit to their self-imposed deadlines, however, they must have the staff and resources to be able to process permit applications and make decisions in a timely manner. Additionally, states must develop an understanding of their broadband needs and deployment plans before providers submit applications to access the rights-of-way, so that states can approve or deny these applications within the context of the community broadband needs. To address this, states should form task forces at both the state and local level to determine what their communities needs are.²²⁰

Second, states can inform ISPs of formal dispute mechanism processes. Michigan, for example, resolves disputes between providers and municipalities by appointing a mediator to make a recommendation.²²¹ The entire dispute process, if contested and taken through each appeal, can take up to roughly six months to resolve.²²² Despite this length, the process provides both parties with predictability in knowing exactly who will be

216. N.H. REV. STAT. ANN. § 231:164 (2002) (six months); VA. CODE ANN. § 56-458(D) (2002) (forty-five days), IND. CODE ANN. § 8-1-2-101(a)(4) (West 2002) (thirty days); MICH. COMP. LAWS ANN. § 484.3115 (West 2002) (forty-five days); WASH. REV. CODE § 35.99.030 (2002) (thirty days); WASH. REV. CODE § 35.99.030 (2002) (120 days for master permits); KAN. STAT. ANN. § 17-1902(i) (West 2006) (thirty days).

217. KAN. STAT. ANN. § 17-1902(i) (West 2006) (thirty days).

218. See *Ex Parte Comments of WISPA*, *supra* note 127, at 2; *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 6; *Comments of NextG*, *supra* note 127, at 2; *July 2012 Comments of PCIA*, *supra* note 127, at 2.

219. See *Ex Parte Comments of WISPA*, *supra* note 127, at 2; *July 2012 Ex Parte Comments of CTIA*, *supra* note 127, at 6; *Comments of NextG*, *supra* note 127, at 2; *July 2012 Comments of PCIA*, *supra* note 127, at 2.

220. For an example of a broadband task force, see STATE OF TENN., TENNESSEE BROADBAND TASK FORCE: REPORT AND RECOMMENDATIONS (2007), available at <http://www.state.tn.us/tra/bbtaskforce/Tenn.%20Broadband%20Task%20Force%20Report%20and%20Recommendations.pdf>.

221. MICH. COMP. LAWS ANN. § 484.3107 (West 2002).

222. *Id.*

involved and how long the process may take. The parties bear the costs to use a private mediator, so resource costs for the state are reduced.²²³

Third, in addition to improving policies in the approval process, states should evaluate the feasibility of enacting their own dig once policies. Utah, Tennessee, and Illinois have enacted policies, both formal and informal, to coordinate broadband projects with other road or utility projects. Utah's policy for the last five years, although not set forth in any specific statute, has been to lay broadband conduit during road construction projects.²²⁴ Illinois enacted an official dig once statute in 2009, requiring public notice of projects with a need for fiber-optic conduit or cable to be made available.²²⁵ In 2012, Chicago Mayor Rahm Emanuel released a Request for Information for the development of a municipal fiber ring, noting that planned street maintenance could be coordinated with the deployment to reduce costs of excavation and labor.²²⁶ The impetus for the project came as Chicago endeavored to upgrade its public utility system.²²⁷ Tennessee, home to Chattanooga's "US Ignite" project, a collaboration made possible through the White House and National Science Foundation, now boasts a city that has deployed fiber to over 170,000 homes.²²⁸ The city was able to bring about a one-gigabit broadband service to *all* of its residents in nine counties through a partnership with its municipal electric utility.²²⁹

223. Rules for the Arbitration of Interconnection Agreements and the Mediation of Complaints, *Order Formally Adopting Administrative Rules*, Mich. Pub. Serv. Comm'n Case No. U-16250 (2011), available at <http://efile.mpsc.state.mi.us/efile/docs/16250/0014.pdf> (Procedures for Telecommunications Arbitrations and Mediations included as Exhibit A).

224. STATE OF UTAH BROADBAND PROJECT, UTAH BROADBAND ADVISORY COUNCIL REPORT 15–16 (2012) [hereinafter UTAH BROADBAND ADVISORY COUNCIL REPORT], available at <http://utahbroadband.files.wordpress.com/2012/06/utah-broadband-advisory-council-report3.pdf>.

225. 605 ILL. COMP. STAT. ANN. § 5/9-131 (West 2009) (The state shall "collaborate to install fiber-optic network conduit where it does not already exist in every new State-funded construction project that opens, bores, or trenches alongside a State-owned infrastructure, including, but not limited to, roadways and bridges.").

226. CITY OF CHI., REQUEST FOR INFORMATION (RFI): BROADBAND INFRASTRUCTURE EXPANSION, section I, available at <http://www.cityofchicago.org/content/dam/city/depts/dps/ContractAdministration/Specs/2012/Spec111304.pdf>.

227. See Zachary Lutz, *Chicago Mayor Targets Affordable Gigabit Broadband, Free Wi-Fi Throughout City Parks*, ENGADGET (Sept. 25, 2012, 10:38 AM), <http://www.engadget.com/2012/09/25/chicago-broadband-challenge/> ("The idea came to Emanuel through Eric Schmidt, who suggested the upgrade be coordinated alongside the city's overhaul of its aging water/sewer system.").

228. *City Stories: Chattanooga Story*, US IGNITE, <http://us-ignite.org/chattanooga-story/> (last visited Mar. 4, 2013).

229. *Chattanooga Tennessee Announces Only 1 Gigabit Broadband Service in U.S. For Both Residential and Business Customers*, EPB (Sept. 13, 2010, 9:05 PM), <https://www.epb.net/news/news-archive/chattanooga-announces-only-1-gigabit-broadband-service-in-u-s-for-residential-and-business-customers/>.

Whether or not this legislation was enacted, it is an important acknowledgement that collaboration and partnerships between local agencies and ISPs can lead to cost savings. If a state can incorporate broadband deployment projects into its road or utility repair or construction projects, it can encourage service providers to build out their own networks in rural areas.²³⁰ This will lead to shared savings and the encouragement of broadband deployment in areas that may have previously been unattractive. These are not the only benefits that can be realized.²³¹

Dig once policies should be initiated at the local level and not dictated by Congress. As decision makers, neither Congress nor the FCC has sufficient information on local community needs to be able to assess demand, determine whether waiver is appropriate, and make those determinations based on consistent criteria.²³² Neither the FCC (nor DOT) is in the best position to know what is in the best interest of local communities.

Lastly, the rejected Broadband Conduit Deployment Act did not specify whether it would require the FCC to determine the basis for requiring deployment from *consumer* demand for broadband or *internet service providers'* demand in determining the number of conduits.²³³ In either case, the FCC, in determining whether or not either source of demand existed, would rely on state broadband plans and state evaluations of the feasibility of broadband in conjunction with its short and long term highway needs.²³⁴ With that in mind, the states are ultimately in a better position to make deployment decisions, but would greatly benefit from guidance and support from the FCC.

V. CONCLUSION

Consumers are the ultimate beneficiaries of a high capacity broadband infrastructure. Google was right when it stated that “[o]rdinary Americans suffer when we fail to have in place a national policy that honestly analyzes the strengths and weaknesses of the market, and provides

230. BROADBAND CONDUIT REPORT, *supra* note 108, at 5; NATIONAL BROADBAND PLAN, *supra* note 4, at 114–15.

231. See UTAH BROADBAND ADVISORY COUNCIL REPORT, *supra* note 224, at 15–16 (noting Utah DOT’s utilization of traffic and weather sensors through its fiber network).

232. See H.R. 2428, *supra* note 97; S. 1266, *supra* note 97; BROADBAND CONDUIT REPORT, *supra* note 108, at 7–8 (“DOT officials expressed concern that the agency would be making decisions and setting policy outside of its scope of expertise”); *Comments of City of Lafayette*, *supra* note 32, at 1 (“It would be dangerous to the public, and harmful to communities, to attempt to develop federal rules that prevented localities from fully considering the impact of installations, or modifications to installations in the right-of-way.”).

233. H.R. 1695, *supra* note 31, § 2; S. 1939, *supra* note 31 (noting that DOT and the FCC would coordinate to determine the size of each conduit is “sufficient to accommodate potential demand”).

234. See 23 U.S.C. § 135 (2012).

tailored policy responses.”²³⁵ The market has demonstrated, at least in the bubble that is Google Fiber and Kansas City, that eliminating fees for rights-of-way access does not lead to universal service. Broad preemption of local rights-of-way decisions by the FCC is not the answer and neither is a congressional directive to states. Reducing cost through streamlining processes and pushing for collaboration and partnerships among government and ISPs is the first step toward eliminating barriers to broadband deployment. It will do more harm than good if the federal government preempts local rights-of-way decisions on an ad hoc basis without a precise regulatory framework in mind. The Google Fiber experiment may not have been perfect, but its existence can inform the way Congress and the FCC support decision-making to encourage broadband deployment on a national scale.

235. *June 8 Comments of Google*, *supra* note 79, at 3.

Toward a Fairer, Subscriber-Empowered Multichannel Television Regime: Injecting Substance Into the Good-Faith Requirement on Retransmission Consent Negotiations

Darrel John Pae*

TABLE OF CONTENTS

I.	INTRODUCTION	141
II.	RETRANSMISSION CONSENT AND THE DUTY TO BARGAIN IN GOOD FAITH	143
	<i>A. The 1992 Cable TV Act</i>	143
	<i>B. FCC's Implementation of Retransmission Consent: The Good-Faith Requirement</i>	146
III.	WHOLESALE BUNDLING	149
	<i>A. The Basic Configuration: Horizontal Integration and Leveraging on Intra-Corporate Holdings</i>	149
	<i>B. Types of Wholesale Bundling and the Maneuvers Through Which They Are Achieved</i>	151
	<i>C. Beyond Mere Bundling: Broadcast Networks' Increasing Market Influence over Conduct of Their Affiliates Regarding Retransmission Consent</i>	153
	<i>D. Some Relevant Examples</i>	157

* J.D. Candidate, The George Washington University Law School, May 2014; B.S. in Business Economics, University of the Philippines School of Economics, Apr. 2011. The Author would like to thank Prof. Ryan Wallach and Allard Chu (Notes Editor, FCLJ Vol. 65) for their guidance and feedback throughout the writing process for this Note, as well as the *Federal Communications Law Journal* editors and staff, and all members of his Note-writing group, for providing diverse insights that shaped the early drafts of this Note. This Note is dedicated to the Author's family and friends, whose unwavering support enabled the completion of this scholarly endeavor.

IV.	ANALYSIS.....	159
	<i>A. Economic Analysis of the Effects of Wholesale Bundling</i>	159
	1. The Basics: Supply, Demand, and Consequent Welfare Reduction.....	159
	2. Effects-Side Analysis: Practical Consequences of Bundling and Their Economic Bases	162
	a. Increased Operating Costs, Market Inefficiency, and Dampening of Competition.....	162
	b. Inflated Prices Passed on to Subscribers	163
	<i>B. The Arguments of Local Broadcast Stations and the Media Companies Owning or Affiliated with Them</i>	165
V.	RECOMMENDATIONS.....	168
	<i>A. Singling Out the Bad Apples</i>	168
	<i>B. Congressional Legislation and FCC Administrative Rulemaking</i>	170
	<i>C. FCC Implementation: An Illustration of the New Regime</i>	173
VI.	CONCLUSION.....	174

I. INTRODUCTION

The wholesale side of multichannel television has always been a war of domination between programming networks (both broadcast and cable systems),¹ on the one hand, and cable providers and other multichannel video programming distributors (“MVPDs”), on the other.² Throughout the evolution of the multichannel marketplace, power has shifted back and forth between broadcasters and MVPDs because of a combination of market developments and government regulation.³ In the past, cable operators, largely viewed as monopolists, were considered kings in whom all the bargaining power resided.⁴ Congress then passed the Cable Television Consumer Protection and Competition Act of 1992,⁵ which gave life to the must-carry and retransmission consent rules. That same year saw the emergence of direct broadcast satellite (“DBS”) as a new industry player that would rapidly inject competition into the MVPD marketplace.⁶ Since then, the dynamics between broadcast networks and MVPDs, and the landscape upon which both exist, have forever changed. Some would even

1. For the purposes of this Note, references to “cable channels” and “cable networks” refer to both cable programming service and per-channel or per-program service. “Cable programming service includes all program channels on the cable system that are not included in basic service, but are not separately offered as per-channel or per-program services.” *Evolution of Cable Television*, FCC, <http://www.fcc.gov/encyclopedia/evolution-cable-television#sec5> (last visited Sept. 29, 2013) (emphasis deleted). These programs refer to those channels MVPDs offer in addition to “over-the-air television broadcast signals carried pursuant to the must-carry requirements of the Communications Act, and any public, educational, or government access channels required by the system's franchise agreement.” *Id.* “Per-channel or per-program service includes those cable services that are provided as single-channel tiers by the cable operator, and individual programs for which the cable operator charges a separate rate.” *Id.* (emphases deleted). HBO is an example of a per-channel service, and pay-per-view sports events are examples of pay-per-program services. Broadcast programming, when referenced in this Note, refers to over-the-air programming, accessible free of charge, which is produced by broadcast stations, like NBC, as defined in 47 C.F.R. section 76.5(b).

2. An MVPD is defined as “an entity engaged in the business of making available for purchase, by subscribers or customers, multiple channels of video programming.” 47 C.F.R. § 76.1000 (2012). Examples include cable providers (like Time Warner Cable), direct broadcast satellite providers (like DirecTV) and telecommunication companies (like AT&T U-Verse). *See id.*

3. *See* Charles Lubinsky, *Reconsidering Retransmission Consent: An Examination of the Retransmission Consent Provision (47 USC § 325(b)) of the 1992 Cable Act*, 49 FED. COMM. L.J. 99, 105 (1997).

4. *See id.* at 106.

5. Pub. L. No. 102-385, 106 Stat. 1460 (1992) (codified in scattered sections of 47 U.S.C.).

6. *See* Ronald Garay, *Direct Broadcast Satellite*, MUSEUM OF BROAD. COMM’NS., <http://www.museum.tv/archives/etv/D/htmlD/directbroadc/directbroadc.htm> (last visited Sept. 29, 2013) (stating that the 1992 Cable TV Act made it possible for DBS to grow because the Act prohibited programmers from denying DBS access to their services).

argue that bargaining power has now transferred mostly to broadcast networks, seizing control from MVPDs.⁷

This Note focuses on the dynamics of multichannel video on the wholesale side. Specifically, it parses the relationship between MVPDs and broadcast networks during retransmission consent negotiations. Substantive issues faced by MVPDs during these negotiations ultimately affect the welfare and utility of consumers in terms of programming choice and the prices they pay. These effects, when amalgamated, create a “market defect” that results in “forced bundles” offered to and purchased by multichannel video subscribers.⁸ This type of wholesale bundling is inimical not only to MVPDs and their business models, but also to consumers who are forced to purchase bundles containing channels that they do not demand, thereby reducing the overall utility they get from multichannel television.⁹

Part II gives a brief history of cable television, as it relates to the relationship between broadcast networks and cable providers, including a summary of the legislative history of the Cable Television Consumer Protection and Competition Act of 1992 and the FCC rules concerning retransmission consent. Part III expounds on the different iterations of wholesale bundling, its structural premise, and the various interrelated factors and marketplace developments that enable its existence. Part IV reviews certain economic analyses to shed light on how current retransmission consent practices negatively affect consumer welfare and consumer choice. Finally, Part V proposes that Congress authorize the FCC to oversee the substantive aspects of the retransmission consent process. A complementary explication on how the FCC can utilize this authority, through rulemaking, to police unfair and utility-reducing retransmission consent practices concludes the Note.

7. See MICHAEL L. KATZ ET AL., AN ECONOMIC ANALYSIS OF CONSUMER HARM FROM THE CURRENT RETRANSMISSION CONSENT REGIME paras. 30–43 (2009), available at <http://apps.fcc.gov/ecfs/document/view?id=7020353149> (study commissioned by the National Cable & Telecommunications Association, DIRECTV, and Dish Network); STEVEN C. SALOP ET AL., ECONOMIC ANALYSIS OF BROADCASTERS’ BRINKMANSHIP AND BARGAINING ADVANTAGES IN RETRANSMISSION CONSENT NEGOTIATIONS paras. 1–2 (2010), available at <http://apps.fcc.gov/ecfs/document/view?id=7020499521> (study commissioned by Time Warner Cable).

8. See George S. Ford & Thomas M. Koutsky, *A la Carte and “Family Tiers” as a Response to a Market Defect in the Multichannel Video Programming Market*, PHOENIX CTR. POL’Y BULL., Feb. 2006, at 1, 5, available at <http://www.phoenix-center.org/PolicyBulletin/PCPB14Final.pdf>.

9. See *id.* at 1, 4.

II. RETRANSMISSION CONSENT AND THE DUTY TO BARGAIN IN GOOD FAITH

A. *The 1992 Cable TV Act*

To fully understand the nature of retransmission consent and how it works, it is helpful to look at the landscape upon which MVPDs and broadcast networks operated before the 1992 Cable TV Act's enactment. Broadcast networks produce programming that is transmitted by their respective affiliate broadcast stations to consumers for free over the air.¹⁰ Prior to 1992, cable providers used these signals free of charge and packaged them with other programming for sale to cable subscribers.¹¹ For a time, broadcast networks and regulators regarded this practice as fostering the development of broadcast networks and the free programming that they produce, in that these programs were able to reach viewers who would otherwise not have access to them through their cable subscription.¹² This was very beneficial for broadcast networks because their income was mainly derived from advertising,¹³ and advertising revenue is inevitably affected by the number of viewers reached by the broadcast networks' programming. As cable providers developed, however, they became vertically integrated.¹⁴ It became common practice that one company would own both a cable provider and a cable network,¹⁵ and Congress became wary that this relationship would result in cable providers favoring the carriage of cable programming of an affiliate to the detriment and exclusion of broadcast programming.¹⁶

Thus ended the symbiotic relationship between cable providers and broadcast networks. Regulators started viewing cable networks as undermining the ongoing viability of free over-the-air broadcasters.¹⁷ The

10. See Pub. L. No. 102-385, § 2(a)(12), 106 Stat. 1461, 1462 (1992) (congressional findings in the 1992 Cable TV Act).

11. ROBERT W. CRANDALL & HAROLD FURCHTGOTT-ROTH, *CABLE TV: REGULATION OR COMPETITION?* 1–6 (1996).

12. See § 2(a)(12), 106 Stat. at 1461; see also CRANDALL & FURCHTGOTT-ROTH, *supra* note 11, at 2.

13. § 2(a)(12), 106 Stat. at 1461.

14. § 2(a)(5), 106 Stat. at 1461–62.

15. See generally THOMAS W. HAZLETT, *VERTICAL INTEGRATION IN CABLE TELEVISION: THE FCC EVIDENCE* (2007), available at <http://www.arlingtoneconomics.com/studies/vertical-integration-in-cable-television.pdf> (study commissioned by Comcast and submitted to the FCC in response to the 2006 Quadrennial Regulatory Review – Review of the Comm'n's Broad. Ownership Rules & Other Rules Adopted Pursuant to Section 202 of the Telecommunications Act of 1996, *Further Notice of Proposed Rulemaking*, FCC 06-93 (2007), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-06-93A1.pdf).

16. See § 2(a)(5), 106 Stat. at 1461–62.

17. § 2(a)(16), 106 Stat. at 1462; see S. REP. NO. 102-92, at 35 (1991), reprinted in 1992 U.S.C.C.A.N. 1133, 1177.

product of this perceived threat was the Cable Television Consumer Protection and Competition Act of 1992 (“1992 Cable TV Act” or the “Act”).¹⁸ Two of the most controversial provisions of the Act were must-carry and retransmission consent.¹⁹ During the drafting period of the Act, the Senate Committee on Commerce, Science, and Transportation noted first that cable providers “use[d broadcast networks’] signals without having to seek the permission of the originating broadcaster or having to compensate the broadcaster for the value its product creates for the cable operator.”²⁰ Because broadcast networks have “been granted an exclusive right by the FCC to broadcast over the limited broadcast spectrum,” they have a proprietary interest in those signals that “might be threatened if others could easily duplicate these broadcasts.”²¹

Broadcast programming was the most popular content watched on cable TV.²² Accordingly, cable programming (much of which was affiliated with cable operators) benefited from increased viewership when it was placed on channels adjacent to popular broadcast programming.²³ However, this meant that “broadcasters [were] in effect subsidiz[ing] the

18. See § 2(b), 106 Stat. at 1463. This Act was passed by Congress on October 5, 1992, over President Bush’s veto. Lubinsky, *supra* note 3, at 113; CRANDALL & FURCHTOTT-ROTH, *supra* note 11, at 8.

19. See 47 U.S.C. §§ 338, 534 (2006) (must-carry); 47 U.S.C. § 325(b) (2006) (retransmission consent). In fact, as a result of the controversy and the varying positions of many stakeholders and legislators, retransmission consent “was explicitly left out of the companion House bill in order to avoid a jurisdictional dispute,” Lubinsky, *supra* note 3, at 116–17, with other committees of the 102nd Congress and to increase the legislation’s chances of passing. Nicholas W. Allard, *The 1992 Cable Act: Just the Beginning*, 15 HASTINGS COMM. & ENT. L.J. 305, 333 (1993). So the retransmission consent provision appeared first in the Senate bill and had its origins in the Senate Committee on Commerce, Science, and Transportation. Lubinsky, *supra* note 3, at 119. Senator Daniel Inouye added the provision during the full committee mark-up of the legislation. *Id.*; Allard, *supra* note 19, at 334 n.121. The companion House bill can be found at H.R. 4850, 102d Cong. (1992). For a full account of the House and Senate Proceedings, see 138 CONG. REC. S400–33 (daily ed. Jan. 27, 1992); 138 CONG. REC. S561–611 (daily ed. Jan. 29, 1992); 138 CONG. REC. S635–97 (daily ed. Jan. 30, 1992); 138 CONG. REC. S711–70 (daily ed. Jan. 31, 1992); 138 CONG. REC. H6531–44 (daily ed. July 23, 1992); 138 CONG. REC. H8671–87 (daily ed. Sept. 17, 1992); 138 CONG. REC. S14,222–51 (daily ed. Sept. 21, 1992); 138 CONG. REC. S14,600–16 (daily ed. Sept. 22, 1992); and 138 CONG. REC. S16,652–77 and H11,477–88 (daily ed. Oct. 5, 1992).

20. S. REP. NO. 102–92, at 35 (1991), *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168; Lubinsky, *supra* note 3, at 120.

21. Lubinsky, *supra* note 3, at 107.

22. Pub. L. No. 102-385, § 2(a)(19), 106 Stat. 1460, 1463. “[R]oughly two-thirds of the viewing time on the average cable system” at the time of the Act’s enactment were spent on broadcast programming. S. REP. NO. 102–92, at 35 (1991), *reprinted in* 1992 U.S.C.C.A.N. 1133, 116.

23. § 2(a)(19), 106 Stat. at 1462. See S. REP. NO. 102–92, at 35, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168; Lubinsky, *supra* note 3, at 120. This increased viewership allowed the cable programmer to obtain increased advertising revenues.

establishment of their chief competitors.”²⁴ This free-riding by cable operators was viewed as unfair²⁵ and against public policy,²⁶ because cable providers had abandoned their classical business models—repackaging and delivering broadcast signals—and started competing in the market for TV programming.²⁷ These market developments, coupled with the fact that cable systems rarely had any local competition, resulted in “undue market power for the cable operator as compared to that of consumers and video programmers.”²⁸

Out of the desire to curb this power and equalize the then pervading market realities, retransmission consent, one of the more controversial provisions of the 1992 Cable TV Act, was born.²⁹ The retransmission-consent provision provides, “No cable system or other multichannel video programming distributor shall retransmit the signal of a broadcasting station, or any part thereof, except . . . with the express authority of the originating station.”³⁰ Retransmission consent was intended to prevent a “distortion in the video marketplace which threaten[ed] the future of over-the-air broadcasting.”³¹ Because cable operators were already paying for the rights to cable programming, Congress found no reason why this option should not be made available for broadcast programmers.³²

The 1992 Cable TV Act ushered in a change to the landscape that underpinned the relationship between broadcast networks and cable providers. Cable operators were stripped of the ability to set the conditions upon which broadcast programming carriage were based.³³ As competition emerged and broadcasters were able to play cable operators and other MVPDs off against one another, cable operators were relegated to a defensive position of just anticipating what broadcast networks had in store

24. § 2(a)(19), 106 Stat. at 1462; *see also* S. REP. NO. 102-92, at 35, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168; Lubinsky, *supra* note 3, at 120.

25. § 2(a)(19), 106 Stat. at 1462-63.

26. S. REP. NO. 102-92, at 35, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168.

27. § 2(a)(5), (19), 106 Stat. at 1460-61, 1462-63.

28. § 2(a)(2), 106 Stat. at 1460.

29. 47 U.S.C. § 325(b) (2006).

30. 47 U.S.C. § 325(b)(1)(A) (2006).

31. S. REP. NO. 102-92, at 35, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168; Lubinsky, *supra* note 3, at 120.

32. S. REP. NO. 102-92, at 35, *reprinted in* 1992 U.S.C.C.A.N. 1133, 1168.

33. What really drives MVPD's crazy, we think, is they are cornered in an industry structure which, at this point in time, put[s] them at a negotiating disadvantage vis-à-vis cable network groups. The networks are the price makers, the MVPD's are the price takers. And they wish the cable network groups would stop exploiting the advantage.

TODD JUENGER, BERNSTEIN RESEARCH, WEEKEND MEDIA BLAST: LOWER YOUR AFFILIATE FEE, OR THE DOG WILL PAY 3 (2012).

for them, instead of being able to dictate the terms of contract and the tenor of negotiations.³⁴

*B. FCC's Implementation of Retransmission Consent: The Good-Faith Requirement*³⁵

Congress initially provided little guidance as to how retransmission consent negotiations were expected to transpire, aside from the three-year periodic renewal of retransmission consent and the considerations the Commission was to account for when crafting rules.³⁶ Specifically, Congress directed the Commission to “ensure that the regulations prescribed under this subsection do not conflict with the Commission’s obligation . . . to ensure that the rates for the basic service tier are reasonable.”³⁷ The FCC also was directed to consider “the impact that the grant of retransmission consent by television stations may have on the rates for the basic service tier.”³⁸ Beyond these obligations, the FCC was not given directives on how to regulate the manner by which retransmission consent negotiations are conducted.

Congressional silence ended in 1999 when Congress enacted the Satellite Home Viewer Improvement Act of 1999 (“SHVIA”), which requires broadcast networks to negotiate retransmission consent in good faith with MVPDs.³⁹ Codified at 47 U.S.C. section 325(b)(3)(C), SHVIA directed the FCC to “prohibit a television broadcast station that provides retransmission consent from . . . failing to negotiate in good faith”⁴⁰ This requirement was “made reciprocal to MVPDs as well as broadcasters by the Satellite Home Viewer Extension and Reauthorization Act of 2004 (“SHVERA”).”⁴¹

34. *Id.*

35. The majority of the material in this subsection was derived from Amendment of the Comm’n’s Rules Related to Retransmission Consent, *Notice of Proposed Rulemaking*, FCC 11-31, paras. 9–12 (2011) [hereinafter *Retransmission Consent NPRM*], available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-11-31A1_Rcd.pdf.

36. 47 U.S.C. § 325(b)(3)(C) (2006).

37. 47 U.S.C. § 325(b)(3)(A) (2006).

38. *Id.*

39. SHVIA was enacted as Title I of the Intellectual Property and Communications Omnibus Reform Act of 1999, Pub. L. No. 106-113, 113 Stat. 1501, Appendix I (codified in scattered sections of 17 and 47 U.S.C.).

40. 47 U.S.C. § 325(b)(3)(C)(ii) (2006); *Retransmission Consent NPRM*, *supra* note 35, at para. 8.

41. *Retransmission Consent NPRM*, *supra* note 35, at para. 8 n.20. “The good faith provision of SHVIA was specifically targeted at constraining unacceptable negotiating conduct on the part of broadcasters, but Congress subsequently recognized that it is necessary to constrain unacceptable retransmission consent negotiating conduct of MVPDs as well as broadcasters, and thus imposed a reciprocal bargaining obligation in SHVERA.” *Id.* at para. 20 n.63; see Reciprocal Bargaining Obligation, *Report and Order*, FCC 05-119, para. 1 (2005), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-05-

In interpreting Congress's grant of power, however, the FCC limited itself to the oversight of the procedural aspects of retransmission consent negotiations and explicitly disclaimed any authority to regulate the substantive aspects and terms of the negotiations.⁴² The FCC reasoned that "Congress intended that the Commission develop and enforce a process that ensures that broadcasters and MVPDs meet to negotiate retransmission consent and that such negotiations are conducted in an atmosphere of honesty, purpose and clarity of process."⁴³ This statutory interpretation proved instructive as the FCC crafted its rules enforcing the duty to negotiate in good faith.

The FCC enforced these congressional directives by paving two avenues through which the good-faith duty can be breached: it can be violated (1) per se when any of the negotiating parties' conduct falls within seven objective breaches of good-faith negotiation set by the Commission;⁴⁴ or (2) when the Commission finds that the totality of circumstances surrounding and relating to the negotiations do not comport with the duty of good faith.⁴⁵ The seven cardinal actions that constitute a breach of the duty to negotiate in good faith are as follows:

- (i) Refusal by a Negotiating Entity to negotiate retransmission consent;
- (ii) Refusal by a Negotiating Entity to designate a representative with authority to make binding representations on retransmission consent;
- (iii) Refusal by a Negotiating Entity to meet and negotiate retransmission consent at reasonable times and locations, or acting in a manner that unreasonably delays retransmission consent negotiations;
- (iv) Refusal by a Negotiating Entity to put forth more than a single, unilateral proposal;
- (v) Failure of a Negotiating Entity to respond to a retransmission consent proposal of the other party, including the reasons for the rejection of any such proposal;
- (vi) Execution by a Negotiating Entity of an agreement with any party, a term or condition of which, requires that such

119A1.pdf ("[W]e conclude that the most faithful and expeditious implementation of the amendments contemplated in Section 207 of the SHVERA is to extend to MVPDs the existing good faith bargaining obligation imposed on broadcasters under our rules.")

42. "[T]he statute does not intend to subject retransmission consent negotiation to detailed substantive oversight by the Commission." Implementation of the Satellite Home Viewer Improvement Act of 1999; Retransmission Consent Issues: Good Faith Negotiation & Exclusivity, *First Report and Order*, FCC 00-99, para. 6 (2000) [hereinafter *Good Faith Order*], available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-00-99A1.pdf.

43. *Id.* at para. 24.

44. 47 C.F.R. § 76.65(b)(1) (2012).

45. 47 C.F.R. § 76.65(b)(2) (2012).

Negotiating Entity not enter into a retransmission consent agreement with any other television broadcast station or multichannel video programming distributor; and
 (vii) Refusal by a Negotiating Entity to execute a written retransmission consent agreement that sets forth the full understanding of the television broadcast station and the multichannel video programming distributor.⁴⁶

The second avenue—the totality of circumstances test⁴⁷—“enables the Commission to consider a complaint alleging that, while a Negotiating Entity did not violate the *per se* objective standards, its proposals or actions were ‘sufficiently outrageous,’ or included terms or conditions not based on competitive marketplace considerations, so as to violate the good faith negotiation requirement.”⁴⁸

When the Commission finds that a negotiating party has violated the duty to negotiate in good faith, that party will be instructed “to renegotiate the agreement in accordance with the Commission’s rules and Section 325(b)(3)(C).”⁴⁹ The FCC, however, interpreted section 325 as “prevent[ing] the Commission from ordering carriage over the objection of the broadcaster, even upon a finding of a violation of the good faith negotiation requirement.”⁵⁰

To date, there has not developed an expansive body of petitions and FCC decisions dealing directly with the duty to negotiate in good faith. With the exception of the WLII/WSUR Licensee Partnership complaint against Choice Cable TV regarding the parties’ negotiations for carriage of WLII-TV and its booster stations WSUR-TV and WORA-TV,⁵¹ complaints were either dismissed by the parties after settlement outside the FCC proceeding,⁵² or the Commission itself dismissed the complaint finding no breach.⁵³

46. 47 C.F.R. § 76.65(b)(1) (2012).

47. *Good Faith Order*, *supra* note 42, at para. 32.

48. *Retransmission Consent NPRM*, *supra* note 35, at para. 32.

49. *Good Faith Order*, *supra* note 42, at para. 81.

50. *Retransmission Consent NPRM*, *supra* note 35, at para. 18.

51. See Letter from Steven Broecker, Deputy Chief, Policy Division, Media Bureau, FCC, to Jorge L. Bauermeister, Counsel for Choice Cable T.V., 22 FCC Rcd. 4933, 4933 (Mar. 12, 2007) (finding that Choice violated its duty to negotiate in good faith).

52. See, e.g., *Mediacom Commc’ns Corp. v. Sinclair Broad. Grp., Inc.*, *Order*, DA 10-66 (2010), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DA-10-66A1.pdf (following the complaint filed by Mediacom alleging that Sinclair violated its duty to negotiate in good faith, Mediacom and Sinclair announced completion of a retransmission agreement and later Mediacom filed a Motion to Withdraw the complaint with the Commission).

53. See, e.g., *EchoStar Satellite Corp. v. Young Broad., Inc.*, *Memorandum Opinion and Order*, DA 01-1865 (2001), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DA-01-1865A1.pdf; *Mediacom Commc’ns Corp. v. Sinclair Broad. Grp., Inc.*,

III. WHOLESALE BUNDLING

A. The Basic Configuration: Horizontal Integration and Leveraging on Intra-Corporate Holdings

Retransmission consent applies only to local broadcast stations (because they control and manage the signals that are then retransmitted), and does not apply to cable networks. The transactions involving cable networks and their carriage by MVPDs are deregulated in most aspects as compared with local broadcast networks. So why are MVPDs complaining about the bundling of cable networks for delivery to specific price tiers as a condition for a broadcast station's retransmission consent? Table 1 helps shed some light on this question.

Table 1: Summary of Big Four Broadcast Networks' Ownership of Significant Cable Networks⁵⁴

ABC/Disney	FOX	NBC	CBS
ESPN/ESPN HD (80%)	Fox Sports Net (100%)	USA (100%)	CBS Sports Network (100%)
Disney Channel (100%)	Fox News (100%)	CNBC (100%)	Smithsonian Channel (90%)
A&E (50%)	Fox Movie Channel (100%)	MSNBC (82%)	Showtime (100%)
Lifetime Television (50%)	Big Ten Network (51%)	Syfy (100%)	Flix (100%)
History Channel (50%)	Fox College Sports (100%)	Bravo (100%)	The Movie Channel (100%)
Biography Channel (50%)	National Geographic Channel (70%)	Oxygen Network (100%)	
Lifetime Movie Network (50%)	Fox Business Network (100%)	NBC Sports Network (formerly VERSUS)	

Memorandum Opinion and Order, DA 07-3 (2007), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DA-07-3A1.pdf; *ATC Broadband v. Gray TV Licensee, Inc.*, *Memorandum Opinion and Order*, DA 09-246 (2009), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/DA-07-3A1.pdf.

54. Table 1 was derived from, and is a shortened version of, Figure 9: Summary of Big Four Cable Network Ownership. SALOP ET AL., *supra* note 7, at 50 (derived from Form 10-K Annual Reports for CBS Corp., The Walt Disney Co., NBCUniversal Media, Inc., and NEWS CORP. and a report by SNL Kagan).

Table 1 demonstrates that cable networks have started horizontally integrating with the Big 4 broadcast networks (ABC/Disney, Fox, NBC, and CBS),⁵⁵ each of which owns local broadcast stations in many major markets.⁵⁶ As can be seen from Table 1, it is commonplace for a single media conglomerate to own multiple cable networks as well as local broadcast networks and stations. For example, ABC/Disney owns twenty-one cable networks⁵⁷ and eight local broadcast stations.⁵⁸ Comcast owns NBC, which owns twenty-six local broadcast stations,⁵⁹ including Telemundo, and has ownership interests in fifteen cable networks.⁶⁰ News Corporation owns Fox, which owns twenty-eight local broadcast stations⁶¹ and eighteen cable networks.⁶² CBS, which owns twenty-six local broadcast stations,⁶³ co-owns the CW,⁶⁴ and has ownership interests in five cable networks.⁶⁵ Viacom, which owns only cable networks, including MTV and Nickelodeon, is CBS's sister company; both are owned with a controlling majority interest by National Amusements.⁶⁶ Consequently, media companies that own cable networks have a strong interest in using the bargaining power and leverage of their local broadcast stations to convince MVPDs to carry specific cable channels in exchange for—or, as some claim, as a condition to—the local broadcast station's retransmission consent.⁶⁷

To provide a concrete example, the ABC Network is a Disney company.⁶⁸ Disney, through its ABC-owned local stations, can condition those local stations' retransmission consent on the carriage of Disney Channel, Disney XD, and other cable channels that it owns, and it typically can demand that those channels be placed in one of an MVPD's most widely distributed service tiers.⁶⁹ Any horizontally integrated media company, including all of the Big Four networks, has the ability to initiate

55. *See supra* Table 1.

56. *See infra* Table 2 and accompanying notes.

57. *See supra* Table 1.

58. *See infra* Table 2.

59. *See id.*

60. *See supra* Table 1.

61. *See infra* Table 2.

62. *See supra* Table 1.

63. *See infra* Table 2.

64. *See Our Portfolio*, CBS CORP., <http://www.cbcorporation.com/portfolio.php?division=95> (last visited Jan. 27, 2013).

65. *See supra* Table 1.

66. *Corporate Information*, SHOWCASE, <http://www.showcasecinemas.com/about-us> (last visited Sept. 29, 2013).

67. *See infra* Part III.D (noting that this leverage comes from the high viewership ratings of broadcast programming).

68. *Media Networks*, WALT DISNEY CO., <http://thewaltdisneycompany.com/disney-companies/media-networks> (last visited Sept. 20, 2013).

69. *See infra* note 108.

this kind of business maneuver.⁷⁰ This horizontal integration, resulting from complex yet interconnected corporate structures, enables broadcast networks to force bundles during retransmission consent negotiations.

It is from this world of complex corporate structures that the capacity to force network bundles during retransmission consent negotiations originates.

B. Types of Wholesale Bundling and the Maneuvers Through Which They Are Achieved

Typically, there are three archetypes of coercive wholesale bundling.⁷¹ First—the simplest kind—is where programmers refuse “to

70. Although not the central focus of this Note, it is worth mentioning that, in addition to horizontal integration, vertical integration between broadcast stations and MVPDs has also occurred in recent years. An example is the FCC-approved merger in 2010 of NBC Universal, which owns broadcast and cable networks, and Comcast, one of the largest MVPDs and owning various cable, regional, and sports programming. App’ns of Comcast Corp., Gen. Elec. Co. & NBC Universal, Inc. for Consent to Assign Licenses & Transfer Control of Licensees, *Memorandum Opinion and Order*, FCC 11-4, paras. 9–11 (2011) [hereinafter *Comcast/NBCU Joint Venture Applications*], available at <http://transition.fcc.gov/FCC-11-4.pdf>; Jonathan B. Baker, *Comcast/NBCU: The FCC Provides a Roadmap for Vertical Merger Analysis*, ANTITRUST, Spring 2011, at 36. Although the exact terms of the retransmission consent agreement between NBCUniversal broadcast stations and Comcast is unclear, NBC broadcast stations and Comcast are currently bound by conditions the FCC imposed due to the significant antitrust implications of the transaction. *Comcast/NBCU Joint Venture Applications*, *supra* note 70, at paras. 3–4. In brief, Comcast is prohibited from discriminatory “video programming distribution on the basis of affiliation or non-affiliation with Comcast-NBCU.” *Id.* at para. 4. Discrimination on the basis of affiliation is difficult to prove, and may be confounded with other financial considerations. See *Tennis Channel, Inc. v. Comcast Cable Comm’ns, L.L.C.*, *Memorandum Opinion and Order*, FCC 12-78, paras. 45–68 (2012), available at <http://www.fcc.gov/document/fcc-releases-decision-tennis-channel-v-comcast-carriage-dispute> (holding that circumstantial evidence indicates that Comcast favored the carriage of affiliates over non-affiliates and that Comcast discriminated against Tennis Channel), *rev’d sub nom.* *Comcast Cable Comm’ns v. FCC*, No. 12-1337 (D.C. Cir. May 28, 2013) (holding that the FCC had not shown sufficient evidence to refute Comcast’s argument that the decision to place Tennis Channel in a different tier was a result of financial analysis, not discrimination against a rival). Further, Comcast and NBCU are disallowed to jointly administer their retransmission consent negotiations. *Id.* apps. A at 134 & F at 195. This means that NBCU is “solely responsible for negotiating retransmission consent of NBCU Stations with non-Comcast MVPDs,” and Comcast remains “solely responsible for negotiating retransmission consent with non-NBCU Stations.” *Id.* Comcast also entered into a collective agreement with the affiliated local broadcast stations of ABC, CBS, and Fox, which guaranteed that Comcast will not “discriminate with respect to its retransmission consent negotiations” with non-NBCU and non-NBCU-affiliated stations. *Id.* app. F at 203. Comcast also agreed to conduct its retransmission consent negotiation with non-NBCU and non-NBCU-affiliated stations at arm’s length and in good faith. *Id.*

71. This Note uses the word “coercion” in its ordinary, non-legal sense in its application to the concept of wholesale bundling.

allow the networks . . . to be offered by MVPD's on an a la carte basis."⁷² The second type are instances where MVPDs are forced to carry weaker networks in the same package as a strong network; the weak and strong networks are "bundled" and are required to be delivered in the same service tier.⁷³ Media companies indirectly achieve this result by "establish[ing] a rate structure that makes it decidedly uneconomical" to carry the weaker channel "below a specified penetration threshold."⁷⁴ The third type is a "reverse tying arrangement" where "carriage of a weaker service is conditioned on the MVPD's agreement to carry a more expensive 'strong' service."⁷⁵ This might seem odd at first, and one might ask why an MVPD would opt for a weaker network than the stronger one. To put this into perspective, it should be pointed out that there are numerous local and regional MVPDs that may find it in their business interest to carry just the weaker service because the stronger service has insufficient subscriber demand in the areas they serve to justify its carriage.⁷⁶

To demonstrate the procedural aspects of coercive bundling, economists Ford and Koutsky of the Phoenix Center for Advanced Legal and Economic Public Policy Studies developed an economic model.⁷⁷ The basic premise of this model suggests that a "necessary condition" for forced bundling is for broadcast networks to offer additional profits to MVPDs in exchange for them agreeing to incorporate certain programming into their basic or expanded basic tiers.⁷⁸ This additional profit is in the form of "avoided additional cost" for MVPDs.⁷⁹

One of the ways that this is done, the economists argue, is when a local broadcast station (presumably owned by a broadcast network) conditions the carriage of a local ABC or NBC affiliate, both of which are very popular to subscribers,⁸⁰ on the acceptance of a bundle containing both desired and undesired programming.⁸¹ The "avoided additional cost" for the MVPD in this instance is the avoidance of the risk of not being able to carry the local ABC or NBC.⁸² Alternatively, this end result could be achieved by offering both bundled and a la carte options to cable companies during retransmission consent negotiations in such a manner that the a la carte option would be set at a prohibitive cost compared to the

72. Comments of Mediacom Commc'ns Corp. at 5–6, Revision of the Comm'n's Program Access Rules, MB Dkt. No. 12-68 (rel. June 23, 2012) [hereinafter *Mediacom Comments*] (emphasis deleted).

73. *Id.*

74. *Id.*

75. *Id.* at 6. In this terminology, a weaker service is one with less viewership.

76. *Id.* at 6–7.

77. Ford & Koutsky, *supra* note 8, at 6–13.

78. *Id.* at 41–42.

79. *Id.* at 42.

80. *See infra* Part IV.B.

81. Ford & Koutsky, *supra* note 8, at 10.

82. *Id.* at 43.

bundled option.⁸³ Under this scenario, the “avoided additional cost” is the astronomical price that the MVPD would have had to pay if it did not accept the bundle. The offer of the a la carte option may reasonably be construed as a token offer, made only to avoid committing a per se violation of the good-faith requirement during retransmission consent negotiations.⁸⁴ In short, broadcast networks create an additional cost that MVPDs may avoid only if they choose the bundle over any other arrangement.

An MVPD, when confronted by bundling, has extremely limited choices because the consent of a local broadcast network is absolute⁸⁵: (1) it can stand its ground, refuse the package offered by the broadcast network (through its local broadcast stations and affiliates), and respond with a more favorable counteroffer with the hope that the local broadcast station would consider it; or (2) it can accept the deal and consequently incur higher costs in conducting its business.⁸⁶ MVPDs rarely have the liberty of time to structure a deal that would at least be marginally more favorable than those that the local broadcast stations offered. When the preceding consent deals are about to elapse, the pressure on MVPDs to secure renewals from local broadcast stations reaches its apogee, and MVPDs are more likely to accept the coercive bundle rather than lose access to highly desired programming.⁸⁷

C. Beyond Mere Bundling: Broadcast Networks’ Increasing Market Influence over Conduct of Their Affiliates Regarding Retransmission Consent

The ability of broadcast companies to coerce MVPD agreement to bundled deals is further strengthened by current market practices that involve cooperation among local broadcast stations in brokering

83. See *id.* at 10. This has been the crux of the allegations by MVPDs in recent years. See, e.g., *Mediacom Comments*, *supra* note 72, at 5–6.

84. See 47 C.F.R. § 76.65(b)(1)(iv) (2012). This provision is discussed further in *infra* Part V.

85. 47 U.S.C. § 325(b) (2006).

86. Implementation of the Cable TV Consumer Prot. & Competition Act of 1992—Dev. of Competition & Diversity in Video Programming Distribution, *Report and Order and Notice of Proposed Rulemaking*, FCC 07-169, para. 120 (2007), available at http://fjallfoss.fcc.gov/edocs_public/attachmatch/FCC-07-169A1.pdf, *aff’d sub nom.* Cablevision Sys. Corp. v. FCC, 597 F.3d 1306, 1306 (D.C. Cir. 2010).

87. See, e.g., Chris Cinnamon, Heidi Schmid & Adriana Kissel, *Retransmission-Consent Outlook: Difficult and Costly*, NTCA, <http://www.ntca.org/july/august-2010/retransmission-consent-outlook-difficult-and-costly.html> (last visited Sept. 29, 2013) (noting that negotiations in recent years have resulted in bitter stalemates that ultimately deprived MVPDs and their subscribers of access to highly desired programming; for example in 2006, Mediacom lost twenty-two stations for two months while its negotiations with Sinclair were pending). “Mediacom reportedly shed over 30,000 customers during and after the dispute.” *Id.*

retransmission consent. In recent years, it has become apparent that broadcast companies are able to influence their local station affiliates in the way they conduct their business with MVPDs.⁸⁸ These market realities increase the influence of broadcast companies beyond just the markets they control and the local stations they directly own, which buttresses their ability to dictate the terms of negotiations.⁸⁹

Broadcast companies not only get their bargaining power from their own local broadcast stations; they also are able to consolidate their influence by combining with local station affiliates that they do not directly own. Broadcast companies do this in two ways: (1) by fashioning local marketing agreements (“LMAs”) with competing broadcast stations other companies own; and (2) by using their bargaining power to influence the conduct of their affiliated local broadcast stations during retransmission consent negotiations.⁹⁰

In the context of retransmission consent, LMAs refer to contracts that allow one local broadcast station to negotiate retransmission consent for another or multiple local broadcast stations in the same market.⁹¹ For example, Sinclair, a conglomerate operating various local broadcast stations in numerous localities, entered into LMAs that gave it the exclusive right to negotiate on behalf of two of the top four stations in several designated market areas (“DMAs”) across the country.⁹² In entering into LMAs, local broadcast stations further solidify their bargaining power by eliminating competition with other broadcast stations.⁹³ This then allows local broadcast stations to extract supracompetitive carriage rates from MVPDs because MVPDs could lose the consent of multiple stations operating in a DMA if they do not accede to the rates.⁹⁴ A study conducted

88. Brian Stelter, *Broadcasters Battling for Cable Fees*, N.Y. TIMES (Dec. 29, 2009), <http://www.nytimes.com/2009/12/29/business/media/29cable.html>; Michael Malone, *Moonves: Give Us Our Retrans Cut*, BROAD. & CABLE (Mar. 1, 2010), http://www.broadcastingcable.com/article/449429-Moonves_Give_Us_Our_Retrans_Cut.php; SALOP ET AL., *supra* note 7, at para. 111.

89. See SALOP ET AL., *supra* note 7, at paras. 111–12.

90. See *id.* at paras. 107–08.

91. Margaret L. Tobey & Phuong N. Pham, *The Broadcast Ownership Provisions of the Telecommunications Act of 1996*, 14 COMM. LAW 6, 8 (1996) (noting that the traditional meaning of LMAs outside the context of retransmission consent is those agreements that allow a broker to operate the station of another broadcast licensee); SALOP ET AL., *supra* note 7, at para. 108. It should also be noted that ownership of two of the top-four local broadcast stations is not sanctioned by the FCC, see 47 C.F.R. § 73.3555(b) (2012), so these retransmission-consent LMAs are a way to avoid violating the rule since, technically, LMAs do not equate to ownership. Further, LMAs of this type may violate antitrust laws. See *United States v. Tex. TV, Inc.*, Civ. No. C-96-64, slip op. at 7, 9 (S.D. Tex. Feb. 2, 1996).

92. SALOP ET AL., *supra* note 7, at para. 108.

93. *Id.*

94. See *Ex Parte* Comments of Suddenlink Commc’ns in Support of Mediacom Commc’ns Corp.’s Retransmission Consent Complaint at 5–6, *Mediacom Commc’ns Corp. v. Sinclair Broad. Grp., Inc.*, CSR Nos. 8233-C & 8234-M (rel. Dec. 14, 2009) (“[W]here a single entity controls retransmission consent negotiations for more than one ‘Big 4’ station

by Professor William Rogerson of Northwestern University identified fifty-seven instances where Big Four local stations operated under some kind of LMA, which made it “very likely [for those stations] to operate under joint control for purposes of negotiating retransmission consent agreements.”⁹⁵ At the macro level, “of the 210 DMAs, fully 78, or more than one third of them have one or two pairs of jointly owned or controlled Big 4 stations.”⁹⁶

In the second scenario, broadcast networks increasingly have used their leverage in their affiliates—those stations that they do not own but receive their programming—to extract various economic benefits. There are a total of 791 independently owned local broadcast stations licensed by the FCC. As can be seen in Table 2, ABC is affiliated to ninety-one, NBC to 108, Fox to sixty-six, and CBS to ninety-seven independently owned local broadcast stations.

Table 2: Survey of Major Broadcast Networks’ Station Ownership and Affiliations⁹⁷

	Total Affiliated Local Broadcast Stations to Big Four Networks	Total Broadcast Stations Directly Owned and Operated by the Big Four
ABC	91	8
CBS	97	14
FOX	66	17
NBC	108	10
Grand Total	362	49

The leverage that the Big Four networks have on local broadcast stations is easy to see. Although they directly own and operate only forty-nine local stations, 362 of the 791 (about forty-five percent) total stations owned and operated by other companies are affiliated with them.⁹⁸ Four broadcast networks essentially dominate almost half of the stations owned and operated by forty-three independent companies.

in a single market, the average retransmission consent fees Suddenlink pays for such entity’s ‘Big 4’ stations . . . is 21.6% higher than the average retransmission consent fees Suddenlink pays for other ‘Big 4’ stations in those same markets.”)

95. WILLIAM P. ROGERSON, JOINT CONTROL OR OWNERSHIP OF MULTIPLE BIG 4 BROADCASTERS IN THE SAME MARKET AND ITS EFFECT ON RETRANSMISSION CONSENT FEES 6 (2010) (footnote omitted) (submitted as an attachment to Comments of Am. Cable Ass’n at app. A, Petition for Rulemaking to Amend the Comm’n’s Rules Governing Retransmission Consent, MB 10-71 (rel. May 18, 2010), available at <http://apps.fcc.gov/ecfs/document/view?id=7020461924>).

96. *Id.* at 7.

97. The sums presented in this table are a consolidation of the data available at Station Index. *Television Stations by Owner*, STATION INDEX: THE BROAD. WEBSITE, <http://www.stationindex.com/tv/by-owner> (last visited Sept. 29, 2013). The numbers for CBS and NBC increase if their ownership of CW and Telemundo, respectively, is accounted for. A similar increase occurs if Fox’s ownership stake in MyNetworkTV (considered independent for the purposes of this survey) is incorporated into the analysis.

98. 362 (total affiliations of the Big Four) divided by 791 (total number of local broadcast stations not directly owned and operated by the Big Four). See *supra* Table 2.

Large broadcast networks, especially the Big Four, have successfully involved themselves in the retransmission consent negotiations of their independent local affiliates.⁹⁹ The Big Four have started demanding a slice of their affiliates' retransmission fees.¹⁰⁰ Fox also was able to contractually procure veto power over Sinclair's retransmission consent and used it to pressure Sinclair to demand higher retransmission fees to subsequently share with Fox.¹⁰¹ It seems that the rationale for demanding a slice of retransmission consent fees collected by local broadcast affiliates stems from the Big Four's view that their affiliates should share the cost of programming that they receive.¹⁰² Especially because advertising revenues have started shifting to the Internet in recent years,¹⁰³ this demand may even be considered reasonable, an inference supported by the fact that a considerable number of Big Four affiliates actually have been willing to share their retransmission consent fees.¹⁰⁴ However, Fox, for example, not only demands a slice of retransmission fees as they are collected by its affiliates.¹⁰⁵ Fox sets a certain dollar amount that must be paid by its affiliates regardless of the fact that its affiliates' current retransmission fees would not cover, or would only barely cover, that dollar amount.¹⁰⁶ Under this paradigm, a Big Four network actually inserts itself to the business transactions of its affiliates and MVPDs. By threatening to shift affiliation to another local broadcast station if its unyielding stance is not complied with,¹⁰⁷ Fox, at the very least, incentivizes its affiliates to demand higher retransmission fees from MVPDs. If broadcast networks have this much bargaining power over their affiliates, to the extent that they can demand

99. SALOP ET AL., *supra* note 7, at para. 111.

100. Stelter, *supra* note 88; SALOP ET AL., *supra* note 7, at para. 111.

101. SALOP ET AL., *supra* note 7, at para. 111 n.130 (citing *Ex Parte* Comments of Time Warner Cable Inc. in Support of Mediacom Commc'ns Corp.'s Retransmission Consent Complaint at 3-4, Mediacom Commc'ns Corp. v. Sinclair Broad. Grp., Inc., CSR Nos. 8233-C & 8234-M (rel. Dec 9, 2009)) (stating that "FOX apparently based this veto right on a contractual provision in its affiliation contracts").

102. See Joe Flint, *Fox TV Demands Share of Stations' Retransmission Fees*, L.A. TIMES (Feb. 12, 2011), <http://articles.latimes.com/2011/feb/12/business/la-fi-ct-fox-affiliates-20110212>.

103. See Suzanne Vranica & William Launder, *Signals Weak for TV-Ad Market*, WALL ST. J. (Mar. 24, 2013, 7:36 PM), <http://online.wsj.com/news/articles/SB10001424127887324373204578377032005060920>.

104. See Brian Stelter, *Networks Want Slices of a New Pie*, N.Y. TIMES (July 3, 2011), http://www.nytimes.com/2011/07/04/business/media/04retrans.html?_r=1 & (indicating that ABC, at the time of the article's publication, was able to complete negotiations with more than fifty percent of its affiliates); Joe Strupp, *Fox Fee Demand Driving Away Affiliates*, MEDIA MATTERS (Aug. 1, 2011, 12:43 PM), <http://mediamatters.org/blog/2011/08/01/fox-fee-demand-driving-away-affiliates/136150> (stating that even after losing certain affiliates because of its fee demand, Fox was able to find other stations as replacement).

105. See Stelter, *supra* note 104.

106. *Id.*

107. *Id.* ("[I]f Fox's proposal did not work for some stations, the network would 'pursue different distribution channels.'").

profit shares over signals that they do not even own,¹⁰⁸ it is not improbable that in the future they might also have the power to pressure their affiliates to condition their consent on the carriage of the broadcast networks' affiliated cable programming.

D. Some Relevant Examples

To demonstrate the reality of coercive wholesale bundling beyond mere hypotheticals, below are examples of alleged past and recent practices of local broadcast stations owned by major media companies while conducting retransmission consent negotiations with MVPDs.¹⁰⁹

Some media companies give their local broadcast stations' retransmission consent only upon the MVPDs' acceptance of additional cable channels tied to broadcast programming. For instance, in March 2004, Viacom was able to tie all of its cable networks to the carriage of fifteen CBS local broadcast stations.¹¹⁰ Certain commenters also alleged that NBC Universal allowed its local broadcast stations' retransmission consent only after cable providers and other MVPDs purchased Bravo, MSNBC, and SyFy, among other NBC-affiliated cable networks.¹¹¹

The more coercive practice, on the other hand, is that which not only requires the carriage of bundled channels but also the placement of those bundles in specific MVPD package tiers.¹¹² For example, Disney demands the carriage of the Disney Channel, ABC News Now, various ESPN services, and Toon, among others, on the basic tier as a condition of obtaining retransmission consent from local ABC stations and affiliates.¹¹³ Similarly, Fox forces many smaller operators to carry, and pay for, "unwanted satellite programming" like the Fox Digital Nets, FX, Fox Health Channel, the new Fox "Fuel" extreme sports channel, and the

108. *Id.* at paras. 113–14.

109. The examples that follow are demonstrative rather than exhaustive.

110. SALOP ET AL., *supra* note 7, at para. 101; see Steve Donohue, *EchoStar Loses Viacom Channels*, MULTICHANNEL NEWS (Mar. 8, 2004, 3:14 PM), http://www.multichannel.com/article/67945-EchoStar_Loses_Viacom_Channels.php. CBS and Viacom are sister companies. See *supra* notes 64–66.

111. Comments of the Am. Cable Ass'n at 7, Review of the Comm'n's Program Access Rules & Examination of Programming Tying Arrangements, MB Dkt. No. 07-198 (rel. Jan. 4, 2008), available at <http://apps.fcc.gov/ecfs/document/view?id=6519821729>.

112. For further explanation on why this practice is more coercive, see *infra* Parts IV.A.1 & V.A and accompanying notes.

113. Comments of the Am. Cable Ass'n at 5–6, Annual Assessment of the Status of Competition in the Mkt. for the Delivery of Video Programming, MB Dkt. No. 03-172 (rel. Sept. 12, 2003) [hereinafter *ACA Comments*], available at <http://apps.fcc.gov/ecfs/document/view?id=6515082093>.

National Geographic Channel before it consents to the carriage of its local broadcast stations' signals.¹¹⁴

Meanwhile, alternatives to bundles have also been offered to MVPDs during retransmission consent negotiations, but instead of being a viable option, the terms of the alternatives tend to be geared towards coercing MVPDs to accept the bundle. As far back as 2003, Mediacom, an MVPD, submitted petitions to the FCC concerning forced bundling.¹¹⁵ In its 2012 comments, Mediacom stated that "the owners of the most popular programming services often use their market power to force MVPDs to purchase and carry unwanted networks by bundling them together with desired 'marquee' networks at a 'discounted' price."¹¹⁶ Further, Mediacom claimed that the terms of this bundle, touted as having a "discounted" price tag, were such that alternative arrangements were substantially less economical.¹¹⁷ Thus, Mediacom was effectively coerced into accepting the bundle and its terms.¹¹⁸ In one instance, when "Mediacom asked for an 'unbundled' price for a programmer's 'strong' network, the price proposal it received raised the percentage of future rate increases (which already were in the double digits) by fifty percent."¹¹⁹ From a business perspective, Mediacom had to accept the bundled deal even though its subscribers had limited interest in the additional networks.¹²⁰ Mediacom not only had to carry these additional networks, but also had to place them into a particular service tier.¹²¹

For less-established and smaller MVPDs, the terms of negotiations can be all the more skewed in favor of broadcast stations and media companies. The American Cable Association ("ACA") stated that "smaller cable operators are paying, on average, retransmission consent fees that are at least double the amount of larger operators," basing this conclusion on a study it commissioned to Professor William Rogerson.¹²² In that study, Professor Rogerson analyzed publicly available data compiled by Kagan

114. *ACA Comments*, *supra* note 113, at 6. For a detailed discussion of how this process transpires, see generally Am. Cable Ass'n Petition for Inquiry into Retransmission Consent Practices First Supplement, Proceeding No. PRM02MB (rel. Dec. 30, 2002). See also Comments of the Am. Cable Ass'n, Carriage of Digital TV Broad. Signals—App'n of Network Non-Duplication, Syndicated Exclusivity & Sports Blackout Rules to Satellite Retransmission of Broad. Signals at 8–10, CS Dkt. Nos. 98-120, 00-96 & 00-2 (rel. June 8, 2001).

115. *Mediacom Comments*, *supra* note 72, at i.

116. *Id.* at ii.

117. *Id.*

118. *Id.*

119. *Id.*

120. *Id.*

121. *Id.* at 4.

122. Comments of the Am. Cable Ass'n at 5–6, Petition for Rulemaking to Amend the Comm'n's Rules Governing Retransmission Consent, MB Dkt. No. 10-71 (rel. May 19, 2010).

Research on retransmission fees paid by direct broadcast satellite providers (like DirecTV), cable (like Time Warner), and telecommunications companies (like AT&T).¹²³ The study found that “[direct broadcast satellite] providers pay retransmission consent fees that on average are 79% higher than those paid by large cable operators and [telecommunications companies] pay fees that are 114% higher than those paid by large cable operators.”¹²⁴ Professor Rogerson then extrapolated this data based on anecdotes of ACA members, and he argued that small- and medium-sized cable operators pay retransmission fees closer to what telecommunications companies are charged—a full 114% more than what large cable operators are charged.¹²⁵ ACA also indicated its knowledge that some of its members are actually charged at \$0.75 per subscriber per month, which is \$0.45 higher than what, on average, telecommunications companies are charged.¹²⁶

Because of these practices, lawsuits outside the FCC have also been lodged against media companies and their local broadcast stations. Most recently, Cablevision filed an antitrust lawsuit against Viacom, alleging (among other things) that “Viacom abused its market power over commercially critical networks, including must-have networks such as Nickelodeon, Comedy Central, and MTV, to coerce Cablevision into carrying the 14 far less popular ancillary channels,” such as Palladia, MTV Hits, and VH1 Classic.¹²⁷

IV. ANALYSIS

A. Economic Analysis of the Effects of Wholesale Bundling

1. The Basics: Supply, Demand, and Consequent Welfare Reduction

To accurately portray where MVPD subscribers stand in the big picture of retransmission consent, they must be seen through the lens of economics. In a free market economy, demand for a product would dictate

123. WILLIAM P. ROGERSON, *THE ECONOMIC EFFECTS OF PRICE DISCRIMINATION IN RETRANSMISSION CONSENT AGREEMENTS* 10 (2010) (submitted as an attachment to Comments of the Am. Cable Ass’n, Petition for Rulemaking to Amend the Comm’n’s Rules Governing Retransmission Consent, MB Dkt. No. 10-71 (rel. May 19, 2010)).

124. *Id.* at 12.

125. *Id.* at 12–13.

126. *Id.* at 13.

127. *Cablevision Files Federal Antitrust Lawsuit Against Viacom for Illegally Forcing Purchase of Programming Services*, CABLEVISION (Feb. 26, 2013), <http://www.cablevision.com/pdf/news/022613.pdf>. Note that Viacom only supplies cable channels, *see supra* Part III.A, so unlike local broadcast networks, it does not fall squarely under the retransmission consent regime, *see id.* This example is included here to demonstrate the general premise of bundling.

how much of such product is produced and supplied.¹²⁸ In the context of multichannel television, MVPDs would only supply channels that have sufficient demand to justify the cost. So if subscribers were willing and able to pay for Disney Channel, MVPDs that want to maximize their profits would include that channel in their package offerings. The difficulty with the business model of MVPDs is that they themselves do not “produce” the channels and the programming contained in them; they are mere intermediaries between the broadcast companies and the viewers.¹²⁹ As intermediaries, they would presumably purchase channels that their subscribers demand, but this becomes impossible during retransmission consent negotiations when broadcast companies demand wholesale bundling.¹³⁰

Ford and Koutsky described as “defective” the delivery of programming to consumers because the supplied channels do not wholly reflect the preferences of the market.¹³¹ Instead, “third parties,” in this case, broadcast networks, more often than not influence the delivery decisions of cable providers and other MVPDs.¹³² Because of wholesale bundling, the delivery of channels to subscribers does not accurately reflect market demand. Delivery of programming is coerced by the broadcast network when the broadcast network “increase[s] the costs of the MVPD for carrying Network A [an in-demand channel] if it does not distribute Network B [a non-demanded channel] on the same tier.”¹³³ The MVPD would typically choose (in order to avoid additional costs¹³⁴) to purchase and distribute a bundle of programming that is not reflective of consumers’ actual demand.¹³⁵ If Network A is the only channel that consumers

128. WILLIAM A. MCEACHERN, *CONTEMPORARY ECONOMICS* 101, 134 (3d ed. 2013) (stating that demand indicates “how much of a product consumers are both willing and able to buy at each price during a given time period, other things constant” and that supply indicates “how much of a good producers are willing and able to offer for sale per period at each price, other things constant”) (emphases deleted).

129. An intermediary is “any entity that enables the communication of information from one party to another.” Thomas F. Cotter, *Some Observations on the Law and Economics of Intermediaries*, 2006 MICH. ST. L. REV. 67, 68 (2006).

130. Intermediaries, because of the very nature of their business structure, have to successfully balance the demands and interests of producers, from which they purchase products, and consumers, to whom they deliver the products, or else they risk losing a portion of both producers and consumers. *Id.* at 70–71. In an imperfect market, of which the regulated market of multichannel video is an example, there is a “risk that intermediaries will bias or skew information in favor of some producers.” *Id.* at 71.

131. Ford & Koutsky, *supra* note 8, at 1.

132. *See id.* at 5. “MVPDs do not create their tiers of programming solely by reference to what consumers want to watch (or not watch)—an MVPD establishes tiers in order to maximize profits.” *Id.* The implication here is that they can maximize profits through acceding to demands of broadcasters regarding channel and tier placement.

133. *Id.* at 8.

134. *Id.*

135. *Id.* at 12.

demand, the market would direct MVPDs to purchase only the rights to Network A so that it can be delivered to the consumers, whose welfare is ultimately maximized.¹³⁶ Since the market is distorted at the wholesale level, it results in the carriage of Network A, conditioned on the carriage of Network B. The distortion is further exacerbated because Networks A and B are placed in the same service tier, “forcing” MVPD subscribers to have both channels in the package they purchase.¹³⁷

Therefore, bundling practices result in the denial to consumers of access to programming of their choice.¹³⁸ Instead, programming is dictated, or at least substantially affected, by the decisions of MVPDs and broadcast networks in the wholesale level—decisions that are compelled by the retransmission consent practices of broadcast networks.¹³⁹

It should be noted, though, that some economic articles have argued from an economic-efficiency perspective that the bundling of networks actually benefits consumers. Professor Thom Lambert of the University of Missouri School of Law argued that in the aggregate and in the long-run, bundling has a positive welfare effect on consumers because it encourages the creation and subsequent delivery of more diverse channels in a way that is not possible in the absence of wholesale bundling.¹⁴⁰ The argument is that bundling allows networks to produce and deliver programming that might not have a sufficient subscriber base to justify its production.¹⁴¹ Professor Lambert posited that bundling makes it possible for networks to produce this additional programming because bundling enables MVPDs to deliver it to consumers who place greater value on desired programming within the bundle than the overall price of the bundle itself.¹⁴² However, Professor Lambert also conceded in his discussion that bundling results in higher, surplus-extractive prices that broadcast networks are able to charge for bundled channels than for independently offered channels.¹⁴³

Professors Crawford and Cullen of the University of Arizona, in an empirical study, found that full a la carte pricing of channels decreases the overall welfare of society because the incremental welfare that consumers gain from an a la carte market does not outweigh the incremental welfare

136. This is basic demand-supply analysis. “[C]onsumer welfare unambiguously rises if the consumer can avoid purchasing undesirable channels as part of a bundle.” *Id.*

137. *Id.* at 37, 40.

138. See App’ns of Comcast Corp., General Electric Co. & NBC Universal, Inc., *Memorandum Opinion and Order*, FCC 11-4, paras. 131–40 (2011), available at <http://transition.fcc.gov/FCC-11-4.pdf>.

139. See *supra* Part III.B (discussing Ford and Koutsky’s “avoided additional costs” paradigm).

140. Thom Lambert, *The Efficiency of Cable Bundling*, TRUTH ON THE MARKET (July 10, 2011), <http://truthonthemarket.com>; see also Gregory S. Crawford & Joseph Cullen, *Bundling, Product Choice, and Efficiency: Should Cable Television Networks be Offered A La Carte?*, 19 INFO. ECON. & POL’Y 379, 391 (2007).

141. Lambert, *supra* note 140.

142. *Id.*

143. *Id.*

loss suffered by networks.¹⁴⁴ At the end of their analysis, however, the professors concluded that consumer welfare is higher under an a la carte pricing model than under the bundling model.¹⁴⁵ This Note is not advocating for the implementation of a full a la carte regime;¹⁴⁶ hence, the macro-level welfare loss estimated by the professors will likely not arise if the recommendations made in this Note were implemented.

2. Effects-Side Analysis: Practical Consequences of Bundling and Their Economic Bases

a. Increased Operating Costs, Market Inefficiency, and Dampening of Competition

The consequences of wholesale bundling are more than illusory. “Bundling limits the resources and channel capacity that MVPDs have available to carry independent networks” and other networks in general.¹⁴⁷ Channel carriage costs money, and MVPDs have to allocate their respective channel capacities among various channels. Therefore, when an MVPD is required to carry Network B just to have the rights to carry Network A, the allocation becomes inefficient because Network B displaces other in-demand networks.¹⁴⁸ The MVPD then suffers a loss since another in-demand, more profitable channel could have taken Network B’s place had the broadcast network not forced the bundle upon the MVPD.¹⁴⁹ This means that the return to MVPDs of carrying Network B does not justify its carriage “cost”—money paid plus the foregone opportunity of using the capacity for a more productive endeavor.¹⁵⁰

The effect may be even more pronounced in smaller MVPDs that do not have as much channel capacity as large MVPDs. In their case, there may be a scenario where Network B occupies the last slot in their carriage

144. Crawford & Cullen, *supra* note 140, at 398, 400.

145. *Id.*

146. See *infra* Part V and accompanying notes.

147. *Mediacom Comments*, *supra* note 72, at 6.

148. In the example above, inefficiency results since Network B simply is not the best use of the MVPD’s resources; there remain exploitable opportunities that would produce the highest return for the MVPD. Arguing that the MVPD has enough capacity to carry Network B while still carrying all in-demand channels does not eliminate the loss because Network B’s placement in the channel lineup is inefficient nonetheless. The MVPD could have chosen another channel to carry or not use the capacity altogether, whichever the market dictates. See PAUL KRUGMAN ET AL., *MACROECONOMICS* 13 (Charles Linsmeyer et al. eds., 2d ed. 2010) (“Economic efficiency is achieved when all opportunities are exploited to make everyone better off.”); see also Ford & Koutsky, *supra* note 8, at 9.

149. See KRUGMAN ET AL., *supra* note 148, at 13.

150. See *id.* at 7. This is a form of opportunity cost, i.e., the cost of having to forego one thing in order to get something else. *Id.*

capacity, precluding the carriage of other channels their subscribers demand. To remedy this, they would have to increase their capacity by improving their technical infrastructure to avoid the loss of the more profitable channel from their packages, increasing their operating costs substantially. Such costs would then be passed on to consumers. A corollary result is increased prices for subscribers who have to receive and pay for programming that they did not demand in the first place.¹⁵¹

Market competition is also harmed because “bundling practices . . . adversely impact the ability of smaller MVPDs to compete with larger distributors.”¹⁵² Bundling forces startup and smaller MVPDs to deliver programming that is not in line with consumer demand, resulting in program delivery and prices that are not wholly reflective of an efficient market.¹⁵³ This is because smaller MVPDs, in order to operate efficiently within specific geographic areas with more specialized demographics, would normally have to “fashion[] service offerings more responsive to local needs and interests.”¹⁵⁴ This specialized service, however, would never be possible if these small and startup MVPDs are not allowed to carry the niche and specific channels that their subscribers demand unless other channels are also carried.

b. Inflated Prices Passed on to Subscribers

Increased prices of cable services borne by consumers each year as a result of bundling have been economically modeled by Professor Salop, et al., in a study submitted to the FCC at the request of Time Warner Cable,¹⁵⁵ and by Professor Rogerson, in a study attached to an ACA submission to the FCC.¹⁵⁶ To understand the basic framework, know first that television programming, whether cable- or broadcast-based, are “substitutes” in some ways.¹⁵⁷ Substitutes are products that directly compete with each other in a way that the demand for one product is

151. Ford & Koutsky, *supra* note 8, at 6; *see also Mediacom Comments, supra* note 72, at 6.

152. *Mediacom Comments, supra* note 72, at 6.

153. Here, small MVPDs can still be made “better off” if they can choose the niche programming they need, *see* KRUGMAN ET AL., *supra* note 148, at 13, driving down their operating costs and enabling them to compete more effectively with giants in the industry. *See Mediacom Comments, supra* note 72, at 6.

154. *Mediacom Comments, supra* note 72, at 6.

155. SALOP ET AL., *supra* note 7. For a general discussion of commodity bundling, *see* Mark Armstrong, *A More General Theory of Commodity Bundling* (Oxford Univ. Econ. Series No. 624, Sept. 2012), *available at* <http://www.economics.ox.ac.uk/materials/papers/12264/paper624.pdf>.

156. ROGERSON, *supra* note 123.

157. *See id.* at 7–8.

affected when the price of its substitute is changed.¹⁵⁸ In terms of channel lineups, one programming, whatever its nature and character, can imperfectly substitute another on an MVPD's package.¹⁵⁹ For example, when a media company increases the carriage fee for Network A (a cable network), the demand for that network would lessen and shift to the same media company's Network B (a broadcast network)—a substitute for and a competitor of Network A.¹⁶⁰ This cannibalization of demand prevents the media company from increasing the price of one of its networks without the consequence of having MVPDs drop that network in favor of another sister network.¹⁶¹

But this cannibalization is avoided when the media company conditions its local station's consent on the carriage of its cable networks. In this scenario, the substitutability of the local station's broadcast programming for the cable networks is eliminated, and now the two kinds of programming would not have to compete against each other.¹⁶² So if Network A and Network B are bundled together, the media company can safely increase the price of Network A within the bundle because subscribers cannot just shift to Network B as a substitute.¹⁶³ That option is now obliterated because it now is impossible for Network B to be purchased in lieu of Network A—both should now be purchased in tandem or not at all.

The MVPD, meanwhile, cannot drop the bundle altogether, especially if Network A contains in-demand programming, for doing so creates the risk of losing subscribers who prefer to have Network A in their package.¹⁶⁴ Because bundling eliminates the shifting of demand from one network to the other, it enables the media company to charge higher prices for both the local broadcast programming and the cable network in a way

158. IRVIN B. TUCKER, *SURVEY OF ECONOMICS* 50 (6th ed. 2009). According to this theory, if Coke increases its price, all things constant and without regard to consumer loyalty and other psychic factors, demand for Pepsi would increase as it is a substitute for Coke. *See id.*

159. Imperfect substitutes are products that can be substituted with each other but only to a certain extent, which means, to simplify, that there comes a point where no amount of price reduction for Product A will induce consumers to purchase more of Product B. *See* SAMPAT MUKHERJEE, *MODERN ECONOMIC THEORY* 293 (2007).

160. *See* TUCKER, *supra* note 158.

161. For a marginal-profit analysis explaining how media companies can charge inflated prices through bundling, see ROGERSON, *supra* note 95, at 7–10.

162. This non-competition through bundling allows the media company to extract fees from the full surplus of adding the entire bundle to the MVPD's portfolio, which is higher than if the fees are extracted from just the surplus of adding the last programming the MVPD chooses to purchase from that media company. *Id.* at 9.

163. “[T]he MVPD would be willing to pay a higher total price for the package than for each type of programming separately” when the package contains substitutable networks and if that package is offered in an all-or-nothing basis. SALOP ET AL., *supra* note 7, at para. 102.

164. *See infra* Table 3.

that is not possible if each network is offered independently of each other.¹⁶⁵ Higher prices are ultimately passed through to subscribers in the form of higher subscription fees. In fact, a recent study estimated that “about 50 percent in programming costs, [which include increases in retransmission fees], were passed through to subscribers.”¹⁶⁶

B. The Arguments of Local Broadcast Stations and the Media Companies Owning or Affiliated with Them

From the local broadcast stations’ perspective, or, more specifically, from the perspective of the media companies that own them, the retransmission consent process is not broken because “the process is operating as Congress intended.”¹⁶⁷ As Disney contends, the bargaining power of local broadcast networks is in no way weightier than that of MVPDs, and “it would be incorrect for the Commission to assume that [there is] a shift in the bargaining power [in favor] of broadcasters.”¹⁶⁸ If there is a shift in bargaining leverage, Disney claims that it is not the broadcast networks but the market, in the form of increased MVPD competition, which necessitated the shift.¹⁶⁹ As to bundling arrangements,

165. See ROGERSON, *supra* note 95, at 8–9; SALOP ET AL., *supra* note 7, at paras. 104–05. “[W]hen sellers offer substitute products, the negotiated discount overturns the innate substitutability of products, inducing firms to raise prices[,] . . . which harms consumers and overall welfare.” Armstrong, *supra* note 155, at 3; see also Aaron S. Edlin & Daniel L. Rubinfeld, *The Bundling of Academic Journals*, 95 AM. ECON. REV. 441, 444 (2005) (arguing that a firm selling its products as a bundle “effectively stop[s] those products] from competing with each other, which substitutes will otherwise do even when sold by the same firm,” and enables the firm to charge a higher price).

166. George S. Ford & John D. Jackson, *Horizontal Concentration and Vertical Integration in the Cable Television Industry*, 12 REV. INDUS. ORG. 501, 513–14 (1997); ROGERSON, *supra* note 95, at 10.

167. Comments of the Walt Disney Co. at 8, Amendment of the Comm’n’s Rules Related to Retransmission Consent, MB Dkt. No. 10-71 (rel. May 27, 2011) [hereinafter *Disney Comments*].

168. *Id.*

169. *Id.* at 9. On the more extreme side, the National Association of Broadcasters (NAB) claims that bargaining power is still on the side of MVPDs. NAB argued that, no matter how small an MVPD is, the fact that the number of subscribers that it may serve is unlimited tips the bargaining power to that MVPD. See Reply Comments of the Nat’l Ass’n of Broad. at 18–19, Amendment of the Comm’n’s Rules Related to Retransmission Consent, MB Dkt. No. 10-71 (rel. June 3, 2010) [hereinafter *NAB Comments*]. NAB stated that it is not uncommon that broadcast stations would “negotiat[e] with a single MVPD that controls a majority—and sometimes an overwhelming majority—of MVPD households in a local market.” *Id.* at 19. This power is further strengthened, NAB emphasized, by the practice of MVPDs to cluster based on the regions they serve, therefore belying the argument that small MVPDs and MVPDs in general have lost their bargaining influence during retransmission consent negotiations. *Id.* at 18–19. But MVPD clustering can be seen as just a reprisal to the broadcast networks’ combination and co-operation practices discussed in Part III.B, which tend to drive up retransmission consent rates. See SALOP ET AL., *supra* note 7, at para. 108.

the broadcast network's position is that payment in kind, *i.e.*, carriage of additional channels as consideration for retransmission consent, is within Congress's expectations and intent when the 1992 Cable TV Act was passed.¹⁷⁰

Table 3: Percentage of Consumers Who Would Switch Provider if Their MVPD Provider Stopped Offering Certain Channels¹⁷¹

Network	% of Consumers Who Would Switch
NBC	52
CBS	52
ABC	51
FOX	51
Discovery Channel	40
The History Channel	36
TNT	35
TBS	34
ESPN	33
CNN	32
TLC	31
A&E	31
Food Network	30
Fox News Channel	30

Disney's assertion that it is not the broadcast networks' and the current regime's fault that MVPDs are losing their bargaining power in the wholesale market has some truth. Cable providers, for example, now compete with DBS and broadband MVPDs, among others.¹⁷² In fact, projections show that by 2018, cable MVPDs will have only 57.5% of total television subscribers, and non-cable MVPDs will dominate the rest of the

MVPD clustering just evens up the field and restores, at least to some extent, the bargaining equilibrium between MVPDs and local broadcast stations.

170. *Disney Comments, supra* 167, at 13. NAB also highlighted a prior FCC statement to buttress this argument: "Proposals for carriage conditioned on carriage of any other programming, such as . . . another broadcast station either in the same or a different market," *i.e.*, forced bundles, are "presumptively . . . consistent with competitive marketplace considerations and the good faith negotiation requirement." *NAB Comments, supra* note 169, at 22.

171. SALOP ET AL., *supra* note 7, at 39 fig. 6 (reprinted with the authors' permission).

172. See CHARLES B. GOLDFARB, CONG. RESEARCH SERV., RL34078, RETRANSMISSION CONSENT AND OTHER FEDERAL RULES AFFECTING PROGRAMMER-DISTRIBUTOR NEGOTIATIONS: ISSUES FOR CONGRESS 11 (2007) ("Today, programmers can distribute their product . . . through traditional broadcast television stations[,] cable operators, . . . direct broadcast satellite operators and other satellite companies, the new multichannel video offerings of the major telephone companies, cable 'overbuilders,' on-line video streams, and even cellular telephones.").

pie.¹⁷³ But the fact that broadcast networks did not cause the increasing competition in the MVPD market does not authorize broadcasters to act in a coercive manner.

Looking at Table 3 above, no matter how vigorously broadcast networks deny that they have the upper hand during retransmission consent negotiations, the figures show in plain view how they can leverage their local programming to get their way. To illustrate, it was found that fifty-two percent of subscribers would switch to another MVPD if either NBC's or CBS's local programming were dropped by their current MVPDs from their portfolios. The results in Table 3 are certainly indicative of the broadcast networks' market and bargaining power—a power that is commonly wielded to coerce MVPDs to consent to unfair and non-market-driven bundles.

Sinclair, aside from concurring with Disney's position that the retransmission consent process is working as intended,¹⁷⁴ also claims that reforming the process would do more harm than good to MVPD subscribers.¹⁷⁵ It contends that market-driven compensation is the primary preventer of the migration of “premier programs away from free over-the-air broadcasting to the detriment of the more than approximately ten million U.S. households who continue to watch television exclusively in such a manner.”¹⁷⁶ Therefore, it argued, the current regime is actually very beneficial for those who are unwilling or unable to pay for MVPD subscription—viewers who, according to Sinclair, were not accounted for by the MVPDs' petition and supporting arguments.¹⁷⁷ Sinclair also pointed out that the concern over the loss of access to broadcast programming resulting from retransmission negotiation impasses is both temporary and rare, lessening the urgency of any FCC intervention.¹⁷⁸

Sinclair is correct that market-driven compensation in the form of bundling, cash, or a combination of both is proper and economically beneficial for subscribers in general, and this Note does not argue that bundling is per se negative. It is the practice of non-market-driven bundling

173. Projections were based on the Commission's 2nd and 6th Annual Price Reports and SNL Kagan's Basic & HD Cable Network Economics (2009). SALOP ET AL., *supra* note 7, at 41 fig. 7.

174. Comments of Sinclair Broad. Grp., Inc. at 2–4, Amendment of the Comm'n's Rules Related to Retransmission Consent, MB Dkt. No. 10-71 (rel. May 18, 2011) [hereinafter *Sinclair Comments*].

175. *Id.* at 5–6.

176. *Id.* at 6 n.8.

177. *Id.* at 6.

178. *Id.* The rarity of blackouts is also an arguable point because there are thirty-one documented, highly publicized blackouts from the year 2000 to 2009 involving retransmission consent disputes. See SALOP ET AL., *supra* note 7, at paras. 16–17. This number, the authors argued, is understated given that these blackouts account only for the most contentious and the most publicized, leaving open the number of other impasses that settled early and impasses that were not publicized. *Id.*

that creates detrimental effects to the market and to subscribers. When the test of whether a channel is delivered to consumers wholly depends on a channel's affiliation with a local broadcast station, with little regard to whether that channel is actually demanded by subscribers, the market becomes defective and subscribers end up with diminished welfare from multichannel television.¹⁷⁹ As to the urgency of FCC intervention, Sinclair's argument fails because retransmission impasses should not be the primary bases of further regulation. Looking at the frequency of negotiation impasses as an indicator of the need for intervention is improper because an impasse is a result, not the cause, of the current regime's inequities.¹⁸⁰ Further, even were blackouts rare, their effects to subscribers, who are precluded from watching their desired programming,¹⁸¹ and to MVPDs, which are either coerced to pay for higher retransmission fees passed on to consumers¹⁸² or to shed subscribers who are irked by blackouts,¹⁸³ indicate that rarity does not necessarily minimize harms occasioned by blackouts.¹⁸⁴ Ultimately, the fairness and substance of the current retransmission consent regime should be the driving force in determining whether FCC intervention is needed.

V. RECOMMENDATIONS

A. *Singling Out the Bad Apples*

Not all kinds of bundling practices are inherently coercive and welfare-reducing.¹⁸⁵ Bundling in good faith, without coercion, and consistent with a competitive marketplace can be allowed because that practice still permits MVPDs to structure their programming delivery in a way that would closely reflect consumer demand and rational commerce. Part IV focused on the effect of wholesale bundling on the prices subscribers pay, the coercion-driven delivery of programming to subscribers, and the macroeconomic inefficiency brought about by coercive

179. See Ford & Koutsky, *supra* note 8, at 12 (positing that consumer welfare is increased "if the consumer can avoid purchasing undesirable channels as part of a bundle," which is inhibited if the bundles are coerced to MVPDs).

180. "[A]ny public policy response should be targeted at the root causes or conditions that might lead to inordinate forced bundling." *Id.* at 14.

181. SALOP ET AL., *supra* note 7, at para. 21.

182. See *id.* at para. 29.

183. *Id.* at paras. 22–27; see Julianne Pepitone, *Time Warner Cable Lost 300,000 Subscribers Amid CBS Blackout*, CNNMONEY (Oct. 31, 2013, 2:49 PM), <http://money.cnn.com/2013/10/31/technology/time-warner-cable-cbs/>.

184. See SALOP ET AL., *supra* note 7, at paras. 21–27, 29.

185. See *supra* Part IV.A.1 (second part of texts) & notes 140–145 for macroeconomics-based arguments in favor of bundling. For consumer-focused arguments, see *Sinclair Comments*, *supra* note 174, at 6.

wholesale bundling. Therefore, only bundling practices that exhibit these negative results should be prohibited.

There are two bundling practices that have the foregoing effects, both of which were discussed in previous sections. The first practice is when a broadcaster does not offer a comparable a la carte deal alongside the bundled deal. This practice includes unreasonable a la carte offers such as those with exorbitant costs.¹⁸⁶ The second are offers that unilaterally and wholly foreclose the possibility of delivering bundled channels in an unbundled manner to final viewers.¹⁸⁷ This includes offers that condition retransmission consent on an MVPD's agreement to purchase bundled channels and, in addition, also demand that those channels be delivered to subscribers in the basic or expanded basic package.¹⁸⁸

The first bundling practice results in higher consumer prices.¹⁸⁹ As illustrated in Part IV.A.2.b, when a comparable a la carte deal is not offered, broadcast networks are able to charge higher for the bundle than if the channels remain individually available as substitutes. But even where a la carte is offered, when coercive terms are used to force the MVPDs to purchase the bundle nonetheless, the a la carte deal neither restores competition nor corrects the resultant price problems.¹⁹⁰ In contrast, if the terms of the bundled and a la carte deals were in parity and pursuant to market forces, the price charged to subscribers would not be bloated, because the substitutability of the channels persists. Accordingly, this practice should be disallowed so that MVPDs can have a meaningful choice as to which arrangement to purchase, while accounting for their business strategies and the desires of their subscribers.

The second bundling practice results in coercive programming delivery that is non-reflective of subscriber demand because it cripples the MVPDs' ability to tailor their packages to suit the demands of their respective subscribers.¹⁹¹ If the MVPDs were able to sell the bundled channels in different package tiers that approximately match the demand for them, then at least a majority of subscribers would not be "forced" to receive and pay for undesired programming.¹⁹² Therefore, this practice should also be proscribed.

186. See, e.g., *Mediacom Comments*, *supra* note 72, at 6; see also Ford & Koutsky, *supra* note 8, at 10.

187. See, e.g., *Mediacom Comments*, *supra* note 72, at 5–6.

188. See *id.*

189. See *supra* Part IV.A.2.b and accompanying notes.

190. See *supra* Part III.B and accompanying notes.

191. See *supra* Part IV.A.1 and accompanying notes.

192. See Ford & Koutsky, *supra* note 8, at 16 (“[This would] permit MVPDs to create a variety of programming tiers that might result in placing, for example, ABC Family on a ‘family tier’ and ABC’s SoapNet on an ‘adult tier,’ rather than have pricing essentially force the MVPD to place both on the ‘expanded basic’ tier.”).

B. Congressional Legislation and FCC Administrative Rulemaking

To finally put to rest the FCC's persistent uncertainty about its ability to oversee and regulate substantive aspects of retransmission consent negotiations, Congress should clarify that the FCC has the power to exercise substantive oversight power over retransmission consent negotiations.¹⁹³ Congress should amend 47 U.S.C. section 325 to include an express provision enabling the FCC to address certain substantive aspects of retransmission consent negotiations as they relate to the good-faith requirement, such as the terms, price, and arrangements each side offers during negotiations.¹⁹⁴

As was mentioned in Part II, the FCC had identified actions that would indicate a violation of the requirement to negotiate in good faith.¹⁹⁵ These have been embodied in the FCC administrative rules but have not been utilized to their full potential. After Congress enacts an explicit authorization for the FCC to monitor the substance of retransmission

193. This does not mean that Congress should enable the FCC to oversee all substantive issues. Congress could still limit the power to specific circumstances that would include the reasonableness and fairness of the local stations' offers during retransmission consent.

194. The most recent proposed legislation is the Next Generation Television Marketplace Act. H.R. 3675, 112th Cong. (1st Sess. 2011), available at <http://www.govtrack.us/congress/bills/112/hr3675>. This bill is overbroad because it does more than what is actually needed. Granted, the current system might be defective, but the market is not totally failing, and only certain aspects of multichannel television, as they relate to consumer welfare, need to be reformed. See Ford & Koutsky, *supra* note 8, at 16 (“[I]ntervention in the wholesale market for MVPD programming may only need to be incremental to cause vast improvement.”). Because the proposed legislation will repeal compulsory copyright, 17 U.S.C. § 111 (1988), the only difference will be that courts would be empowered to set rules that follow copyright licensing principles, instead of the FCC crafting administrative rules. See Lorna Veraldi, *Newscasts As Property: Will Retransmission Consent Stimulate Production of More Local Television News?*, 46 FED. COMM. L.J. 469, 481–83 (1994) (discussing the process involved under compulsory copyright); see generally Fred H. Cate, *Cable Television and the Compulsory Copyright License*, 42 FED. COMM. L.J. 191 (1990) (discussing cable television, the compulsory copyright, and the relationship between the two); DAVID NIMMER & MELVILLE B. NIMMER, *NIMMER ON COPYRIGHT* (2006). Forced bundling will still be present because the leverage will be transferred to copyright holders, which may also be owned by media companies controlling, or affiliated with, several local broadcast stations. This regime would give rise to the conditioning of a highly rated show, as opposed to a highly rated network, on the carriage of other shows that have little or no consumer demand—shows that are produced by the same broadcast network or a company that owns that broadcast network. There will be little difference, if at all, to the dynamics among the industry players, with or without the proposed legislation. In the end, consumers will be left to where they presently stand. Therefore, the more effective and prudential approach is for Congress to enact legislation expanding the authority of the FCC to oversee the substance of retransmission consent negotiations.

195. The authority of the Commission to craft these rules stems from 47 U.S.C. § 325(b)(3)(C) (2006). As to the general rulemaking powers of the FCC, see 47 U.S.C. §§ 154, 303 (2006).

consent negotiations, the FCC should expand the interpretation of the good-faith requirement to include forced wholesale bundling as a per se violation. The FCC should rule that both the refusal to offer a la carte deals adjacent to bundled deals and a la carte offers with coercive terms are prohibited by one of the extant rules setting forth a per se violation of the duty to negotiate in good faith.¹⁹⁶

The closest rule that can be utilized is 47 C.F.R. section 76.65(b)(1)(iv), which provides that “[r]efusal by a Negotiating Entity to put forth more than a single, unilateral proposal is a violation of the good-faith duty.” The FCC can expand this rule by concluding that the first bundling practice is equivalent to a “single, unilateral proposal.”¹⁹⁷ When a bundle is offered without any alternatives and without even considering the MVPDs’ counteroffers, the local broadcast station per se violates its good-faith duty. If, in the alternative, the a la carte option is offered alongside the bundle but with coercive terms that induce MVPDs to choose the bundle, the local broadcast station in reality is still offering a “single, unilateral proposal” in the form of the bundle, so the rule will be violated. Since the a la carte alternative is substantially less desirable than the bundle, it can reasonably be considered as a nominal alternative in the sense that the MVPD is not given a meaningful choice.¹⁹⁸ It may well be the case that the a la carte option is just added to avoid violating the literal meaning of section 76.65(b)(1)(iv) and to reinforce the result that the local broadcast station desires—for the MVPD to purchase the bundle.¹⁹⁹ Therefore, coercive offers would also safely fall under the proposed reinterpretation of section 76.65(b)(1)(iv).

196. Note that the current totality of circumstances test, 47 C.F.R. § 76.65(b)(2) (2001), may, but should not, be used to police these bundling practices. *See supra* Part II.B. There might be offers without an a la carte option, rare as they may be, that would not breach the duty of good faith if mitigating factors are included to prevent the inflated prices that these offers normally entail. In those rare circumstances, this rule would make it possible for the FCC to uphold the offer. More appositely, it can also be used in instances where an a la carte alternative is offered but in a coercive manner. Because the determination of what is coercive would ultimately depend on the facts and circumstances of a given offer, this test can, in theory, accommodate different fact patterns and scenarios. On the other hand, the totality of circumstances rule, sparsely used by the FCC, inherently includes a tinge of ambiguity and uncertainty. The use of this rule would muddle the playing field during retransmission consent negotiations because it provides little guidance on the procedural and substantive manners by which the negotiating parties should conduct themselves. As such, it is a better public policy to per se prohibit the refusal to offer a la carte deals adjacent to bundled deals and a la carte offers with coercive terms, even if it means sacrificing those rare instances where these practices may have been made in good faith because of some mitigating factors and notwithstanding their facially suspect provisions.

197. 47 C.F.R. § 76.65(b)(1)(iv) (2012).

198. *See Mediacom Comments, supra* note 72, at 5 (stating that when Mediacom requested a la carte pricing for a strong network, the broadcast network responded with exceedingly uneconomical terms).

199. *See id.*

The only issue that remains under this solution is how the FCC can distinguish a coercive offer from a good-faith offer. The test for good faith on the local broadcast station's side of the bargain should be whether its mixed offer is dictated by considerations of the competitive marketplace.²⁰⁰ So long as the FCC is satisfied, based on objective evidence, that the offer's terms and provisions are a result of market forces and not of other capricious bases extraneous to the market, that offer would be considered to have been made in good faith.²⁰¹ The "market" referenced here focuses on the direct line of economic relationship from the local broadcast station to the MVPD and from the MVPD to its subscribers. If the offer of a local broadcast station to an MVPD is essentially dictated by its affiliation with a cable network (for example), a party that is only incidental to the economic relationship between MVPD subscribers and the local broadcast station as intermediated by the MVPD, then that would be considered as "extraneous."

Meanwhile, to address forced bundling that dictates the tiers in which the channels must be placed, the FCC can create a new category of per se violations of good faith that would prohibit this conduct. It can phrase the rule as follows: "It shall be a failure to negotiate in good faith when a local broadcast station conditions its retransmission consent on the carriage of another network if the local broadcast station also dictates the service tier or tiers in which the networks are to be placed."²⁰² By implementing this rule, the FCC will be able to ensure that even where the market dictates the purchase of bundled channels, those channels can still be delivered to MVPD subscribers in a way that would closely track the needs and demand of different subscriber groups.²⁰³ Accordingly, if consumer A, a parent with young children, does not want to have MTV Channel or SpikeTV in her package, the MVPD will be able to deliver a package to consumer A that adheres to consumer A's programming choice.²⁰⁴

200. This test is directly taken from 47 U.S.C. section 325(b)(3)(C)(ii), which provides that "it shall not be a failure to negotiate in good faith if the television broadcast station enters into retransmission consent agreements containing different terms and conditions, including price terms, with different multichannel video programming distributors if such different terms and conditions are based on competitive marketplace considerations." 47 U.S.C. § 325(b)(3)(C)(ii) (2006). Following the benchmark standard imposed by this rule would ensure that the FCC would have the preexisting capacity, resources, and experience in deciding whether offers are coercive, and the only remaining task for the FCC would be to transpose this standard and its experience in enforcing it in the context of retransmission consent negotiations.

201. See *infra* Part V.C (providing an example of how an offer will be analyzed under this proposed test).

202. See Ford & Koutsky, *supra* note 8, at 17.

203. See *id.*

204. See *id.*

C. FCC Implementation: An Illustration of the New Regime

Under this regime, all offers would be mixed—consisting of an a la carte option and a bundled alternative—because solely offering a bundle would be a per se violation of good faith.²⁰⁵ Forced bundling that dictates the tiers in which the channels must be placed is just a subset of the practice of not offering a la carte deals side by side bundled deals or of offering a la carte but in a coercive manner. The rule prohibiting this subset is a further limitation on offers made during retransmission consent, and would apply only if the offer passes the reinterpreted section 76.65(b)(1)(iv). Analysis under section 76.65(b)(1)(iv) boils down to whether the offer is mixed and whether the differences in contractual terms, if any, between the various alternatives are dictated by the market. The question of whether the bundled option is improper—whether the bundle also dictates the tiers in which the channels must be placed—would be reached only if the FCC first concludes that the offer is prima facie valid under section 76.65(b)(1)(iv). If, in the first instance, the FCC concludes that the offer violates section 76.65(b)(1)(iv), the inquiry ends there.

To illustrate, assume that a local ABC broadcast station makes the following offer in exchange for its retransmission consent: (1) a bundle of five Disney/ABC cable channels that must be placed in the MVPD's expanded basic tier priced at \$5 per subscriber; or (2) the same five cable channels, offered a la carte, each of which priced at \$2. If the parties are able to finalize a retransmission consent deal under this offer or under a revised one, then the FCC need not be involved. The only time that would warrant the FCC's attention is where a dispute arises because of this offer or during the course of negotiations commenced after tendering this offer.

This offer, under the proposed interpretation of section 76.65(b)(1)(iv), is superficially valid because it is a mixed offer consisting of bundled and a la carte alternatives. The next question is whether the price differential between the alternatives—\$1 unit price (bundle) versus \$2 unit price (a la carte)—is dictated by marketplace considerations. To prove this, the local ABC station can proffer reasonably persuasive financial data to show, for example, that the lower unit price for the bundle is a result of a reduction in its overhead costs in producing programming because each channel within the bundle is essentially cross-subsidizing the production and maintenance of the others. If the FCC agrees with the evidence submitted and concludes that the price differential resulted from marketplace considerations, then it can proceed to the next step. If, on the other hand, the FCC is not convinced by the local ABC station's assertion because the MVPD successfully proves, by providing contradicting evidence, that the local ABC station's reasons are just a pretext, then the inquiry ends. This can happen if the MVPD can show that, even accounting

205. See *supra* Part V.B and accompanying notes.

for the reduction of overhead costs because of bundling, the price differential should still not be as high (*i.e.*, 100% markup on each bundled channel's unit price). Alternatively, the MVPD can show that the local ABC station's actual reason for the price differential is to forcibly enable a non-demanded affiliated channel to penetrate the MVPD's market, a reason that is extraneous to the direct economic relationship between the local ABC station and MVPD subscribers.²⁰⁶ The greater the differences are between the terms of the bundle and the terms of a la carte, the more suspect the offer should appear and the more critical FCC's scrutiny should be.

Assuming that the local ABC station was able to persuade the FCC that its offer is dictated by marketplace considerations, inquiry then shifts to the bundled option: Does it require the placement of the bundled channels in a specific tier? Yes; accordingly, the bundle is invalid, which thus taints the whole offer. To resolve this, the FCC should order ABC to either (1) delete that provision from the offer; or (2) restructure the whole offer, not just the invalid provision, so long as the resulting new offer would comply with the FCC rules on good faith.

VI. CONCLUSION

MVPD subscribers are the ultimate losers when coercive bundling practices are used during retransmission consent negotiations, not only because of the inflated prices that they have to pay, but also because of their inability to receive programming that suits their demand. Broadcast networks have accumulated bargaining power through horizontal integration and affiliation while taking advantage of the increased competition in the MVPD market to further consolidate their dominant position. Bundling has taken over the wholesale business model, coercing MVPDs to carry networks their consumers do not demand on top of paying the rising retransmission fees local stations require. As a result, subscribers are paying higher MVPD subscription fees for a portfolio of channels the majority of which they do not even recognize.²⁰⁷

This indeed is the most crucial time for the FCC and Congress to collaboratively take action. Congress should authorize the Commission to evaluate and rule upon certain substantive questions and issues on retransmission consent negotiations, including the carriage terms each side offers the other. This power should extend to the evaluation of the extent to which a given bundled offer is coercive, discriminatory, and capricious. This would then pave the way for the FCC to develop its existing rules and

206. See *supra* Part V.B and accompanying notes.

207. The FCC estimates that "the typical American consumer is only interested in watching 17 cable channels." See *Wholesale Unbundling*, AM. CABLE ASS'N, http://www.americancable.org/issues/page/Wholesale_Unbundling (last visited Sept. 29, 2013).

to create new ones, fortifying its administration of the reciprocal duty of MVPDs and local broadcast stations to negotiate in good faith. Without administrative or legislative intervention at this critical point, the interests and welfare of MVPD subscribers will be jeopardized, and the very reasons for the adoption of the 1992 Cable TV Act will soon be nullified.

Public Easements in Spectrum: A Solution to Protect the Public Interest

Mary Shields*

TABLE OF CONTENTS

I.	INTRODUCTION	179
II.	BACKGROUND	181
	<i>A. Statutory and Regulatory Bases for Licensed and Unlicensed Spectrum</i>	181
	<i>B. A Shift to Property Law Concepts in Spectrum Management Policy</i>	184
	<i>C. The Elements of a Public Prescriptive Easement</i>	188
	1. Open and Notorious	189
	2. Adverse and Under a Claim of Right	190
	3. Continuous and Uninterrupted Use	190
	4. Public	191
	5. Other Considerations	191
III.	UNLICENSED VS. LICENSED DISPUTES IN THE PUBLIC PRESCRIPTIVE EASEMENT FRAMEWORK	192
	<i>A. Open and Notorious</i>	193
	<i>B. Adverse and Under a Claim of Right</i>	194
	<i>C. Continuous and Uninterrupted</i>	195
	<i>D. Public</i>	196
	<i>E. Statute of Limitations</i>	197
	<i>F. Scope of the Easement</i>	198

* J.D. Candidate, The George Washington School of Law, May 2014; B.A. in French Literature, The University of Iowa, 2009. The author would like to thank Evan Lucarelli and all the members of the *Federal Communications Law Journal* who have helped her prepare this Note for publication. The author would also like to thank her family for their support and encouragement.

IV.	WHY THE PUBLIC PRESCRIPTIVE EASEMENT FRAMEWORK SHOULD BE ADOPTED	199
	<i>A. Benefits</i>	199
	1. Public Interest	199
	2. Equity	200
	3. Uncertainty	201
	<i>B. Potential Problems and Solutions</i>	202
V.	CONCLUSION	202

I. INTRODUCTION

A recent shift in Federal Communications Commission (“FCC”) policy has favored stronger protection for unlicensed spectrum users, even when they encounter interference from licensed operators. In 2009, the predecessor to mobile satellite company LightSquared applied to the FCC for a modification to its license to operate in spectrum blocks adjacent to those used by unlicensed Global Positioning System (“GPS”) devices.¹ In response, the GPS industry raised concerns about interference from the licensee’s spectrum use that would be detrimental to the operation of GPS devices.² As a condition for transfer of the license to LightSquared, the FCC ordered LightSquared to meet certain build-out requirements, which included establishing a 4G mobile network.³ Before LightSquared could begin building out its network, however, the FCC required LightSquared to show that its operations would not cause interference with GPS.⁴ As of 2012, LightSquared had still failed to satisfy this requirement, and both the FCC and the National Telecommunications and Information Administration (“NTIA”) found that LightSquared will not be able to meet its build-out requirements without interfering with GPS.⁵ In March 2012, the FCC proposed suspending indefinitely LightSquared’s authorization to use its license to build a 4G network.⁶ Regardless of the outcome of this dispute, it is illustrative of the shift in FCC policy in recent decades to stronger protection for unlicensed spectrum operators.

The LightSquared matter highlights the tension between licensed and unlicensed spectrum uses. Part 15 of the FCC’s Rules provides for the unlicensed use of certain bands of spectrum, subject to specific

1. See Int’l Bureau Invites Comment on NTIA Letter Regarding LightSquared Conditional Waiver, *Public Notice*, DA 12-214, paras. 2–4 (2012) [hereinafter *LightSquared Notice*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-12-214A1.pdf. It is important to note that the unlicensed nature of GPS is slightly different than other services, such as Wi-Fi. Whereas Wi-Fi operates in unlicensed spectrum, such that anyone may set up a Wi-Fi network without permission, the GPS spectrum is licensed but the federal government operates GPS satellites, making GPS service free for use by GPS receivers. See Marshall Brain & Tom Harris, *How GPS Receivers Work*, HOWSTUFFWORKS, <http://electronics.howstuffworks.com/gadgets/travel/gps.htm> (last visited July 21, 2013). Historically, GPS devices have been treated as, and subject to the same rules as, Part 15 unlicensed devices. See, e.g., GARMIN, GPS 15H AND 15L TECHNICAL SPECIFICATIONS 1 (2006), available at http://www8.garmin.com/manuals/237_TechnicalSpecifications.pdf.

2. See *LightSquared Notice*, *supra* note 1, at para. 4. The GPS device industry was concerned about operations in the LightSquared spectrum because GPS devices do not have filters that would adequately block signals from LightSquared’s band. See Jon Brodtkin, *Why LightSquared Failed: It Was Science, Not Politics*, ARS TECHNICA (Feb. 19, 2012, 9:00 PM), <http://arstechnica.com/tech-policy/2012/02/why-lightsquared-failed/>.

3. See *LightSquared Notice*, *supra* note 1, at para. 4.

4. See *id.* at para. 7 (noting that this was required by a 2011 congressional statute).

5. See *id.* at para. 8.

6. See *id.* at para. 9.

prescriptions.⁷ Unlicensed use of spectrum is highly valuable to society, and has provided for the growth and widespread use of such wireless technologies as Wi-Fi, Bluetooth, and GPS.⁸ However, use of unlicensed spectrum is not without costs. FCC regulations stipulate that unlicensed spectrum use must not cause interference to licensed users, and unlicensed users are not formally entitled to any protection against interference from other users, licensed or unlicensed.⁹

Conflicts between unlicensed and licensed users raise spectrum ownership issues¹⁰ because of the process through which licenses are issued, and whatever rights those licenses may entail. 47 U.S.C. section 301 specifically states that spectrum licenses do not convey any rights of ownership, constituting an explicit proscription on the assertion of property rights in spectrum licenses.¹¹ After decades of advocacy by legal and economic scholars for a property approach to spectrum management, however, it seems the FCC is increasingly relying on common law property principles in its treatment of spectrum.¹² In the LightSquared–GPS case, the FCC appeared to recognize the long-standing operation of GPS devices in a certain frequency when it protected GPS services from interference, as it would for a licensed user. The FCC’s recognition of a beneficial use and its protection of that use is similar to a court finding the existence of an easement in real property.

Of course, the FCC cannot adopt pure property law as a spectrum management regime, because doing so would violate a congressional prohibition on private spectrum ownership.¹³ It would also entail some major shifts in settled rights and expectations.¹⁴ Still, adoption of certain

7. 47 C.F.R. § 15.1(a) (2012); *see generally* 47 C.F.R. §§ 15.1–15.407 (2012).

8. *See* Kenneth R. Carter, *Policy Lessons from Personal Communications Services: Licensed vs. Unlicensed Spectrum Access*, 15 *COMMLAW CONSPECTUS* 93, 96, 111–12 (2006).

9. *See* Ellen P. Goodman, *Spectrum Rights in the Telecosm to Come*, 41 *SAN DIEGO L. REV.* 269, 288 (2004); 47 C.F.R. § 15.5(b) (2012).

10. Though legal ownership of spectrum is prohibited, *see* 47 U.S.C. § 301 (2006), users do exercise something like ownership of spectrum. This *de facto* ownership, combined with a lack of a determinate right of exclusion, is what causes some disputes and leaves the FCC with no clear guidance as to how to adjudicate such disputes.

11. *See* 47 U.S.C. § 301 (2006).

12. *See* Dale B. Thompson, *Of Rainbows and Rivers: Lessons for Telecommunications Spectrum Policy from Transitions in Property Rights and Commons in Water Law*, 54 *BUFF. L. REV.* 157, 157–58, 170 (2006) (citing Peter C. Cramton, *The FCC Spectrum Auctions: An Early Assessment*, 6 *J. ECON. & MGMT. STRATEGY* 431 (1997), and noting the 1994 and 1996 spectrum auctions as the FCC’s initial acceptance of a property theory).

13. *See* 47 U.S.C. § 301 (2006) (“It is the purpose of this chapter, among other things, to maintain the control of the United States over all the channels of radio transmission; and to provide for the use of such channels, but not the ownership thereof, by persons for limited periods of time, under licenses granted by Federal authority, and no such license shall be construed to create any right, beyond the terms, conditions, and periods of the license.”).

14. *See* Goodman, *supra* note 9, at 309–11 (discussing the FCC’s “‘first-in-time’ principle, whereby the rights of the more established licensee are privileged over those of the newer entrant, regardless of the efficiency implications”).

property law principles could help resolve some spectrum management issues.¹⁵ Property law concepts could be particularly useful in resolving disputes between licensed and unlicensed users. This Note focuses on the application of the public prescriptive easement concept to certain unlicensed uses of spectrum. Part II provides background on current FCC regulation of unlicensed spectrum and the interaction between property law and FCC spectrum policy. Part III analyzes how the concept of easements could be applied to spectrum. Part IV argues that an easement framework should be adopted for unlicensed spectrum use and provides potential solutions to problems that could arise if the easement framework is utilized.

II. BACKGROUND

A. Statutory and Regulatory Bases for Licensed and Unlicensed Spectrum

Congress passed the Communications Act of 1934 (“the Act”) in response to the problem of increasing radio interference.¹⁶ The Act established the basis for spectrum management policy in the United States.¹⁷ In the Act, Congress created the FCC and authorized it to allocate certain spectrum frequencies to operators via a licensing regime.¹⁸ The license sets out the legal responsibilities and rights of the licensee.¹⁹ Typically, the licensee agrees, among other things, that it will use its allotted spectrum for a specified service and that its spectrum use will not interfere with other licensed uses.²⁰ The law also protects licensees from harmful interference and provides means for adjudication of conflicts between users.²¹ To enforce this protection, the FCC may require the interfering operator to correct its technology or cease operations; the Commission might also levy a fine for failure to comply with the license.²²

Spectrum use is not limited to licensed operators. In the Communications Act, Congress also granted the FCC authority to waive licensing; consequently, the FCC promulgated regulations to allow for certain devices to utilize spectrum without a license.²³ These devices are

15. *See id.* at 274–75.

16. *See id.* at 281–85.

17. *See* 47 U.S.C. § 301 (2006) (“No person shall use or operate any apparatus for the transmission of energy or communications or signals by radio . . . except under and in accordance with this chapter and with a license in that behalf granted under the provisions of this chapter.”).

18. *See id.* § 303.

19. *See id.* § 308(b).

20. *See id.* § 301(d).

21. *See id.* § 333.

22. *See, e.g.*, 47 C.F.R. §§ 1.80, 22.353, 24.237, 90.173(b), 90.403 (2012).

23. *See* 13 Fed. Reg. 4392, 4398 (July 22, 1948) (codified at 47 C.F.R. §§ 15.1–15.4 (2012)).

generally free to operate, subject to the rules laid out in Part 15 of the Commission's Rules, which are meant to prevent any harmful interference they might create.²⁴ For example, unlicensed devices are subject to technical rules governing device design, and operators may be required to alter the design or cease operating under order of the FCC.²⁵ Part 15 rules also make clear that unlicensed operators have limited regulatory rights, stating that they do not have any "vested or recognizable right to continued use of any given frequency by virtue of prior registration or certification of equipment," and must accept interference from other operators, whether licensed or unlicensed.²⁶ In other words, unlike licensees, unlicensed operators are not ensured any formal protections should interference impair the functionality of their services.

Despite these limitations on unlicensed spectrum use, the public has widely adopted technology that utilizes unlicensed spectrum.²⁷ These technologies have become increasingly important to consumers and society at large.²⁸ Technologies that utilize unlicensed spectrum range from personal devices such as garage door openers and baby monitors to widely used communications and navigation services such as Wi-Fi and GPS.²⁹ Wireless local area networks, commonly called Wi-Fi networks, are a prime example of a ubiquitous unlicensed spectrum service that the public

24. See generally 47 C.F.R. § 15 (2012) (stating rules governing unlicensed devices, including minimal emission strength and device or system design). "Harmful interference" is defined as "any emission, radiation or induction that endangers the functioning of a radio navigation service or of other safety services or seriously degrades, obstructs or repeatedly interrupts a radio communications service operating in accordance with this chapter." 47 C.F.R. § 15.3(m) (2012).

25. See Carter, *supra* note 8, at 115 (noting that Part 15 devices normally cause interference to licensed services when they become faulty; subsequently, FCC field personnel locate and repair the source of the interference at the owner's cost).

26. See 47 C.F.R. § 15.5 (2012).

27. See Gregory Staple & Kevin Werbach, *The Coming Spectrum Explosion-A Regulatory and Business Primer*, COMM. LAW., Fall 2003, at 23–25. Up until roughly the year 2000, unlicensed spectrum was generally used for personal devices such as baby monitors and cordless phones. See *id.* at 24. After developments in technology, however, unlicensed devices have become pervasive in society. See *id.* A 2009 report by Richard Thanki surveyed the prevalence of unlicensed spectrum use. See generally RICHARD THANKI, THE ECONOMIC VALUE GENERATED BY CURRENT AND FUTURE ALLOCATIONS OF UNLICENSED SPECTRUM 4 (2009), available at <http://apps.fcc.gov/ecfs/document/view?id=7020039036>. The report notes that in 2008, sales of devices enabled for unlicensed use was roughly equal to devices that utilize licensed spectrum alone, and predicts that by 2014, sales of unlicensed-only devices will greatly outpace sales of both licensed-only and hybrid devices (which are enabled for both licensed and unlicensed spectrum use). *Id.* at 19. The study also predicted that between 2009–2025, unlicensed spectrum use could generate \$16–37 billion per year for the United States economy. *Id.* at 34–35.

28. Unlicensed spectrum was once used for mundane applications such as cordless phones, but market demand has since shifted to wireless local area network equipment which enables increasingly important high-speed data connections. See Staple & Werbach, *supra* note 27, at 24.

29. Goodman, *supra* note 9, at 288.

highly values.³⁰ Wi-Fi networks create wireless connections by operating on radio bands dedicated for unlicensed use.³¹ Perhaps the most valuable function of Wi-Fi is wireless access to the Internet.³² The public's increasing use of wireless devices to connect to the Internet has contributed to the growth of Wi-Fi use over the past decade.³³ As the proliferation of Wi-Fi-utilizing devices such as smartphones and tablets continues, Wi-Fi (and other unlicensed services) will continue to be a valuable resource to the public.³⁴

The FCC has enhanced access to unlicensed spectrum for approximately the past decade, recognizing its current and potential value. The FCC's actions accomplished this goal by permitting unlicensed operations in additional frequency bands, including so-called "white spaces," and lowering regulatory burdens for certain unlicensed operators.³⁵ The FCC has used at least two methods for decreasing regulatory burdens on unlicensed operators: relaxing enforcement of regulatory violations, and adopting rules that are favorable to unlicensed operators.³⁶ For example, the FCC removed some certification requirements of cognitive radio technologies in order to foster their development in 2005.³⁷ The following

30. See Staple & Werbach, *supra* note 27, at 24 ("Since 2000, the market demand for wireless local area network equipment has been extraordinary.").

31. *Discover & Learn*, Wi-Fi ALLIANCE, <http://www.wi-fi.org/discover-and-learn> (last visited Sept. 13, 2013). Wi-Fi operates in the 2.4 GHz or 5 GHz bands and "can be used to connect electronic devices to each other, to the Internet, and to wired networks which use Ethernet technology." *Id.*

32. See KATHRYN ZICKUHR & AARON SMITH, PEW RESEARCH CTR., *DIGITAL DIFFERENCES 2* (2012), available at <http://pewinternet.org/Reports/2012/Digital-differences.aspx>. According to the Pew report, the majority of adults who use mobile devices such as smartphones and tablets, as well as PCs and laptops, utilize wireless access to the Internet on those devices. *Id.*

33. See *id.*

34. See THANKI, *supra* note 27, at 57–62. 3G and 4G cellular services (which operate in licensed spectrum bands) also provide wireless Internet access on mobile devices, but are not utilized as frequently for large data transfers on those devices as is Wi-Fi; one reason is that large data transfers would overburden the cellular networks. *Id.* at 27.

35. See Staple & Werbach, *supra* note 27, at 24–26; Kathryn A. Watson, *White Open Spaces: Unlicensed Access to Unused Television Spectrum Will Provide an Unprecedented Level of Interconnectivity*, 2010 U. ILL. J.L. TECH. & POL'Y 181, 181–82 (2010); Revision of Part 15 of the Comm'n's Rules Regarding Ultra-Wideband Transmission Sys., *Second Report and Order*, FCC 04-285, paras. 10–14 (2004) [hereinafter *UWB Order*], available at <http://sss-mag.com/pdf/FCC-04-285A1.pdf> (discussing lowering regulatory standards and controlling potential interference to permit use of ultra-wideband ("UWB") devices in spectrum bands licensed to other devices); Revision of Part 15 of the Comm'n's Rules to Permit Unlicensed Nat'l Info. Infrastructure (U-NII) Devices in the 5 GHz Band, *Notice of Proposed Rulemaking*, FCC 13-22, para. 2 (2013), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-13-22A1.pdf (proposing expansion of Wi-Fi use of some 5 GHz frequencies that are also used by a licensed operator).

36. See Watson, *supra* note 35, at 181–82.

37. See *Facilitating Opportunities for Flexible, Efficient, and Reliable Spectrum Use Employing Cognitive Radio Technologies*, *Report and Order*, FCC 05-57, para. 3 (2005)

year, the FCC removed limitations on emissions of unlicensed ultra-wideband devices (“UWB”).³⁸ In some conflicts between licensed and unlicensed operators, the FCC stated its intent to protect the unlicensed providers’ interests over the licensed provider.³⁹ In the same Order authorizing higher UWB device emissions, the FCC rejected arguments from licensed providers that the new rules would infringe upon the rights established by their licenses.⁴⁰ In addition to the LightSquared–GPS dispute, the FCC recently waived certain operation requirements for Progeny, a licensed Location and Monitoring Service (“LMS”) provider, on the condition that it show that its services would not interfere with Part 15 devices operating in the same frequency band.⁴¹

Despite actions favoring unlicensed spectrum use, the FCC has neither proposed nor issued regulations eliminating or relaxing the Part 15 rules. Likewise, the FCC has not promulgated any rules that would protect unlicensed operators from interference. However, the decisions mentioned above evidence a limited common law property thinking. I will expand on this potential in the next sections.

B. A Shift to Property Law Concepts in Spectrum Management Policy

At common law, a property owner is generally entitled to a bundle of rights: “the right to possess, the right to use, the right to exclude, [and] the right to transfer.”⁴² An owner may be entitled to compensation if another

[hereinafter *Cognitive Radio Report*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-05-57A1.pdf.

38. See *UWB Order*, *supra* note 35, at para. 1.

39. See, e.g., *id.* at paras. 64–68 (stating that Congress has been aware of the FCC’s toleration of unlicensed devices for almost seventy years); *LightSquared Notice*, *supra* note 1, at paras. 3–4 (stating that FCC approval of the transfer of MSS/ATC licenses to LightSquared was predicated upon a finding of a lack of interference to GPS devices in the L-Band despite lacking a license to operate in that band); Request by Progeny LMS, LLC for Waiver of Certain Multilateration Location and Monitoring Serv. Rules, *Order*, DA 11-2036, paras. 24–25 (2011) [hereinafter *Progeny Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/DA-11-2036A1.pdf (stating that Progeny is obligated to demonstrate through actual field tests that its M-LMS licenses will not cause unacceptable interference with unlicensed Part 15 devices).

40. See *UWB Report*, *supra* note 35, at paras. 33–35.

41. See *Progeny Order*, *supra* note 39, at paras. 24–25. Though the unlicensed operators did not receive the full protection they sought, see Harold Feld, *The Progeny Waiver: Will the FCC Wipe Out Smart Grid? Save Thousands of Lives? Both? This Season on Spectrum Wars!*, WETMACHINE (Mar. 5, 2013), <http://tales-of-the-sausage-factory.wetmachine.com/the-progeny-waiver-will-the-fcc-wipe-out-smart-grid-save-thousands-of-lives-both-this-season-on-spectrum-wars/>, the fact that the unlicensed operators did receive some protection is indicative of the trend towards protection for unlicensed spectrum use.

42. See JESSE DUKEMINIER ET AL., PROPERTY 83–84 (Vicki Been et al. eds., 7th ed. 2010) (noting that certain classes of property are subject to restrictions on one or more of these rights).

interferes with these rights.⁴³ Though spectrum licenses may seem to convey something like property rights, both the Communications Act and 47 C.F.R. section 15 explicitly state that neither spectrum licensees nor unlicensed users have ownership rights in spectrum.⁴⁴ Instead, the FCC historically operated in what it terms a “command-and-control” model of spectrum allocation, that is, it “allocates and assigns frequencies to limited categories of spectrum users for specific government-defined uses.”⁴⁵ The Commission’s authority extends beyond initial allocation and can constrain a licensee’s ability to transfer a license to another user.⁴⁶ The command-and-control model allowed supervision and prevention of interference issues and permitted the FCC to carry out its mandate to manage spectrum use in a manner beneficial to the public.⁴⁷

In the decades following the passage of the first Communications Act, a rich body of commentary developed regarding the economic efficiency of spectrum management policies.⁴⁸ Influential economist Ronald Coase, and commentators who followed, criticized the United States method of spectrum management as economically inefficient.⁴⁹ They argued that the licensing regime did not allow for market forces to determine the best use of spectrum and, in some instances, created barriers for technological innovation.⁵⁰ Coase advocated for private, exclusive ownership of spectrum.⁵¹ According to this theory, the possession of exclusive ownership rights in spectrum would expose spectrum to market forces, facilitating the flow of spectrum to its most valued uses.⁵² Coase contemplated that the rights and obligations of spectrum owners would largely be the same as the owner of any other type of property.⁵³ He argued that applying property law in the context of spectrum would enhance efficiency since property law, in theory, tends to reward those who efficiently use their resources and punish those who do not.⁵⁴ For example, Coase likened interference conflicts between spectrum users to real

43. See *id.* at 84 (discussing conversion remedies); see also *id.* at 133 (discussing compensation as a remedy for adverse possession).

44. See 47 U.S.C. § 301 (2006); 47 C.F.R. § 15.5 (2012).

45. See FCC SPECTRUM POLICY TASK FORCE, REPORT OF THE SPECTRUM EFFICIENCY WORKING GROUP 29 (2002) [hereinafter TASK FORCE REPORT], available at http://transition.fcc.gov/sptf/files/SEWGFinalReport_1.pdf.

46. See 47 U.S.C. § 310(d) (2006) (stating that transfer of licenses are permitted only if the parties file an application with the FCC and that the FCC finds that such a transfer is in the public interest).

47. See Goodman, *supra* note 9, at 281–82, 286.

48. See Thompson, *supra* note 12, at 169–71.

49. See *id.*

50. See Christopher S. Yoo, *Beyond Coase: Emerging Technologies and Property Theory*, 160 U. PA. L. REV. 2189, 2191–92 (2012).

51. See Goodman, *supra* note 9, at 270.

52. See Yoo, *supra* note 50, at 2193.

53. See R. H. Coase, *The Federal Communications Commission*, 2 J.L. & ECON. 1, 14 (1959).

54. See *id.* at 18.

property conflicts that give rise to actions in trespass or nuisance, and argued that these common law doctrines were appropriate and efficient means for parties to settle interference conflicts.⁵⁵ Some courts have been receptive to Coase's spectrum theories and have recognized that while spectrum licenses are not property, a spectrum license is an asset in which spectrum licensees do have some legally protected interests.⁵⁶

While the FCC has yet to adopt a wholesale reformulation of the regulatory scheme for spectrum management, it has responded to some of the inefficiencies in a strict command-and-control regime.⁵⁷ In 1997, a new law required the FCC to issue licenses to the highest bidder at auction, a more market-oriented approach to licensing.⁵⁸ However, the law did not totally fulfill Coase's vision for spectrum management because the FCC still limited how an operator may use its license.⁵⁹

In 2002, the FCC created a Spectrum Policy Task Force to assist in identifying and evaluating spectrum policies that would promote new and expanded use of spectrum services.⁶⁰ New spectrum policies that would have promoted expanded spectrum use were stymied by the fact that "most 'prime' spectrum has been assigned" and that current licensed spectrum is not used efficiently.⁶¹ The Task Force analyzed various models of spectrum management—including those based in property law—and recommended that the FCC integrate some principles from property models into its regulatory policy, particularly to encourage unlicensed device development.⁶² Specifically, the Task Force recommended that where spectrum was scarce and the costs of market-based negotiations high, the FCC should apply an exclusive-use policy that would entitle licensees to rights similar to those of property owners.⁶³ The Task Force also advised that, where spectrum is not scarce and transaction costs are high, a commons model would be more efficient than the command-and-control model.⁶⁴ The Task Force further stated that "[c]ontinuing and expanding

55. *See id.* at 25–26.

56. *See, e.g.,* *IRS v. Subranni (In re Atl. Bus. & Cmty. Dev. Corp.)*, 994 F.2d 1069, 1073–74 (3d Cir. 1993); *Orange Park Fla. T.V., Inc. v. FCC*, 811 F.2d 664, 674 n.19 (D.C. Cir. 1987); *see also* Goodman, *supra* note 9, at 320–21.

57. *See* Yoo, *supra* note 50, at 2191–92.

58. *See* Balanced Budget Act of 1997, Pub. L. No. 105-33, § 3002, 111 Stat. 251 (codified as amended at 47 U.S.C. § 309(j) (2006)).

59. *See* Yoo, *supra* note 50, at 2191–92.

60. Press Release, FCC, FCC Chairman Michael K. Powell Announces Formation of Spectrum Policy Task Force (June 6, 2002), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-223142A1.pdf.

61. *See* TASK FORCE REPORT, *supra* note 45, at 4, 21 (noting that some licensees may be unable to maximize their allotted spectrum due to regulatory restraints or prohibitive costs).

62. *Id.* at 36.

63. *Id.* at 31–32.

64. *Id.* at 32. The commons model, like Coase's exclusive-use model of spectrum allocation, is a long-standing theory among legal scholars. *See* Thompson, *supra* note 12, at 171–72. The model is based on the property law concept of the "commons," or a piece of

the use of the commons model in some lower bands [i.e., sub-3 GHz] also is important to encourage the development of low-power, short-distance communications and emerging technologies.”⁶⁵

Subsequent FCC actions seem to indicate that the FCC has been receptive to the recommendations of the Task Force. For example, the FCC has somewhat relaxed its control over how licensees use their allotted spectrum, allowing for licensees to enter into secondary-use agreements, or leases, with other spectrum users.⁶⁶ Additionally, the FCC provided that licensees and lessees could create “private commons.”⁶⁷ These actions treat spectrum licenses more like property, in that they grant licensees more freedom in choosing how to use the license, similar to the way a property owner is free to dispose of her property by selling some or all of it.⁶⁸ The FCC also considered implementing a policy that would focus enforcement efforts on interference regulations rather than specific use requirements, further freeing licensees to engage in secondary use agreements and expanding unlicensed use.⁶⁹ Though the proposal was ultimately declined, the FCC has stated that it has “implemented a ‘flexible use’ policy that

property to which all members of the community are equally entitled. See *DUKEMINIER ET AL.*, *supra* note 42, at 43. The spectrum commons is frequently analogized to the concept of a public park, where any member of the public may access and enjoy the park as long as the user adheres to certain rules. See *TASK FORCE REPORT*, *supra* note 45, at 33–34. The model is reminiscent of how bands dedicated to unlicensed use function now. See *Goodman*, *supra* note 9, at 360. Both in property law and in spectrum theory, the commons model is subject to risk of the “tragedy of the commons,” where the property is devalued by overuse. See *id.* at 273 n.10; *DUKEMINIER ET AL.*, *supra* note 42, at 53.

65. *TASK FORCE REPORT*, *supra* note 45, at 34.

66. Promoting Efficient Use of Spectrum Through Elimination of Barriers to the Dev. of Secondary Mkts., *Second Report and Order*, FCC 04-167, para 1 (2004) [hereinafter *Secondary Markets Order*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-04-167A1.pdf; *Yoo*, *supra* note 50, at 2191.

67. *Secondary Markets Order*, *supra* note 66, at paras. 91–92 (describing “private commons” as an option in which a licensee would “lease” its allotted spectrum to a user, subject to certain specifications set by the licensee).

68. See Gregory L. Rosston & Jeffrey S. Steinberg, *Using Market-Based Spectrum Policy to Promote the Public Interest*, 50 *FED. COMM. L.J.* 87, 99 (1997) (“[F]lexibility increases users’ incentives to expand spectrum capacity by enabling them to profit from investments in more efficient use of spectrum, either by using spectrum for additional purposes or by transferring the authorization to use part of the spectrum to a party that values it more highly.”).

69. Establishment of an Interference Temperature Metric to Quantify and Manage Interference & to Expand Available Unlicensed Operation in Certain Fixed, Mobile and Satellite Frequency Bands, *Order*, FCC 07-78, paras. 1–2 (2007), available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-07-78A1.pdf. The FCC has “generally establishe[d] protection requirements each time it authorizes a radio service.” *Task Force Report*, *supra* note 45, at 25. The Spectrum Policy Task Force found that this method promotes inefficient spectrum use. *Id.* It recommended that the FCC instead use an “interference temperature” metric, which would set maximum noise floor levels for licensees. *Id.* Any other operator could use the same frequency in the same geographic area as the licensee as long as those operations did not exceed the maximum level of tolerated interference. *Id.*

focuses on technical rules to prevent or limit interference among multiple spectrum uses, rather than prescribing specific uses.”⁷⁰ More recently, the FCC proposed compensating operators for surrendered spectrum via “incentive auctions” in accordance with new statutory authorization.⁷¹ In addition to compensation for relinquishing the spectrum, the statute and proposed regulation require that the relinquishment be voluntary.⁷² The voluntary element of the proposed regulation seems to recognize a property right to exclude, while the compensatory aspect seems to recognize that interference with the licensee’s rights in the license requires compensation, much like property.

C. *The Elements of a Public Prescriptive Easement*

The easement is one property law concept that may be useful to consider in the effort to achieve more efficient spectrum management. In property law, an easement is an interest in land that allows one party to enter upon or use the land of another.⁷³ Easements may be expressly agreed upon, or they can be established by law.⁷⁴ An easement by prescription is an easement that arises under circumstances similar to adverse possession.⁷⁵ Like adverse possession, an easement by prescription requires the following: (1) that the property at issue has been used continuously and without interruption during the statutory period;⁷⁶ (2) that the use has been open and notorious; and (3) that the use was adverse and under a claim of right.⁷⁷ A subtype of these easements is referred to as public prescriptive easements, which require the same elements as individual prescriptive

70. See Expanding the Econ. and Innovation Opportunities of Spectrum Through Incentive Auctions, *Notice of Proposed Rulemaking*, FCC 12-118, para. 23 (2012) [hereinafter *Incentive Auction NPRM*], available at http://hraunfoss.fcc.gov/edocs_public/attachmatch/FCC-12-118A1.pdf; see also 47 U.S.C. § 309(j)(8)(G)(i) (2006).

71. See *Incentive Auction NPRM*, *supra* note 70, at para. 5. The FCC defines the reverse auction as a process “in which broadcast television licensees submit bids to voluntarily relinquish spectrum usage rights in exchange for payments.” *Id.* Like other spectrum policy changes over the past decade, the reverse auction is meant to increase efficient use of spectrum by freeing underused licensed spectrum for flexible use. *Id.*

72. See *id.* at para. 28.

73. See Easement Definition, BLACK’S LAW DICTIONARY (9th ed. 2009)

74. See DUKEMINIER ET AL., *supra* note 43 at 785.

75. See *id.* at 794. The difference between adverse possession and prescriptive easements is that adverse possession typically applies to possessory estates (such as life estates and fees simple), while easements apply to (1) a right-of-way, (2) a right of entry for any purpose relating to the dominant estate, (3) a right to the support of land and buildings, (4) a right of light and air, (5) a right to water, (6) a right to do some act that would otherwise amount to a nuisance, and (7) a right to place or keep something on the servient estate. BLACK’S LAW DICTIONARY 62, 585-86 (9th ed. 2009); see also RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.17 (2000).

76. The “statutory period” refers to the statutory limitation on an owner’s right to bring an action in trespass, or other applicable statute of limitations. See DUKEMINIER ET AL., *supra* note 42, at 120–21.

77. See *id.* at 122, 795.

easements, except that the owner of the property in question must be put on notice that the property is being used by the public.⁷⁸

The rationale for the doctrine of prescriptive easements is based on utilitarian property theory, which states that the “primary function of property rights is to promote the efficient use of resources.”⁷⁹ The doctrine of prescriptive easements supports efficient use of resources because, when all requirements are met, the law favors the party that has made use of the land over the owner that has not.⁸⁰ The legal title to the property is thus corrected to reflect the actual use of the property.⁸¹ This doctrine also protects the user’s reliance interest in the property developed through long-term use, while punishing the inattentive owner who “sleeps on his or her rights.”⁸²

1. Open and Notorious

The first element necessary to establish a prescriptive easement is the “open and notorious” use of property.⁸³ In general, this requirement means that the acts of the trespasser would put a “reasonably attentive” owner on notice that someone is using her property.⁸⁴ To establish a public prescriptive easement, the public use must have been “so frequent, widespread, and common that a reasonable property owner would have been aware of it.”⁸⁵ For example, in *Stickney v. City of Saco*, the court found that the open and notorious element for a public prescriptive easement was satisfied not only because the private road in question was used by the public, but also because no one had ever asked permission to use it, nor had the owners obstructed public use.⁸⁶ The reasoning behind the open and notorious element is that it gives the owner a “full opportunity to assert his rights and challenge the claimant’s use of the easement.”⁸⁷ An owner who does not take this opportunity is negligent and “sleeping upon his rights.”⁸⁸

78. *See id.* at 798.

79. *See id.* at 50 (noting that the utilitarian theory is “the dominant view of property today”); RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.18 cmt. f (2000).

80. *See* RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.17 cmt. c (2000).

81. *See id.*

82. *See id.*

83. *See* DUKEMINIER ET AL., *supra* note 42, at 795.

84. *Id.* at 120; *see* RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.17 cmt. h (2000) (noting the various ways in which the true owner may be held to have been aware of the adverse possession).

85. 2 AM. JUR. 3D *Proof of Facts* § 5 (1988).

86. *Stickney v. City of Saco*, 770 A.2d 592, 602 (Me. 2001).

87. 2 AM. JUR. 3D *Proof of Facts* § 5 (1988).

88. DUKEMINIER ET AL., *supra* note 42, at 120–21.

2. Adverse and Under a Claim of Right

For a prescriptive easement to be established, adverse possession must be “accompanied by a ‘claim of title.’”⁸⁹ The majority of jurisdictions define this requirement as being satisfied whenever an “owner is dispossessed by someone taking possession inconsistent with . . . his title.”⁹⁰ In the majority of interpretations of this element, the entrant’s state of mind towards the legal ownership of the property is of no consequence—all that matters is that the trespasser entered upon another’s property and that she did not do so in subordination of the true owner’s rights.⁹¹ This means that the adverse possessor must not have used the property with authority or permission from the owner.⁹² For example, if the public uses a private road believing that it is open to public use, or even with knowledge that it may be private, the use is adverse.⁹³ However, if the owner were to inform users that the road belonged to her but that the public was free to use it, the adverse use requirement would not be satisfied.⁹⁴ The reasoning behind the “adverse and under a claim of right” requirement is that if the use is subordinate to the true owner’s rights, the law would consider the use more like a license than an easement.⁹⁵

3. Continuous and Uninterrupted Use

The third element that is required to establish a prescriptive easement is continuous and uninterrupted use during the statutory period, that is, the period during which the owner may bring an action for trespass or a similar action.⁹⁶ The “uninterrupted” element refers to a lack of action by the true owner to stop the adverse use.⁹⁷ The “continuous” element refers to continuous, but not necessarily constant, use in the context of normal usage for a property of that nature.⁹⁸ In the case of public prescriptive easements, this requirement may be met when “exercised by the public at such times as

89. *DUKEMINIER ET AL.*, *supra* note 42, at 131. This element is also termed “claim of right” or “hostility.” *Id.* at 132.

90. *Id.* at 132.

91. *Id.*; see RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.16 cmt. f (2000). The other interpretations of this element include the “good-faith” view, which requires that the entrant believe, in good faith, that she has a right to be on the property, and the “aggressive trespasser” view, which requires that the entrant intended to take the property for herself while knowing that it belongs to someone else. See *DUKEMINIER ET AL.*, *supra* note 42, at 132. Under this view, if title is awarded to the adverse possessor, she may be required to pay fair market value for the property. See *id.* at 133.

92. See RESTATEMENT (THIRD) OF PROP.: SERVITUDES § 2.16 cmt. f (2000).

93. See *id.*

94. See *id.*

95. See *id.*

96. See *DUKEMINIER ET AL.*, *supra* note 42, at 120-21.

97. See *Stickney*, 770 A.2d at 602.

98. See *DUKEMINIER ET AL.*, *supra* note 42, at 121.

the public's convenience and business require."⁹⁹ If the adverse possessor uses the property in the way that the average true owner would, this constitutes continuous use.¹⁰⁰ For example, if the public uses a road for occasional hiking for fifteen years, assuming fifteen years satisfies the statutory period, the use would be continuous.¹⁰¹ However, if the owner were to successfully block access, or bring an action for trespass or ejection after fourteen years of the same use, the owner would have interrupted the use and this element would not be satisfied.¹⁰²

4. Public

The defining requirement for the *public* prescriptive easement is, of course, that the property in question is actually used by the public.¹⁰³ Specifically, "the landowner must be put on notice . . . that an adverse right is being claimed by the general public, not by individuals."¹⁰⁴ One factor in determining whether the use is by the general public is the purpose of the use.¹⁰⁵ Generally, courts will not find that the use was public if the use was not for a public purpose or benefit.¹⁰⁶ For example, use of a private road by a group of individuals who own or reside on land adjacent to the road is not public use, while use by members of the community without interest in the adjacent land may establish public use.¹⁰⁷

5. Other Considerations

Two other considerations in determining public prescriptive easements are the applicable statute of limitations, and, if an easement is found, the scope of the easement. Public prescriptive easements require that all the aforementioned elements be met for the duration of the statute of limitations for a trespass or nuisance claim against the entrant.¹⁰⁸ Alternatively, a jurisdiction may have statutory limitations specifically for establishing a prescriptive easement.¹⁰⁹ If any of the elements are not met or cease to be satisfied during this period, there can be no claim of a prescriptive easement.¹¹⁰

99. See 2 AM. JUR. 3D *Proof of Facts* § 7 (2012).

100. See *id.*

101. See RESTATEMENT (THIRD) OF PROP.: SERVITUDES §2.17 cmt. j (2000).

102. See *id.*

103. See 2 AM. JUR. 3D *Proof of Facts* § 2 (2012).

104. See DUKEMINIER ET AL., *supra* note 42, at 798. Courts have occasionally restricted the public easement to a smaller locality when general public use would overburden the land. See RESTATEMENT (THIRD) OF PROP.: SERVITUDES §2.18 cmt. c (2000).

105. See 2 AM. JUR. 3D *Proof of Fact* §§ 2-4 (1988).

106. *Id.*

107. See *id.*

108. See DUKEMINIER ET AL., *supra* note 42, at 120.

109. See *id.*

110. See *id.*

The “nature of the right acquired by prescription is generally measured by the actual use made of the property by the public during the prescriptive period, and the physical extent of the easement is generally determined by the [geographic] extent of such use.”¹¹¹ Recognition of an easement requires that these two measures of scope be fairly definite.¹¹² For example, a public prescriptive easement for a road cannot be established if there is no single route that the public travels over because the extent of the use could not be adequately defined to create a specific interest in the land.¹¹³

As use of unlicensed spectrum increases, conflicts between licensed users and unlicensed users are bound to increase.¹¹⁴ The FCC should adopt a consistent means of adjudicating these conflicts, since a constantly shifting spectrum policy has led to unpredictable results.¹¹⁵ Property law may provide a guide for the FCC to use in developing a coherent framework.

III. UNLICENSED VS. LICENSED DISPUTES IN THE PUBLIC PRESCRIPTIVE EASEMENT FRAMEWORK

In the case of unlicensed spectrum use, the framework of easements by prescription would be useful. This section will explain how the easement framework would function in the spectrum context, analyzing how each element required of public prescriptive elements might be met by a spectrum user.

Spectrum is not a physical resource that can be clearly marked off like a parcel of land, which would seem to limit the applicability of property law concepts to spectrum.¹¹⁶ While establishing a physical presence on another’s land may be relatively easy, it is more difficult to picture how an operator’s use of licensed spectrum would support finding an easement. However, an analysis of the public prescriptive easement doctrine, which takes into consideration principles of notice, duration of use, and use by the public, reveals that these principles can be adapted to describe the way spectrum is used. There are two scenarios in which an operator might pursue a claim for a public prescriptive easement: one in which the unlicensed device interferes with a licensed use, and a second in which the licensed operator interferes with an unlicensed operator (as in the LightSquared–GPS case). For example, in the latter scenario, a court would find that a user of unlicensed spectrum, such as for Wi-Fi, could continue her use at the expense of interference to the licensee. The following

111. See 2 AM. JUR. 3D *Proof of Facts* § 9 (1988).

112. See *id.*

113. See *id.*

114. See Goodman, *supra* note 9, at 393–94.

115. See *id.*

116. See *id.* at 272.

sections will analyze how the prescriptive easement elements might be met in each scenario.

A. *Open and Notorious*

The open and notorious element of prescriptive easements, which requires that the acts of the trespasser would put a reasonably attentive owner on notice that someone is using her property, can be adapted to spectrum use.¹¹⁷ “Acts” for this purpose could include unlicensed device emissions over licensed frequency when the unlicensed transmission interferes with a licensed transmission. When the licensed transmission interferes with an unlicensed transmission, “acts” might mean actual or predicted interference with other operators, since both would put an observer on notice that some operator may be using that band.¹¹⁸ A “reasonably attentive” operator would at least be aware of harmful interference, since by definition such interference would impair the operator’s service or device.¹¹⁹

Again, this element may not be easily satisfied in every case, because in some cases the source of the interference is quite difficult to determine and may be caused by many different devices.¹²⁰ However, in the case of GPS devices, Wi-Fi, and other technologies that would be protected by a public prescriptive easement, it is easier to identify the source of the transmission.¹²¹ Some bands are designated by FCC regulations for unlicensed spectrum use, and adjacent users should be aware of this fact.¹²² GPS devices, Wi-Fi, and other wireless devices, for example, operate in a specific frequency band.¹²³ Therefore, licensees in the same or adjacent bands would be aware of at least the type of unlicensed devices causing the interference, if not the actual source. In the second scenario, unlicensed operators might be able to determine the source of interference from the licensed operators that transmit at a nearby frequency.

To illustrate, in the LightSquared-GPS case, GPS device utilization of the L-band could be considered an open and notorious “act” for the purpose of a public easement analysis. Though the GPS devices did not interfere with LightSquared’s operations and therefore did not “trespass” on LightSquared’s licensed spectrum, the devices could not filter out

117. See *supra* Part II.C.1.

118. See Yoo, *supra* note 50, at 2204–07 (noting that interference can be caused by inanimate objects, terrain and weather). Predicted interference could come in the form of comments to the FCC about laboratory trials in the disputed frequencies. See *LightSquared Notice*, *supra* note 1, at para. 8.

119. See 47 C.F.R. § 15.3 (2012).

120. See Yoo, *supra* note 50, at 2204–07.

121. See *id.*

122. See Staple & Werbach, *supra* note 27, at 24–25.

123. See 47 C.F.R. § 2.106 (2012).

LightSquared's signals after preliminary tests were performed.¹²⁴ Such predicted interference could establish "open and notorious" use of the licensed spectrum because it would put the reasonably attentive licensee on notice that another operator's spectrum use conflicts with license.¹²⁵

B. Adverse and Under a Claim of Right

In property law, the "adverse and under a claim of right" element of an easement describes when the owner's cause of action against the trespasser arises, that is to say, when the trespasser uses the property without the permission of the owner.¹²⁶ A spectrum licensee's correlating cause of action might arise when there is actual interference or potential interference, since the law provides that licensees may enjoy their licensed spectrum free of interference just as real property owners are entitled to enjoy their land free of trespass.¹²⁷ An operator who is transmitting at a power level that would interfere with an adjacent licensee's use is reducing the quality of the licensee's spectrum and is inconsistent with the licensee's "title."¹²⁸ The majority interpretation of the "adverse and under a claim of right" element in property law is also well suited for spectrum disputes. Devices unintentionally transmit spurious emissions out of their assigned bands, and the provider might not even be aware of this until notified by an adjacent user.¹²⁹ Therefore, state of mind would be difficult to determine. Under the majority interpretation, it would only matter that the operator is creating interference or emitting at a level that would cause interference. State of mind would not be relevant so long as the operator is not interfering pursuant to authorization or permission of the licensee.

124. See *LightSquared Notice*, *supra* note 1, at para. 8; Brodtkin, *supra* note 2.

125. Note that in real property, a property owner generally may not prevent a neighbor from building a structure that would interfere with the light, air, or view on the owner's property. See, e.g., *Fontainebleau Hotel Corp. v. Forty-Five Twenty-Five, Inc.*, 114 So. 2d 357, 359 (1959) (quoting *Reavers v. Martin Theatres*, 52 So. 2d 682, 683 (Fla. Dist. Ct. App. 1951)); JAMES W. ELY, JR. & JON W. BRUCE, *THE LAW OF EASEMENTS AND LICENSES IN LAND* § 5.30 (2013) (noting that in the United States, courts have generally found that easements in light, air, or view may not be established by prescription). For example, the court in *Fontainebleau* found that a property owner could not enjoin its neighbor from building a structure that would cast shade on its beach area. See *Fontainebleau*, 114 So. 2d at 360. Following this logic, one might argue that a spectrum user similarly should not be able to establish a prescriptive easement to prevent predicted interference. Some courts, however, have made exception to the general rule against easements in light to protect users of solar-powered technology. See ELY & BRUCE, *supra*, § 5.30; *Tenn. v. 889 Assocs., Ltd.*, 500 A.2d 366, 377 (N.H. 1985). Similarly, an exception to the general rule might be made in order to protect and foster spectrum use that satisfies the other elements of a public prescriptive easement.

126. See *supra* Part II.C.2.

127. See 47 U.S.C. § 333 (2006).

128. In this case, the licensee's title is the license to use the spectrum.

129. See Yoo, *supra* note 50, at 2212–13.

This element may be more difficult to establish in the scenario of an unlicensed operator seeking protection from a licensed operator because the analogy from property use to spectrum use is not as clear. In this case, the unlicensed operator is not “trespassing” on the licensee’s allotted spectrum because it is not creating interference but rather receiving it. However, the “adverse and under claim of right” element can be adapted for this scenario. The unlicensed operator’s adverse action to the licensee’s “claim of right” in this scenario would be the inability to operate without experiencing interference from the licensee’s operations in an adjacent band. While the unlicensed operator in this situation is not technically using the licensee’s spectrum, it is acting adverse to the licensee’s use of that spectrum if it is to operate without interference because this would necessarily limit the licensee’s ability to fully utilize (or “enjoy”) its licensed spectrum. For example, in the LightSquared-GPS case, GPS devices could not filter out interference from LightSquared’s operations in an adjacent band.¹³⁰ In this situation, GPS device operations were adverse to LightSquared’s licensed use of spectrum because the two operations could not coexist without interference to GPS devices.¹³¹ In other words, GPS devices were “trespassing” on LightSquared’s licensed spectrum, in that they could not fully operate without limiting LightSquared’s use of its licensed spectrum.¹³²

C. Continuous and Uninterrupted

In property law, the “continuous and uninterrupted” element of an easement is established when the trespasser uses another’s land in a manner consistent with how the average owner would use the land during the statutory period, without the owner attempting to block the trespasser’s access to the land during that time.¹³³ In the context of spectrum, continuous use could likewise be measured. If the unlicensed service makes use of the spectrum in a way that a licensee would, the use could be considered continuous for the purpose of establishing an easement. Under this standard, so long as the unlicensed operator is transmitting in the way an average operator would under the circumstances (as opposed to a random out-of-band emission), the continuous element would be satisfied. This standard would work quite well for spectrum use since emissions may or may not be constant.¹³⁴ The “uninterrupted” element could also be easily

130. See Brodtkin, *supra* note 2.

131. See *id.*; see also *LightSquared Notice*, *supra* note 1, at para. 6.

132. Taken to an extreme, under this element, it might be argued that a spectrum user might manufacture a device that receives interference from wide range of spectrum, and thus claim an easement in that range of spectrum. However, such a user would not be putting that spectrum to productive use and, it is unlikely that such a user could meet all the elements for a public prescriptive easement throughout the statutory period.

133. See *supra* Part II.C.3.

134. See Goodman, *supra* note 9, at 387.

met. If the licensee formally complained of interference or of a possible conflict with an unlicensed operator before the statutory period, the unlicensed operator's ability to claim an easement would end. Likewise, if an unlicensed operator utilized spectrum without conflict with a licensee during a statutory period, the "continuous and uninterrupted" element could be met in the scenario where the unlicensed operator seeks protection from a licensed operator. In the *LightSquared-GPS* case, for example, the federal government made GPS available for civilian use in the 1980s and, until the *LightSquared* case, operated in its band without major conflict.¹³⁵ Furthermore, GPS devices operated in a typical manner during that time; that is to say, they consistently used a certain band of spectrum. Therefore, in this situation, GPS would be able to meet the "continuous and uninterrupted" element of an easement.

D. Public

The "public" element of a public easement requires that the property at issue be used by or for the benefit of the general public, not just for a specific group of individuals.¹³⁶ For certain uses of unlicensed spectrum, the "public" requirement would be easily met. Many devices that use unlicensed spectrum are sold to and used by the public—Wi-Fi routers, cell phones, and so forth.¹³⁷ The way the public uses spectrum through these devices is more like a road thought to be open to the public than a private road used by individuals with adjacent property. Furthermore, the private members of the public who purchase wireless products are not the only unlicensed user—government entities also use unlicensed spectrum.¹³⁸ Perhaps not every unlicensed spectrum use would meet this standard, but it would clearly be met by many unlicensed services that are beneficial to the public. The unlicensed operator's relationship to the licensee (i.e., whether the unlicensed operator is interfering with a licensee's operations or is seeking protection from a licensee's interference with its operations) is of no consequence to the analysis for this element because in either scenario, the "public" element will be satisfied as long the unlicensed operation at issue is used by or for the benefit of the public. For example, GPS would meet the "public" element of a potential easement because the band in which many GPS devices operate is specifically available for public use and is, in fact, used by the public for a variety of applications.¹³⁹

135. See *What is GPS?*, GARMIN, <http://www8.garmin.com/aboutGPS/> (last visited Sept. 2, 2013); Stephen Lawson, *LightSquared v. GPS Raises Big Spectrum Issues*, PCWORLD (July 25, 2011, 2:30 PM), <http://www.pcworld.com/article/236501/article.html>.

136. See *supra* Part II.C.4.

137. See Thompson, *supra* note 12, at 166.

138. See *id.*

139. See *Applications*, GARMIN, <http://www8.garmin.com/aboutGPS/applications.html> (last visited Sept. 2, 2013).

E. Statute of Limitations

There are various regulations that could be used to establish a public easement in spectrum. Though interference is the natural analog to a trespass in the context of spectrum, regulations regarding procedures for interference complaints do not specifically state a time within which a complaint must be made.¹⁴⁰ 47 U.S.C. section 503 does limit the period during which the FCC may fine an interfering operator to one year after the complaint is made; however, this would not be helpful for measuring a time during which *the licensee* should be on notice of a “trespasser.”¹⁴¹

To find an adequate solution to this problem, it is useful to remember the purpose of adverse possession and prescriptive easement laws—to reward the party that has “earned” his right to the property by making use of it and to punish the owner who has “slept” on her rights.¹⁴² The FCC places certain obligations on licensees to ensure that they are making efficient use of their licenses in the form of build-out and “substantial service” requirements.¹⁴³ These regulations mandate that a licensee provide a defined level of service within a period of time.¹⁴⁴ For example, the regulations governing Broadband PCS require that

licensees of 30 MHz blocks must . . . provide adequate service to at least one-third of the population in their licensed area within five years of being licensed and two-thirds of the population in their licensed area within ten years of being licensed. Licensees may, in the alternative, provide substantial service to their licensed area within the appropriate five- and ten-year benchmarks.¹⁴⁵

The regulations further specify that failure to meet the requirement results in forfeiture or non-renewal of the license.¹⁴⁶ The FCC has very

140. See, e.g., 47 C.F.R. §§ 90.674, 22.879, 25.274 (2012).

141. No forfeiture penalty shall be determined or imposed against any person under this subsection if--

(A) such person holds a broadcast station license issued under subchapter III of this chapter and if the violation charged occurred--

(i) more than 1 year prior to the date of issuance of the required notice or notice of apparent liability; or

(ii) prior to the date of commencement of the current term of such license, whichever is earlier.

47 U.S.C. § 503 (2006).

142. See *DUKEMINIER ET AL.*, *supra* note 42, at 120–21.

143. See 47 C.F.R. § 27.14 (2012).

144. *Id.*

145. See 47 C.F.R. § 24.203 (2012) (“Substantial service’ is defined as service which is sound, favorable, and substantially above a level of mediocre service which just might minimally warrant renewal.”).

146. *Id.*

similar construction and renewal requirements for many types of licensees.¹⁴⁷

These regulations could establish the time in which a licensee must make use of its allotted spectrum after the FCC grants the license. If, within that time, the licensee does not recognize that another operator causes or will cause harmful interference, this could establish that the licensee was not reasonably attentive in making efficient use of its spectrum allotment and has therefore “slept” on its rights as a licensee, while the unlicensed user has “earned” rights by using the spectrum to provide service to the public. Likewise, in the scenario where the licensee interferes with an unlicensed operator, if the conflict is not recognized and raised within the build-out period, the claimant would lose the right to bring the dispute before the FCC.

There are some difficulties with adapting the statute of limitations requirement of a prescriptive easement in real property to current FCC procedures. In the *LightSquared–GPS* case, for example, GPS raised the issue of potential interference during the applicable period, causing *LightSquared* to take actions that, under this framework, would likely toll the statute of limitations.¹⁴⁸ To adequately fit the statutory period element of public prescriptive easements to spectrum disputes, it may be necessary to establish new procedures, such as a requirement that the party seeking ejection make a special filing.

F. *Scope of the Easement*

While spectrum is not a physical entity that can be obviously parceled off, the FCC does create “parcels,” or blocks, of spectrum. The FCC either licenses operators to use a certain block of spectrum or allocates it to unlicensed uses.¹⁴⁹ Different services use different bandwidth; for example, Wi-Fi devices operate in the unlicensed 2.4 GHz, while the 4.9 GHz band is dedicated to public safety use.¹⁵⁰ The scope of an easement for an unlicensed use could be measured by the frequency that is necessary for functional transmission. The *Progeny* and *LightSquared* cases are illustrative: in both cases, the licensee was required to show that it would not interfere with unlicensed services.¹⁵¹ The scope of an easement

147. See, e.g., 47 C.F.R. §§ 24.203, 27.14, 90.743 (2012) (Broadband PCS, wireless communications services, and land mobile radio services, respectively).

148. See *LightSquared Notice*, *supra* note 1, at paras. 1–7. If GPS already had established an easement, its notice of potential interference could toll the statute of limitations if it were seeking ejection of *LightSquared*.

149. See Goodman, *supra* note 9, at 280–81.

150. See 47 C.F.R. § 2.106 (2012); ABB INC., THE 4.9 GHz SPECTRUM AND MUNICIPAL UTILITIES (2013), available at http://www.tropos.com/pdf/technology_briefs/4.9_GHz_Spectrum_Municipal_Utilites.pdf.

151. See *LightSquared Notice*, *supra* note 1, at para. 9; *Progeny Order*, *supra* note 39, at para. 25.

for the unlicensed user would be to the extent that other transmissions do not create interference with its operations.

The prescriptive easement framework could be used when an unlicensed operator interferes with a licensee's spectrum use or when an unlicensed operator experiences interference from a licensee. The scenario where an unlicensed operator interferes with a licensee's spectrum use may more clearly correlate to the traditional concepts of "trespass" and other easement elements, but with some adaptations, the easement framework can also be used to analyze and resolve disputes in a scenario where the unlicensed operator seeks protection from a licensee.

IV. WHY THE PUBLIC PRESCRIPTIVE EASEMENT FRAMEWORK SHOULD BE ADOPTED

The FCC should apply the public prescriptive easement framework to unlicensed use that is facing a complaint of interference or complains of potential interference. It could do so by issuing new regulations that adopt this framework. It is probable that not all unlicensed spectrum operators would meet every requirement necessary to establish a public prescriptive easement, which limits the types of operators who would benefit from implementation of this framework. However, the types of unlicensed uses that would meet the necessary requirements are services that merit protection in order to ensure that the public has access to these valuable services.

Furthermore, in hotly contested cases like the dispute between GPS device manufacturers and LightSquared, the public prescriptive easement framework would allow for more reasoned and predictable outcomes. This is in contrast to the FCC's recent, seemingly random decisions to protect certain unlicensed operators in disputes with licensees. This section will further discuss the benefits of using the public prescriptive easement framework as well as the potential hurdles to implementing the framework.

A. Benefits

1. Public Interest

The FCC has a broad mandate to carry out its duties as the "public convenience, interest, or necessity requires."¹⁵² The FCC promotes the use of unlicensed spectrum on the basis that it furthers the public interest.¹⁵³ Specifically, the FCC has stated that it seeks to foster technological development by allowing developers access to unlicensed spectrum.¹⁵⁴ New

152. See 47 U.S.C. § 303 (2006).

153. See Watson, *supra* note 35, at 181–82.

154. See *id.* at 186–87.

technology can provide direct benefits to the public in the form of new services or devices. It can also benefit the public in the form of increased spectrum efficiency since new technologies like smart radio are better at economizing spectrum use.¹⁵⁵ Finally, with access to unlicensed spectrum, developers can easily overcome one very costly barrier to entry—obtaining a license from the FCC.¹⁵⁶ These cost savings may be passed along to consumers as they need only purchase the spectrum-using device instead of paying a fee for use of the provider's service.¹⁵⁷

The public prescriptive easement framework is harmonious with the goal of spurring development of public-benefitting technology because one of the requirements is that the use must be by the public and for the benefit of the public, not just a small group of individuals. The “public” element echoes the FCC's public-interest mandate because, in most cases, protecting services widely used by the public will be in the public interest. This can provide assurance that where there are competing interests, the public prescriptive easement doctrine as applied to spectrum will protect the interest most benefitting the public.

2. Equity

The public prescriptive easement doctrine would be fairer than current regulations because it would more equitably balance the interests of unlicensed and licensed operators. The current rules clearly favor licensees over unlicensed operators.¹⁵⁸ There are some obvious justifications for this policy; for one, licensees spend large sums of money and other resources in reliance on certain guarantees provided by the license, such as interference protection.¹⁵⁹ Manufacturers and service providers, however, also spend their resources in reliance on access to unlicensed spectrum necessary to develop and operate their technologies.¹⁶⁰ Consumers purchase these products or services based on an implicit guarantee that they will be able to access spectrum.¹⁶¹ Because, in some circumstances, all parties may have equal and competing interests in spectrum access free of interference, at least one party must be disregarded in favor of the other. The current law and regulations simply protect one party in all circumstances where

155. See *Cognitive Radio Report*, *supra* note 37, at para. 4.

156. See Carter, *supra* note 8, at 111.

157. See Harold Feld, *From Third Class Citizen to First Among Equals: Rethinking the Place of Unlicensed Spectrum in the FCC Hierarchy*, 15 *COMMLAW CONSPECTUS* 53, 54 (2006).

158. See *UWB Order*, *supra* note 35, at para. 21.

159. See Goodman, *supra* note 9, at 284.

160. See Feld, *supra* note 157, at 54.

161. See Thompson, *supra* note 12, at 166.

unlicensed and licensed uses conflict—the licensee.¹⁶² But this may not always be the most equitable resolution to the dispute, particularly with consideration of the “public interest” mandate.

For example, in the LightSquared–GPS dispute, LightSquared argued that it spent a vast amount of resources in reliance on the license.¹⁶³ However, GPS device manufacturers made note of meaningful interests in protecting the functionality of GPS beyond money spent—access to the service itself is highly valuable for the public and the government.

The public prescriptive easement doctrine applied in this situation would lead to the result that is most harmonious with the goals of the FCC and would provide a reasoned, balanced basis for the outcome. GPS, having utilized certain spectrum bands for at least a decade to the extent that the FCC was aware of it, and meeting the requirement of public use, would satisfy the requirements of a public prescriptive easement. This resolves the dispute in favor of the established service that is already supplying a benefit to the public, rather than the licensee who has not yet made its service available.

3. Uncertainty

Implementation of the public prescriptive easement doctrine would help reduce regulatory uncertainty for both licensees and unlicensed spectrum users. Despite contrary regulations, the FCC has recently issued decisions to protect or expand unlicensed access in the face of interference concerns from licensees. This situation creates uncertainty in the law since it seems neither party can be assured to any degree which one will merit the FCC’s protection. Applying a prescriptive easement framework would eradicate the problem of uncertainty in the current law. Certainty in the law is desirable because parties may more confidently invest in spectrum with the knowledge that their spectrum use will not be subjected to inconsistent application of the law. An established framework would also improve adjudication of disputes. By providing certain requirements, both unlicensed and licensed users alike will be aware of the actions that are necessary to succeed in a conflict over interference by taking steps that satisfy the elements of a prescriptive easement.

162. As discussed above, the FCC’s actions toward unlicensed spectrum users do not always closely reflect the law and regulations regarding protection from interference. Those laws and regulations, however, still plainly protect the licensee without exception.

163. Letter from Lawrence E. Strickling, Assistant Sec’y for Commc’ns and Info., U.S. Dept. of Commerce, to Julius Genachowski, Chairman, FCC (Feb. 14, 2012) (NTIA Letter), available at <http://apps.fcc.gov/ecfs/document/view?id=7021860324>.

B. Potential Problems and Solutions

There are some potential obstacles to the FCC in implementing a public prescriptive easement framework to spectrum management. First, the FCC cannot, by law, adopt outright property law principles in its spectrum management duties since the Communications Act prohibits licensees from having a property interest in spectrum.¹⁶⁴ However, by creating regulations that simply adopt the framework of prescriptive easements, the FCC would not have to specifically recognize property ownership rights in spectrum. Furthermore, the FCC has stated that Part 15 devices, though referred to as unlicensed, may have a kind of “license by rule” in unlicensed bands that are adhering to FCC regulations.¹⁶⁵ Under this interpretation, the public prescriptive easement doctrine can be seen as a way of managing licenses rather than awarding property.

Another possible obstacle is that if there is a rigid regulatory regime, the FCC would lose some degree of control over which unlicensed spectrum uses it will protect. Furthermore, it may allow licensed users to defeat unlicensed uses valuable to the public if interested parties are unable to show that the use has met all the requirements of a public prescriptive easement. However, current uncertainty is not a tenable policy going forward as unlicensed spectrum use increases; there must be some standard so that users may conform their behavior and expectations. The public prescriptive easement doctrine would provide the necessary predictability while producing results that will generally reflect public interest goals.

V. CONCLUSION

Unlicensed spectrum use has increased exponentially and, if the FCC’s current policy choices are any indication, will continue to do so. Increased use will mean increased potential for interference. If there is to be any accord between licensed and unlicensed operators, there must be some way to equitably consider the interests of each. The public prescriptive easement doctrine, which takes into consideration principles of notice, duration of use, and use by the public, would be the best means of providing predictable results that will generally resolve disputes in the public interest. In the LightSquared-GPS case, the result would be clear and predictable: interference protection would be afforded to GPS, a service that has been used by the public over many years, regardless of its unlicensed status.

164. See 47 U.S.C. § 301 (2006).

165. See *UWB Order*, *supra* note 35, at para. 75.