EDITOR’S NOTE

Welcome to the first Issue of Volume 68 of the Federal Communications Law Journal, the nation’s premier communications law journal and the official journal of the Federal Communications Bar Association.

In honor of the twentieth anniversary of the Telecommunications Act of 1996, this Issue includes a special compilation of personal reflections from individuals instrumental in crafting, implementing, and litigating this landmark legislation.

Next, a Comment by Harold Furchtgott-Roth and Arielle Roth examines the Telecommunications Act of 1996 by considering four questions: (1) what were the political conditions that enabled the passage of the Act?, (2) to what extent was the implementation of the Act faithful to its intent?, (3) how did the communications sector fare in response to the Act?, and (4) is the Act due to be re-written? Their analysis of the 1996 Act provides useful guidance to future policy makers.

This Issue also contains an Article coauthored by George S. Ford, Ph.D. and Larry Spiwack of the Phoenix Center for Advanced Legal & Economic Public Policy Studies. In their timely piece, the two describe the lessons learned from the United States’ unbundling experience. The article explains that the unbundling paradigm outlined in the 1996 Telecom Act contained fundamental defects, which effectively doomed unbundling from its conception. The article also provides guidance to policymakers contemplating future regulatory interventions.

In addition to the pieces described above, this Issue includes two student Notes. In the first Note, Jason Norman describes the dangers of cell-site simulator use and outlines the role the FCC should play in protecting privacy and security. The Note contends that additional FCC regulation of cellular service providers and device manufacturers will enhance their encryption protocols. The second Note, written by Shannon Rohn, explains the burdens broadcasters face regarding the regulations of political speech. The Note argues that the FCC should not expand sponsorship identification requirements for political issue ads.

The Journal is committed to providing its readership with substantive coverage of relevant topics in communications law, and we appreciate the continued support of contributions 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.

Rachael Seidenschnur Slobodien
Editor-in-Chief
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.
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Reflecting on Twenty Years under the Telecommunications Act of 1996
A Collection of Essays on Implementation

To commemorate the twentieth anniversary of the Telecommunications Act of 1996, the Journal has compiled thirty-two essays by individuals involved in the Act’s drafting, implementation, and attendant legal challenges. The essays come from former Chairmen, Commissioners past and present, FCC staff members, federal and state legislators, private attorneys, economists, and more. Their commentaries are diverse in subject matter and scope but all offer unique and valuable perspective on the 1996 Act and insightful lessons for future policy makers.

Answering Four Questions on the Anniversary of the Telecommunications Act of 1996

By Harold Furchtgott-Roth & Arielle Roth

Commentary examining the Telecommunications Act of 1996 by considering four questions: (1) what were the political conditions that enabled the passage of the Act?, (2) to what extent was the implementation of the Act faithful to its intent?, (3) how did the communications sector fare in response to the Act?, and (4) is the Act due to be re-written? Their analysis of the 1996 Act provides useful guidance to future policy makers.

Lessons Learned from the U.S. Unbundling Experience

By George S. Ford, PhD & Lawrence J. Spiwak, Esq.

The unbundling paradigm contained in the 1996 Telecommunications Act was one of the most ambitious regulatory experiments in American history. Yet, despite high expectations, less than a decade after codification the experiment was over. Without making any consumer welfare claims about the desirability of unbundling or its failure, in this paper we attempt to discern what lessons can be learned from the experience. With the benefit of hindsight, we believe that the demise of the unbundling regime in the U.S.
was driven by three underlying economic causes which policymakers failed to comprehend: (a) the expectations of policymakers for “green field” competitive facilities-based entry into the local wireline market at the time of the 1996 Act were unrealistic; (b) the unbundling regime was incentive incompatible in that the incumbent local phone companies were required to surrender market share to entrants without any (permanent) offsetting benefit; and (c) the rise of new alternative distribution technologies such as cable, wireless and over-the-top services that expanded the availability and quality of competing voice services. Local competition in the U.S., it turns out, was not the result of new entrants constructing new plant, but from the repurposing of the embedded cable television plant and the migration of many households to the exclusive use of mobile wireless services. The study concludes that while unbundling may have been a sensible policy for the monopoly communications world of 1996, the presence of inter- and intra-modal competition and the inherent incentive problems with unbundling make it unsuitable for today’s marketplace. As such, the United States needs a new policy regime for the communications market of the 21st century. Hopefully, with the benefit of hindsight and lessons learned from the U.S. unbundling experience, future regulatory interventions in the communications marketplace will proceed with more humility and wisdom.

NOTES

Taking the Sting Out of the Stingray: The Dangers of Cell-Site Simulator Use and the Role of the Federal Communications Commission in Protecting Privacy & Security

By Jason Norman

The Stingray is a cellular tower emulator technically known as an IMSI catcher. This emulation capability allows law enforcement, or anyone with the technical expertise, to capture cellular data in transit to or from any cellphone within the Stingray’s broadcast range, entirely without the person’s knowledge or consent. This note argues that the Federal Communications Commission should enact regulation under its Title II authority requiring cellular service providers and device manufacturers to enhance their encryption protocols pursuant to recommendations established by the Communications Security, Reliability, and Interoperability committee, which released its final report in early 2015. Additionally, the FCC should mandate that SIM card manufacturers enable consumer access to already existing security options, which are, as of this writing, permanently disabled during manufacture. This will enable security conscious consumers to more effectively protect their private communications against eavesdropping or theft. This action will help to secure the national wireless infrastructure by adding a stronger layer of cybersecurity to protect against crimes such as identity theft, corporate espionage and against warrantless searches conducted in violation of the Fourth Amendment which are becoming increasingly frequent. In many cases, law enforcement use of this equipment violates existing FCC regulations prohibiting the use of particular broadcast technologies. These security enhancements would not compromise national security or decrease the effectiveness of law enforcement, and can be done in compliance the Communications Assistance for Law Enforcement Act as
well as the Electronic Communications Privacy Act. Taking these first essential steps toward a more secure wireless infrastructure will serve the interests of both privacy and national security by preventing wireless voice and data communications from being easily accessible over the airwaves by widely available interception equipment.

Protecting Political Speech and Broadcasters from Unnecessary Disclosure: Why the FCC Should Not Expand Sponsorship Identification Requirements for Political Issue Ads

By Shannon Rohn

The Supreme Court in *Citizens United v. Federal Election Commission* found that the “First Amendment has its fullest and most urgent application to speech uttered during a campaign for political office.” For this reason, the Court expanded the right of organizations, corporations, and unions, to use independent expenditures for the purpose of express advocacy in political campaigns. This decision and its progeny have led to an influx of political advertisements from outside groups not affiliated with a candidate or a political party. Organizations that are unhappy with the changes in campaign finance reform have turned to the Federal Communications Commission as an avenue to increase transparency in elections. They contend that more information during sponsorship identifications are necessary so that the public can get the “true” identity of those behind these third party political ads. However, convenience, necessity, and the public interest weigh against furthering the sponsorship identification requirements for political advertisements. Broadcasters already provide the public with sufficient information about those behind the ads they air, and expanding those requirements runs the risk of chilling the political speech that *Citizens United* sought to expand and protect.
Correction to Volume 67 Issue 3 page 393:

The first paragraph was misprinted and should have read:

Next, the Court held that the FCC acted arbitrarily and capriciously when promulgating its final $75 Rule and Default-Off Rule, because the record supported neither the Rules' factual predicate nor reasoning and the agency failed to show its exercise of “predictive judgment” was based on anything more than “sheer speculation.”
Reflecting on Twenty Years Under the Telecommunications Act of 1996

A Collection of Essays on Implementation

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INTRODUCTION

It is appropriate that the Federal Communications Law Journal is devoting this special issue to analysis of the Telecommunications Act of 1996 on its twentieth anniversary because the '96 Act significantly amended the Communications Act of 1934 in many important ways.

The most fundamental change mandated by the Act was to open local telecommunications markets to competition. To implement that change, Congress adopted detailed provisions designed to foster local competition and Congress’s decision to address local telecommunications issues upset the traditional division of authority between state and federal regulators. Congress also adopted provisions permitting the Bell Operating Companies to provide long distance service after they opened their local markets to competition. In addition, Congress recognized that local competition would require major changes in the existing universal service and intercarrier compensation rules and adopted provisions addressing those critical issues. Congress also recognized that regulation should recede as competition developed and enacted a novel provision permitting the Federal Communications Commission to forbear from enforcing provisions of the Communications Act that were not needed once competition developed. These are only a sample of the provisions adopted in 1996.

Congress mandated that the FCC issue rules implementing the market-opening provisions of the Act within six months of enactment. Along with many of the contributors to this special issue, I worked at the Commission while the landmark Local Competition Order was drafted between February and August of 1996. It was only the first of dozens of FCC orders resulting from the Act.

To say that the requirements of the Act and the Commission’s implementation of its provisions were subject to extensive debate at the Commission and litigation in the courts is a major understatement, but that is about all I can say in my role as President of the Federal Communications Bar Association. However, this special issue of the FCLJ includes articles by scholars examining the Act and essays by many communications lawyers that, together, provide useful celebration and critical analysis of the Act. Those contributors include key drafters of the Act, the Chairman of the FCC when ’96 Act became law, lawyers representing state commissions and public interest groups, and lawyers who represented the many telecommunications companies affected by the Act. I would like to thank all of the contributors for their articles and essays.

I also would like to thank the Journal staff, especially Amy McCann Roller, and the FCBA’s Law Journal Committee, especially Jeff Lanning and Larry Spiwak, for their excellent work on this special issue.

Christopher J. Wright
President, Federal Communications Bar Association
By the late 1980s, technological innovations, such as the advent of fiber optics, made it possible to open monopoly communications markets to competition. Consumers, communications companies, and members of Congress saw the opportunities that creating competition in communications services would provide for robust infrastructure investments, market pricing for services and broader public access to information.

On the House Energy and Commerce Subcommittee on Telecommunications and Finance, we began a long process of holding hearings, introducing early legislative drafts and proceeding to markups and floor consideration of bills. The culmination of that effort was the Communications Act of 1996.1 The first seeds for the Act were planted in 1989 with a proposal I co-authored with then Senator Al Gore to allow telephone companies to offer cable television service inside their telephone service areas.2 That amendment to the cross-ownership restriction of the 1984 Cable Act became the first plank in the Telecommunications Act of 1996.3

Over time, additional planks were added. The monopoly local telephone exchange was opened to competition.4 The long-distance market was made more competitive by enabling the Bell Regional Operating Companies to offer nationwide long-distance service once they had fully established that their local telephone exchanges were open to voice competition,5 and the Bell companies were given the permission to manufacture telecommunications equipment.6

In the same timeframe that the ’96 Act made communications markets competitive, the Clinton administration and the FCC adopted a light touch regulatory approach for the nascent fiber-optic broadband network. That farsighted decision ignited a virtual explosion in broadband investments and created the foundation for the modern Internet which is now the preferred medium for communications of all kinds.

The 1996 Telecommunications Act was a product of bipartisan cooperation in both the House and the Senate. It passed in both bodies by overwhelming margins. As we mark the twentieth anniversary of the Act, we are reminded that landmark achievements in Congress rarely happen on a partisan basis. The nation now faces new communications policy challenges

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3. See Telecommunications Act, § 202(i) (amending telephone company/cable cross-ownership restrictions contained in 47 U.S.C. § 533(a)).
ranging from transitioning from the circuit switched telephone network to an all IP network, finding effective ways to transition large allocations of spectrum from government ownership to commercial auctions and securing a durable foundation for network neutrality protections. Just as for the ’96 Act, bipartisan cooperation will be the key to legislative success.
It was an honor and a privilege to participate in the herculean effort needed to implement the Telecommunications Act of 1996, and I will be forever grateful to Commissioner Susan Ness for giving me that opportunity. The Act required dozens of rulemakings, and established tight timetables, but the entire agency rose to the challenge and implemented the Act as faithfully as possible. Key factors in the success of this effort were the Commissioners’ wisdom, humility, and willingness to compromise, the Bureau and Office staffs’ experience, professionalism, and collegiality, the active and (usually) constructive participation of a wide range of stakeholders, and—something I only came to appreciate with hindsight—the strong oversight provided by engaged congressional overseers.

But the biggest successes of the Act came not from new regulations that Congress instructed the agency to promulgate but from new freedoms the Act created. Telephone companies were allowed to provide video services, opening the door for new competition to cable and satellite providers (though it took a decade before this opportunity was aggressively pursued). Cable companies were freed from the yoke of rate regulation, restoring their ability to maintain and upgrade their networks and enabling them to carry a multitude of new channels and to develop new services. Broadcasters were freed from certain ownership limitations and given greater assurance of license renewals, and a pathway for transmission of digital, high-definition signals was opened. And Congress established a national policy “to preserve the vibrant and competitive free market that presently exists for the Internet and other interactive computer services, unfettered by Federal or State regulation.”

Inevitably, then, telephone, cable, and broadcast services are vastly better today than they were twenty years ago, but these gains are trifling compared to the explosive growth of the Internet. We should not forget that only a small percentage of Americans used the Internet in 1996 and that those who did typically did so using dial-up access that allowed only 14, 28, or at most 56 thousand bits per second—and there were proposals to focus on “integrated services digital networks” that would increase speeds to 128 or perhaps 256 kbps. Fortunately, cable company innovators didn’t listen, and

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2. Telecommunications Act, § 202(i) (amending the telephone company/cable cross-ownership restrictions contained in 47 U.S.C. § 533(a)).
4. See, e.g., 47 U.S.C. §§ 309(k), 336 (2012) (respectively prescribing broadcast station renewal procedures and permitting licensing of advanced television services); Telecommunications Act, § 202(a)-(f) (directing FCC to modify its broadcast-ownership rules contained in 47 C.F.R. §§ 73.658(g), 73.3555, 76.501).
they plowed ahead with a risky bet on cable modem technology, which in turn drove telcos to deploy digital subscriber line technology, which paved the way for wireless and satellite broadband—all of which now allow consumers to communicate at many millions of bits per second. I firmly believe that this progress would have come much more slowly were it not for the Commission’s steadfast determination, in 1998 and 1999, to follow the guidance that Congress had given and resist the entreaties of those who demanded regulation of Internet service providers. The benefits of this “hands-off” approach have surpassed all expectations, and the predicted harms proved to be illusory. Chairman Kennard and his colleagues deserve enormous credit for recognizing the imperative of creating an environment conducive to investment, and Chairman Powell likewise should be honored for carrying that policy forward.
Passage of the Telecommunications Act of 1996 offers great perspective on today’s political and policy gridlock in Washington. It signified a moment in time when an Administration and far-sighted legislators from both parties, holding different perspectives, but all keenly interested in the dawning Internet age, joined ranks to craft a statute that was far-reaching in its scope and visionary in its impact.

At bottom, the framers of the ’96 Act embraced a wise humility toward technology and its future development. They were conscious of the Communications Act of 1934’s sixty-year legacy, and wanted their work to last. It took nearly six years over three Congressional sessions to negotiate, compromise, draft and re-draft what ultimately became the Telecommunications Act of 1996, and their work provided a roadmap for the future of the nation’s communications landscape.

Indeed, the framers of the Act did their work better than they perhaps knew, piloting the ship of telecommunications policy through a foggy harbor into an open and unknown sea towards a destination of today’s cross-platform communications marketplace. In retrospect, it is easy to forget how different things looked at the advent of the Internet. Back then, a consumer reached the Internet over a slow, twisted pair telephone line. The incumbent telephone companies who provided those lines were just starting to see the effects of competitive entry into their markets. Back then, the companies that comprised the current AT&T operated just over 70,000,000 switched access voice telephone lines. We didn’t provide any video services, and DIRECTV had just passed 1,000,000 video subscribers in the United States. The entire cellular industry had just over 44 million subscribers in the United States. The cable companies had not yet entered the voice market. The Internet existed but, broadband was still off in the future. It was a world where the dominant companies were traditional telephone companies, like Southwestern Bell, BellSouth, NYNEX and Bell Atlantic. Facebook, Google, and Twitter didn’t exist (Mark Zuckerberg was 11 years old when the Act passed). Apple was foundering in the wake of Microsoft’s dominance, having fired Steve Jobs eight years earlier.

Compare that to today. The large Internet companies literally have billions of customers. First Apple and Steve Jobs reunited to give us the iPod, which revolutionized the entertainment world, then the iPhone, which did

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the same for the wireless marketplace. In states where AT&T provides traditional telephone service, less than 15% of households even bother to subscribe to POTS service. AT&T/DIRECTV have over 25 million video connections. Cable companies now provide voice service to approximately 30 million customers. Without even considering connected cars and the Internet of Things, there are more than 350 million wireless subscribers in the United States alone (an 800% increase). According to the United States government, more than 45% of American households have cut the traditional landline telephone cord. In other words, we have gone from a near-monopoly telephone company voice market to a consumer communications nirvana.

In 1996, we didn’t yet have broadband or know fully its potential to create entire new industries and revolutionize not only communications, but all commerce on the planet. So how did we end up with a communications system that leads the world? Wisely, the Act was drafted from the premise that telecommunications markets – in time, all telecommunications markets – could be opened to competition successfully and, once competition took root, those markets could be substantially deregulated. Indeed, the Act itself stated its purpose as: “To 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.”

The pro-competitive goals of the Act have been achieved. The numbers cited above reflect the dramatically different communications landscape that exists today. Innovation, investment, and easy market entry have combined to ensure that today competition is the rule, not the exception, in every segment of the marketplace. Convergence of technologies and cross-platform competition are not future prospects but accomplished facts.

The introduction of Apple’s iPhone in June 2007 conveniently divides the twenty years since the Act and marks a significant milestone in the success of the Act itself. Since that date, smartphones and connected tablets have become commonplace, Americans have consumed broadband voraciously, and the United States passed Europe in adoption of broadband technologies and in average speed of broadband connections. This, too, may be attributed to the Act and to policies that favored deregulation, innovation, and capital investment rather than top-down regulation like the Europeans, who subsequently lost both their initial lead in broadband and their associated edge in economic competitiveness.

Despite this history, rather than completing the Act’s deregulatory mandate, the FCC now appears ready to extend pre-1996 Act monopoly-era regulations and rules to today’s competitive broadband markets and services. By contrast, in 1996, the Act’s framers chose the path of restraint in the expectation—fully justified by subsequent events—that the marketplace would encourage innovation and investment, spreading the

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3. Telecommunications Act, pmbl.
benefits of broadband to all Americans. In reversing course, we now risk jeopardizing this success by turning back towards outmoded and unnecessary regulation rather than advancing successful policies based on regulatory restraint and confidence in competition first set forth during the Clinton Administration.

The agency’s dramatic break from this successful policy of regulatory restraint is striking and worrisome. In 1996, Congress unleashed competitive forces in order to reduce regulation. Yet today, the FCC has turned Congressional intent on its head, refusing to recognize competition in order to expand its own regulatory role. Rather than back away in competitive situations as the Act clearly envisioned, the FCC more and more is intervening to direct outcomes it prefers rather than leave them to the decisions of consumers. Broad phrasing intended to allow the FCC discretion to deregulate is now being used to justify expansion of FCC authority. It is because of this trend, and the seeming inability of a government agency to understand let alone direct wise outcomes in an era of hypersonic technological change, that many now recognize the need for Congress to reassert its primacy.

Clearly this situation calls for a new Communications Act, a rewrite of our laws based upon the realities of today’s competitive marketplace where new, innovative companies and technologies compete against each other and against global players at a pace unheard of twenty years ago. It would be a rewrite that places consumer choice, not a government agency, at its center.

Of course, this new Act should protect twenty-first century consumers against abuse irrespective of technology, provider, and legacy classification by treating similarly situated providers throughout the broadband ecosystem equally, rather than continue uneven protections based on the silos of the past. Moreover, in crafting a new Act, Congress could revisit the FCC’s role in the twenty-first century digital economy to ensure a constructive government mission to advance high-speed broadband infrastructure deployment and technological innovation, while ensuring that consumers, not government, decide winners and losers in the marketplace.

Thomas Jefferson famously wrote (here, in paraphrase) that the tree of liberty was best watered by a rebellion every twenty years.5 In the two decades since 1996, rapid technological change has produced a revolution—the broadband revolution—and also a rebellion of users essentially bypassing legacy services weighed down by outmoded and unnecessary regulatory restrictions. Today, consumers adopt and discard services and technologies at amazing speeds. A wise rewrite of the Communications Act will empower those consumers, not burden their range of choices based on which services government favors or disfavors. A wise law will also recognize that this pace of change requires policies that encourage investment, especially infrastructure investment, as well as innovation.

Congress should ensure that any FCC policy that inhibits either must meet a heavy burden of proof before it is allowed.

To achieve this vision fully will require a significant revision of the Act, building on its deregulatory, pro-competitive premises and recognizing that government regulations cannot keep pace with the rate of technological progress and, if they try, will surely slow it down to the detriment of consumers. As in 1996, the key to a successful revision of the Act will be to rethink how to approach a new competitive dynamic that is already improving lives and advancing our Nation’s progress. Even more than in 1996, regulatory humility is called for. Consumers must be protected against harm, but we should find ways of doing so that do not discourage needed investment and innovation. Our experience with the Federal Trade Act shows this can be done without burdening a major portion of our economy with ex ante regulation, and could provide a new way to think about the FCC and its mission. But whichever approach it may choose, Congress must act. As the FCC continues to deal with the problems of today by applying statutes and rules designed for another era, the confidence and certainty needed for investment wanes. Innovative new services and offerings wait for an endless series of rulemakings, notices of inquiry, interpretations and court appeals. And as the FCC strays farther into gray areas of interpretation, we see partisanship and external ideologies having more influence over decision-making, to the detriment of that respect for its nonpartisan expertise on which the agency depends.

Reconceiving the communications laws needed for a modern era is a worthy task for the Congress and is increasingly vital to our economy as well. Too much has changed since 1996 to avoid the task, and too much is at stake if we shrink from this challenge.
At the state level, the decade or so after enactment of the Telecommunications Act of 1996\(^1\) was a time of much confusion vis-à-vis implementing the law’s many telephone-related provisions. Justice Scalia’s criticisms of the Act, that it was not a “model of clarity” and was in “many important respects a model of ambiguity or indeed even self-contradiction,”\(^2\) proved to be an enduring truth, as state regulators clashed with the FCC over jurisdictional boundaries and regulatory roles.\(^3\) Although a central part of the legislation, the Act’s primary focus on creating competition in local telephone markets was quickly undermined by the rapid emergence of more robust IP-enabled competitors like VoIP, the meteoric growth of the wireless sector, and the increased popularity of high-speed Internet connectivity. Unlike many other states at the time, Florida was among the first to recognize the profound importance and enormous potential of these services for consumers and economic development.

Florida was a leader in responding to Congress’s bipartisan directive to keep these new services “unfettered” by state regulation.\(^4\) In 2003, Florida became the first state to explicitly deregulate VoIP, finding that a minimalist regulatory approach for this dynamic service was in the public interest.\(^5\) It was also among the first to clarify that wireless services were not to be regulated by the state public service commission,\(^6\) bolstering the certainty provided by the national regulatory framework for mobile that was

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\(^3\) See generally Charles M. Davidson & Michael J. Santorelli, Federalism in Transition: Recalibrating the Federal-State Regulatory Balance for the All-IP Era, 29 BERKELEY TECH. L. J. 1131 (2014) (detailing many of these battles and the shifting balance of regulatory federalism before and after the Act).


\(^5\) See Fla. Stat. § 364.01(3).

\(^6\) See Fla. Stat. § 364.01(1), (granting the Florida Public Service Commission jurisdiction over “telecommunications companies”; see also Fla. Stat. § 364.02(13)(c) (excluding CMRS (wireless) providers from definition of “telecommunications company”).
implemented in the 1990s. State policymakers also acted in the 2000s to free broadband service of unnecessary state and local regulation, aligning Florida’s policy with the federal light-touch “information service” model that was being formalized at the time. The resulting framework for these advanced communications services—light-touch in nature; supportive of market forces; and consumer-focused in all respects—contributed to the development of a vibrantly innovative and intensely competitive high-tech sector in Florida, positioning it as a rational and effective model for furthering the spirit and letter of the Act.

Despite the considerable successes facilitated by Florida’s minimalist regulatory approach to advanced services, many states elected to pursue a decidedly different approach to implementing the Act. Indeed, many state regulators focused primarily on defending their regulatory authority over basic telephony, suing the FCC on numerous occasions in the decade following enactment in an effort to protect what they viewed as the proper balance of regulatory federalism. This created a schism between traditionalist regulators, who focused only on preserving a formal regulatory role, and regulators who were accepting of a more limited regulatory role in order to unleash the true potential of advanced communications services. Over time, more states elected to replicate Florida’s deregulatory framework for advanced services, but the contours of this clash of regulatory philosophies persist to this day.

In addition, recent actions by the FCC to reinterpret a key provision of the Act relating to regulatory authority over advanced services and reclassify broadband undermines much of the progress made by forward-looking states like Florida, which acted in response to Congress’s clear directive to implement light-touch regulatory frameworks for these services. In sum, it appears that, after 20 years, the sector has come full circle from a

10. See Federalism in Transition, supra note 3, at 1154-1161 (discussing these clashes).
12. See generally Federalism in Transition, supra note 3.
regulatory standpoint, an outcome that seemed unthinkable only a few years ago. Looking ahead, now might be the most opportune time for Congress to update the law lest the policies governing this sector become impediments to, rather than enablers of, further investment, innovation, and competition.
The Wireless Telecommunications Bureau was only a year old when the Telecommunications Act of 1996 was passed. The Bureau’s immediate priority was to conduct the initial PCS spectrum auctions under its new auction authority, as well as the related rulemaking proceedings and licensing efforts. The PCS C Block bidding was currently underway, with record-breaking bidding of more than $10 billion when the auction closed in May of 1996.

At the time, policymakers viewed wireless spectrum as a prime opportunity for new entrants to compete with the “duopoly” cellular carriers as well as incumbent local telephone companies and cable operators down the road. Accordingly, FCC Chairman Reed Hundt and the Bureau were focused on adopting spectrum caps, resale and roaming requirements and other regulations to bring new competition and investment to the relatively nascent wireless industry.

The Telecom Act presented a major opportunity to bring competition and investment to the broader telecommunications industry, although mobile wireless lagged far behind the wireline and cable segments in terms of deployment and penetration at that stage. Indeed, mobile wireless was typically viewed as a complement rather than a substitute to local wireline service, and generated less consumer and public interest group attention. The Telecom Act put the initial tools and framework in place to drive today's cord-cutting culture, however, particularly with its focus on interconnection, access, universal service, number portability, and cross-platform competition.

On a more personal level, the Bureau was an exhilarating and overwhelmingly busy place to work when I arrived in late November of 1995 from NTIA. The staff was hard working and enthusiastic, reflecting the combination of the former Private Radio Bureau with parts of the Common Carrier Bureau, as well as the new Auctions Division team, many of whom came from other agencies. Spectrum and licensing issues dominated our agenda, including proposing more flexible service rules and preparing to auction many new spectrum bands as well as the remaining “Swiss cheese” from previous site-by-site licensing. The Bureau was also focused on

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developing new rules governing Local Exchange Carrier (LEC)-Commercial Mobile Radio Service (CMRS) interconnection arrangements when the Telecommunications Act was passed, and we needed to rethink some of our priorities going forward. Fortunately, our overall approach already dovetailed well with the competitive framework of the new legislation, but the devil was in the details—and there were many details to resolve.

Following passage of the Act, the Bureau worked closely with the Common Carrier Bureau, the Office of General Counsel, and other Bureaus on implementation of many provisions. Chairman Hundt recognized the importance of utilizing the perspectives and expertise of the Bureau staff, particularly given the disruptive role that mobile wireless carriers were likely to play in the future. The level of engagement and commitment was extremely high across the agency, enabling the Commission to undertake countless rulemakings on many complex and cutting-edge issues stemming from the Act during a compressed time period.
GEORGE S. FORD

I joined the newly-created (and now eliminated) Competition Division at Federal Communications Commission about eighteen months before Congress passed the 1996 Act.\(^1\) To give you an idea about the state of the market at the time, consider the following statistics: At the time, all but 6% of American households had a wireline telephone provided by a local telephone monopoly; today, less than half do.\(^2\) Access charges were nearly $0.07 and a long distance call would run you about $0.14 per minute;\(^3\) today, there is no longer an independent “long distance market.” Wireless voice service was considered a luxury, with only about 20 million wireless subscriptions; today, there are over 355 million.\(^4\) The first spectrum auction would take place in my first year at the Commission, permitting the entry of multiple new wireless providers and creating a consumer product of broad appeal not long afterwards; today, the FCC recently completed Auction 97.\(^5\) Windows 3.1, the first commercially successful version of the now-ubiquitous Windows operating system, became available only two-years prior to the Act.\(^6\) My FCC computer had a 20-megabit hard drive running a 486 processor. The Internet was in its infancy. About a year after I started, a few of us in the Competition Division would figure out how to hack our way to the World Wide Web from our work desktops using the Mosaic browser—a practice not formally encouraged by the Commission. AOL would not begin offering an unlimited fixed-price dialup service until 1996.\(^7\) The FCC


\(^3\) See id. at 8 tbl. 2.1; see also Year-End U.S. Figures from CTIA’s Annual Survey Report, CTIA (June 2015), http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey.


would not begin reporting the number of high-speed Internet connections until 2000.8

There was plenty of traditional regulation going on at the time, but the promotion of competition was the focus of attention.9 Americans had already experienced the benefits of competition in consumer premises equipment and in long distance services—they could choose from over 800 long distance providers in 1994 and prices were steadily falling.10 But, local telephone and cable television services remained, for all practical purposes, monopolies. As for local telephone services, FCC statistics assigned a market share to competitive providers of 0.3% in 1994, and DirecTV was launched in that year.11 Direct competition from cable overbuilding, the topic of my PhD dissertation, was exceedingly sparse. Increasing, if not outright creating, competition in these last vestiges of monopoly in communications was on everyone’s mind.

As we searched for ways to affirmatively nudge these markets toward competition, the tendency at the time was to point to regulation as a barrier to competitive entry, and rightfully so. Regulation was then, and remains today (though perhaps less so), a barrier to entry into local markets. More significant to the deterrence of entry, however, was and is the fundamental economics of providing local wireline services; fixed costs are high relative to market size thereby limiting the number of financially-viable providers.12 But we weren’t greedy—we would be happy with only one additional facilities-based entrant and understood even this to be a long shot. Duopolistic competition was the objective, and we understood that even two-firm rivalry would outperform regulation in almost all cases. Congress felt the same and codified the sentiment: the 1992 Cable Act defined “effective competition” as the presence of one-half a competitor, a situation that led to the forbearance of rate regulation.13 If duopoly could be achieved, it was a

10. See TRENDS IN TELEPHONE SERVICE, supra note 2, at 38 tbl. 9.1, 74 tbl. 13.5.
11. See id. at 29 tbl. 8.1; see also A Look Back at 1994, SATELLITE BIS. NEWS (June 29, 1994), http://www.satbiznews.com/94look.html.
victory and the starting point for deregulating the communications landscape.

Promoting competition and deregulation, though the two need not be interdependent (regulation can be bad even under monopoly), were our goals and eventually the nation’s goals with the passage of the Telecommunications Act of 1996. I would not work on implementing the 1996 Act at the Commission; in August of that year, I took an economist position at MCI Communications. MCI was the leader in promoting competition in those days—a creative and intelligent group with great respect for the law, the economics, and the engineering of the communications industry. Later, as a result of the darkness we know as Bernie Ebbers, I would take a job with Z-Tel Communications, a small Competitive Local Exchange Carrier (CLEC) based in Tampa, Florida. The company began as a software company, trying to make telephone service more useful, but learned that to offer its services it needed to own the customer, a need that could be met using the unbundled network element (UNE) Platform.

Both MCI and Z-Tel were active users of unbundled elements and vocal advocates for it. About the time a business plan using network elements appeared feasible, the unbundling regime began crumbling. Incessant litigation, the FCC’s inability to set a legal “impairment” standard, and the adverse political winds were taking their toll. Regulation and litigation were against the CLECs, but my vision of the CLECs death came in the early 2000s, a few years before the FCC would effectively shelf the unbundling experiment. Bright House (the cable system in Tampa) began offering a fully-featured, unlimited voice service for much lower than the price offered (or could be offered) by CLECs for the same service. Seeing this development first hand, I knew the CLEC sector was doomed. The unbundling regime—which rested on shifting political sands, heavy regulation by both state and federal regulators, and poor incentives—was no match for facilities-based entry by the cable industry. In my research on the industry prior to my employment at the FCC, I had read numerous articles published the 1980s and 1990s talking of cable systems offering phone service and telephone carriers offering video service. This cross-entry was a bit of running joke at the Commission. And then, it wasn’t a joke anymore—it was reality. Since the costly unbundling regime offered nothing better than the cable industry could provide (as well as other Internet-based phone providers), the unbundling scheme became, in almost an instant, a very high-cost, low-benefit public policy.

15. See Bernie Ebbers, TIME (June 9, 2009), http://content.time.com/time/specials/packages/article/0,28804,1903155_1903156_1903277,00.html.
17. See Ford & Spiwak, supra note 14, at 134-36.
During the implementation of the 1996 Act, I was engaged in a continual stream of fights over unbundling rates, statistical performance plans, and the entry of the local phone companies into the long distance industry. It was an exciting time for communications policy professionals. The lessons learned over this period are too numerous to list and perhaps too numerous to recall (though likely stored in the unconscious). There are a few lessons, however, that continually influence my thinking on the industry and its regulation.

First, an expert in local wireline service competition must be an expert in the economics of competition in concentrated markets. Almost all the policy conservation is about large numbers competition, which is entirely inappropriate and misleading given that the economic conditions of the industry limit the number of financially-viable competitors. In fact, when fixed costs are high, as they are, adding competitors can be detrimental to social welfare. What is often misunderstood about competition is that price cuts must be purchased by society, the price of which is the replication of fixed costs. At some point, the price effects just aren’t worth the cost, and this happens with very few competitors in naturally concentrated markets.

Second, there is no real constituency for competition. Firms mostly hate it, and the government is interested only if competition produces the outcomes it deems desirable. It rarely does. Competitive firms don’t like to sell things below their costs, but government officials love for them to do so. Subsidies, which infect the industry even today, are the enemies of competition but the friend of elected officials (and their appointees). Practices like usage-based pricing, promotional strategies, and two-sided pricing are competitive outcomes, yet often despised by regulators. Regulators want what they want, not what the interaction of buyers and sellers produces. As economist Friedrich Hayek observed, “competition is important only because and insofar as its outcomes are unpredictable and on the whole different from those that anyone would have been able to consciously strive for; and that its salutary effects must manifest themselves by frustrating certain intentions and disappointing certain expectations.”

Policymakers often pick desired outcomes and then, unthoughtfully, expect competition to produce them. It often doesn’t work out as intended.

Third, the argument for competition is an argument against regulation. Both telephone and cable services were heavily regulated in the early 1990s. Regulation, done properly, is intended to mimic competition. If effective, then the presence of regulation should imply no need for competition. Yet, when competition appeared in the communications landscape, there was no question about its measurable and often significant effects. The desire for competition demonstrates a dissatisfaction with regulation, something often forgotten in today’s policy debate—a lapse that had led, in part, to the present

19. See Friedrich Hayek, Competition as a Discovery Procedure, 5 Q. J. AUSTRIAN ECON., Summer at 9, 10 (2002).
regulatory revival at the FCC. Neither regulation nor competition can consistently satisfy the ever-shifting whims of politicians and political advocates; dissatisfaction is the only constant.

Fourth, and related to the third, the 1996 Act provided an experiment that revealed just how hard regulating the communications business is. I learned this lesson working on the payphone proceeding, implementing Section 276 of the 1996 Act (a task most would view as dreadful, but I continue to consider the most interesting proceeding of my twenty-plus year career). In the years after the 1996 Act was passed, the Commission was engaged in a number of highly involved and simultaneous proceedings including unbundling and the reform of the access charge regime and its universal service programs. But, in the midst of all this complexity, there was a payphone proceeding in which the Commission was required to set a single price for a single service—a service whereby consumers could connect to a long distance provider to make phone calls from payphones to avoid the typically high rates charged by the payphone providers. This simple task served as a test for the Commission’s regulatory prowess. It took the Agency three tries to write a legally-defensible order. In my view, the final order was as defective as the two prior, but the court seemed exhausted with the issue and by the time the FCC was done, the payphone industry was a shadow of its former self (falling from over two million phones to about 400,000 today). The Agency’s inability to routinely set a single price for a clearly defined service shows just how hard it is to regulate communications. A little humility, and a little empathy, are called for.

Fifth, now that competition exists in pretty much every sector of the communications industry, the FCC is primarily in the business of shifting around rents among industry participants. The Commission’s net neutrality rules, for example, are plainly designed to shift rents away from infrastructure companies and toward edge providers. Given that few competitors is the rule, a “high concentration” story is always available to those wanting more regulation as an excuse for regulatory intervention to favor one industry segment over another or to “protect consumers.” The number of competitors sufficient to end the call for regulation equals the number of guitars a guitar player needs—-one more. If you put out a complaint box, you’ll get complaints.

Sixth, language matters. Sitting on my desk at Z-Tel was a large stack of testimony by ILEC experts from years before touting the benefits of LRIC (long run incremental cost) pricing. It was unusable against their attacks on TELRIC (total element long-run incremental cost pricing) because the FCC had appended “TE” to “LRIC” and, consequently, created an entirely new animal. They were the same cost standards, but this simple change in the language led to enough confusion to largely render decades of research and testimony on LRIC useless in an adversarial proceeding. Through a smart

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and effective media campaign, the ILECs defined TELRIC (in the public view) as “below cost pricing.” Despite the Supreme Court affirming the cost standard in 2002, TELRIC would never shake this perception (it remains intact today).\(^{22}\) Be careful of the language you use.\(^{23}\)

Of course, the bigger question is what has the larger “policy collective” learned from the experience of the 1996 Act? As far as I can tell, not much. It is said that those who cannot remember the past are doomed to repeat it.\(^{24}\) The early reflections are now audible.


\(^{24}\) See George Santayana, LIFE OF REASON, VOL. I (1905).
It is important to remember how monumental the task of implementing the 1996 Telecommunications Act\(^1\) was for the Commission. Many of the deadlines in the Act were extremely challenging, starting with a thirty-day deadline to initiate a proceeding to overhaul the Universal Service regime. This was followed by numerous Notices of Proposed Rulemaking to be adopted within six months of passage of the Act. The first thing the staff did, therefore, was break down the Act into a series of tasks with deadlines. The Bureaus then designated teams to work each of the categories of proceedings. It was a very heady time, with even junior staff often given significant responsibility for implementing the provisions in the Act. The Act’s multiple policy pieces formed a “competition puzzle” that the Commission had to, and did eventually complete.

The Commissioners and their advisors were heavily engaged from very early on in the process. We held numerous meetings to brief them on the Act and on our proposals for meeting each of the Act’s mandates. When we delivered the drafts, we met with the Commissioners’ advisors collectively to discuss their questions and proposed edits. The advisors negotiated their edits together in meetings that the staff attended, and the Bureaus helped facilitate those negotiations. For a staffer, it was a thrill to participate in these meetings, with the legal advisors debating the law and the policies—in an impressively collegial manner given the pressure that everyone was under—and reaching bipartisan consensus in time to meet the statutory deadlines.

In terms of substance, one of the major policy goals of the Act was opening local markets to competition. At the time, long distance and local service were still largely separate services, and the “death of long distance” was still to come. The Act did not anticipate mobile substitution, convergence, or VoIP as a competitor to the incumbent local exchange carriers. Therefore, most of the discussions within the Commission were about creating an environment that would allow local competition to flourish. The issues were extremely complex and hard fought, but in the end, the Commission was optimistic that its policies would drive lower prices and foster innovation. One can debate whether the Commission’s policies were ultimately successful. But, at the time, even though there were many different points of view, there was an extraordinary sense of common purpose throughout the agency, as everyone was unified in the desire to meet the Act's objectives.

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Presidents sign important bills into laws with multiple pens, so as to hand out a dozen or so to key participants in the process. When Bill Clinton signed the 1996 Telecommunications Act\(^1\) into law, Commerce Secretary Ron Brown grabbed two off the table—one for himself and one he gave to me, because I was the chairman of the Federal Communications Commission. He gave me his trademark wink, as if to say, good luck! My pen is framed on my wall. I don’t know what happened to Ron’s. Two months later he died in a plane crash in Croatia.

Anyone who lives long enough confronts tragedy. If we can learn from it, the lesson is to be infinitely grateful when visited by luck and success. For those of us at the Commission and elsewhere in government who implemented, enforced, and reformed the nation’s regulatory paradigm over the last two decades, the enactment of the 1996 Act was a great piece of luck. It permitted all of us to help create the fascinating, overwhelmingly successful, and never-ending communications revolution.

Plainly some of the results of the digital age have been sinister, deadly beyond imagination. No technology resists use by forces of evil. Yet the overall legal framework of the 1996 Act has enabled principles of entrepreneurial competition and individual liberty to spread around the world.

All knew from the day of signing that the Act had everything to do with change, and something to do with the Internet. Vice President Gore’s policy adviser, Greg Simon, arranged for President Clinton’s bill signing to take place on the Internet, a first in such ceremonies. Simon, who in late 1993 was the first person to show me the Internet in action, also had the superb idea of setting the signing ceremony in the spectacular central room of the Library of Congress. The law, among other things, was meant to fulfill the promise Vice President Gore had made years before: “The schoolgirl in Carthage, Tennessee, should be able to have access to all the information in the world’s biggest library without leaving her hometown.” And indeed, then-Congressman Ed Markey and Senator Jay Rockefeller had assured (thanks to Senator Olympia Snowe’s crucial vote) that the bill authorized the FCC to allocate enough money to connect every classroom and library to the Internet—this was the E-Rate, recently reformed and expanded by the Wheeler Commission.

The Republicans had won the House and Senate in the previous election by running against the Administration’s tax increase in the Omnibus Budget Reconciliation Act of 1993 and the failed universal health care bill. Nevertheless, the Republican leadership, Senator Dole and Speaker Gingrich, supported the telecommunications reform, as did the White House

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* In 1996, Reed E. Hundt was Chairman of the FCC.

and Congressional Democrats. The principal reason for the huge bipartisan support (only Senator John McCain was a prominent outlier) was that the great lobbying enemies, AT&T and their severed satrapies, the regional Bell companies, had agreed to attack each others’ markets, and thus wanted a bill that let them both have it. Neither the Bells nor AT&T then understood that the Internet was the ring to grasp.

The guiding principle of the new law was that FCC rules would open every communications market to competition. By contrast, the 1934 Communications Act gave the Commission the task of regulating monopolies, especially the national telephone monopoly of AT&T. In succeeding decades, Congress expanded the Commission’s jurisdiction to cover such new markets as broadcast television, cable, satellite and cellular. In each case the Commission’s regulations tended to minimize business risk for incumbents, in exchange for providing public interest benefits. At least until the 1980s, Congress and the agency typically encouraged oligopolistic market structures, hived off markets from one another, slowed the pace of technological change, and created barriers to market entry.

By contrast, the 1996 Telecommunications Act asked the Commission to adopt the opposite approach. Rules should be erased or rewritten to create competitive markets. Barriers to adjacent market entry and new market creation should be reduced. The agency should encourage firms to take risks in return for reward. In short, everyone should compete with everyone and try everything that innovation permitted. The Act was only a tenth as long as, say, the Affordable Care Act, because it did not contain a plan for a particular outcome for any market. Competition, not Congress or the Commission, would produce optimal results.

Because existing markets were monopolized or oligopolized, the Commission had to write rules that in effect created irresistible opportunities for new entrants. Overall, the agency had to conduct more than four dozen separate proceedings. The affected parties had billions of dollars at stake, and they hotly contested every erasure of old rules and every phrase of new rules. This sea change in regulation and business models was accomplished, under the Congressional deadlines, in eighteen months, not counting the time for judicial review that followed.

Not only those in the agency, but also the business participants in this process would probably say, twenty years later, that they never worked so hard to produce such momentous results.

As everyone drilled down on the details of reform, the Internet’s rapid growth and astounding potential for transformation transfixed imagination and stimulated a huge stock market run-up. In that ramshackle eyesore of a building at 1919 M Street, we were at the center of global change.

Fortunately, as we worked, the President sailed smoothly to re-election, so that our team stayed in office until we completed our processes. Our brilliant lawyers then won the key cases on judicial review, including a five to three victory on the meaning of federalism in the Supreme Court after I had turned over the agency’s helm to the new chairman, Bill Kennard.
Because of technological innovation and the new paradigm of the Act, seismic waves of change hit the communications, computer and content industries. How could any of the leaders of the incumbent companies know what new strategies to select?

The old AT&T telephone monopoly had been broken up by the Department of Justice in 1982. It was divided into seven regional local telephone monopolies, known as the Baby Bells, and a separate long distance industry, dominated by AT&T, with MCI and Sprint as challengers. This structure was locked into place by a court order known as the Modified Final Judgment. The new law repealed the MFJ, and permitted the Baby Bells to enter long distance when the FCC granted permission.

The two most visionary local companies, Southwestern Bell and Bell Atlantic, used the new law to pursue an acquisition strategy. They bought the other telephone companies, in order to achieve economies of scale as they attacked AT&T in long distance. But soon they realized that their right goal was to become what they are now, under the names AT&T and Verizon, namely, the leading national wireless carriers. The firms’ shift from regional wire line to national wireless is the most dramatic business model change at a really large scale in modern history.

AT&T also welcomed the 1996 Act. It argued especially hard for the Commission’s rules that gave it the right to lease the local access network. The company wanted to offer its customers, more than half of the population, local and long distance service. But after barely a year of effort in this strategic direction, AT&T tried to merge with Southwestern Bell. Don’t beat them, join them—that was what AT&T’s CEO Bob Allen seemed to be saying in 1997 when he declared that this merger, at odds with the premises of the Act, was in fact “thinkable.” In one of the last decisions during my chairmanship, my team coached me up (with the support of key Senators) to explain publicly under the new law’s competition paradigm the suggested merger was “unthinkable.” That word, I learned years later, killed the merger that was actually being negotiated in a conference room at the time of my speech.

In the wake of this fiasco, Mike Armstrong replaced Bob Allen as AT&T’s CEO. He also had no stomach for leasing the Bell network to acquire local voice customers. Instead, he used the cash flow from the company’s huge but shrinking long distance revenue to acquire cable companies. By 2000 AT&T had become the biggest cable company in the United States, under the name AT&T Broadband.

As AT&T splurged on acquisitions the tech-driven stock market soared to bubble heights. The cheap capital of IPOs and easy credit enabled firms to build the new communications infrastructure at a rapid rate. From the mid-90s to the early ’00s, firms invested more than a trillion dollars in building the new, digitized networks that undergird communications to this day.

But AT&T’s timing was dismal. It paid sky-high prices for the cable assets, and had to borrow a lot for the deals. Almost from the moment it had finished construction of its cable empire, the stock market began a long, steep
decline, and the nation entered the mild recession of 2000-2001, AT&T could not hold on to its purchases. In 2001 it sold its cable companies at huge losses to astute, patient Comcast, and Brian Roberts became the new king of cable.

Even worse, AT&T spun off its wireless business: expanding that should have been its strategic goal. But how could anyone in the old fixed line telephone business have that insight? The 1996 Act exiled big companies from edenic incumbency and sent them wandering into unknowable futures. Some thrived. Others, like AT&T, withered.

In 2005, SBC bought that once great company after all. The buyer wanted this icon of twentieth century America for its long haul assets and its brand name. SBC paid $16 billion. AT&T’s market capitalization was $250 billion in 1997, when I had blocked the same merger. The 1996 Act envisioned competition, and therefore necessarily imagined that some firms would be destroyed in the market.

A few weeks before the momentous day when Ron Brown snatched that pen for me, Bill Gates, then Microsoft’s CEO, went to the Oval Office to make a last-ditch effort at persuading the President to veto the bill. Perhaps he was concerned about the speed of change that would follow. He already knew the Internet was threatening his operating system monopoly. Clinton listened attentively. Gates felt he had made some headway, as he flew to New York. Looking at the television screen in LaGuardia after landing, he saw that the President had agreed to sign the bill.

A year and a half later, in 1997 the FCC extended the enhanced service provider exception to Internet access by explicit order. As Steve Case, then CEO of AOL, understood, this decision guaranteed that firms like his could offer dial-up access to the Internet by using the local Bell company’s monopoly telephone network for free. He enjoyed guaranteed distribution to almost every building in the country. Case leveraged this regulatory advantage into the creation of a national franchise in e-mail.

Gates had imitated, and then crushed Netscape’s browser, the initial method of accessing the Internet. However, under threat of both the Department of Justice lawsuit against extending his Windows monopoly and the pace of change, he was not able to lead in the next big thing, e-mail. Then came search, where Google won dominance. Later, access became a mobile experience, and Apple made apps the cool new way into the Internet. Gates had more reasons to ask for a veto than he knew.

The government wanted the 1996 Act to produce this sort of Schumpeterian competition—cycles of creative destruction producing increasing social and economic benefits. Everyone knew that somehow the story was about the Internet. But no one knew which firms would win, or how long winners would hold their leads. Rapid change was the only certainty.

That access decision, and many other decisions implementing the pro-competition paradigm of the 1996 Act, helped assure that the culture of the Internet would be open and ever-changing, chaotic and creative, risk-taking and reward-producing. Over the last two decades, through all the twists and
turns of technology and politics, the Commission has continuously supported and extended the best attributes of that culture. To this day, the results of that steady purpose should give us confidence that the public and private sectors can work in rambunctious concert to better the human condition.
In 1995, as today, digital was all the rage. Although ISDN stood for “it still does nothing,” there was excitement about ATM (Asynchronous Transfer Mode, not cash machines) and the possibility of having “Swiss Army networks” that would carry voice, video, and data. The potential for the Internet—at least the fixed-line version—was widely recognized by Commission staff. In fact, I think we tended to overestimate how quickly it would disrupt the established regulatory order. I remember how each holiday season we predicted that, because voice was so cheap when viewed as data, this was going to be the year when a new VoIP product would destroy the landline telephone pricing regime as we knew it. It never happened. But an even more important development that people eagerly anticipated was that digital networks would engender greater competition. It was hoped that the convergence of broadband networks would lead telcos and cable companies to enter each other’s lines of business.

Although I don’t recall the issue’s ever rising to the Commissioner level, even in the mid 1990s several of us on the staff and in industry believed that the biggest issue in future telecom policy debates was very likely going to be the regulation of Internet access services. The big question that no decision maker had the appetite to address in advance was this: would the likely cable/telco duopoly for Internet access services be considered competitive enough to avoid regulation, or would data also eventually become subject to price regulation?

Looking back, the biggest technological development that we failed to foresee was how important mobile data would become. In 1996, we had recently finished the first spectrum auctions for Personal Communications Service. People were very excited about the benefits of mobile phones, especially the new smaller flip phones. But the excitement was about the convenience of mobile voice, not data. And the biggest excitement about mobile voice was the possibility of relying on competition, rather than regulation, to set prices.

While many of us were excited by the prospects of competition facilitated by wireline convergence and wireless entry, the Telecommunications Act of 1996\(^1\) largely pinned its hopes for competition on getting local and long distance carriers to enter each other’s markets in return for various forms of regulatory relief.\(^2\)

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So what happened? With the benefit of hindsight, it is clear that the 1996 Act bet on the wrong horses for competition. After fits and starts, cable companies and telcos did enter each other’s business, and they now compete head to head. Today, we have competition among four nationwide wireless carriers as well as several smaller, local and regional carriers. By contrast, neither the 1996 Act’s grand plan for inducing local and long distance telcos to create competing local exchange carriers, nor the considerable regulatory efforts to promote competition by unbundling the local loop, led to significant, lasting competition. Many of us were skeptical at the time of the Act’s fundamental premises with respect to the mechanisms for promoting competition, and that skepticism proved to be well founded. Fortunately, there were several other avenues to competition.
“Be bold!,” FCC Chairman Reed Hundt told his staff implementing the 1996 Act. And they were indeed bold in their efforts to open up local telecommunications markets to competition. So bold that the resulting regulatory scheme was repeatedly rejected by the courts.

The goal of competition was laudable, but the means chosen were lamentable. Despairing of actual facilities-based competition, the Commission chose instead to create artificial competition through radical unbundling and rock bottom pricing of the local telephone networks. The jewel in the crown of the FCC’s creation was the so-called UNE Platform at TELRIC prices. UNE-P is the sham equivalent of resale; TELRIC is . . . well, few remember what the letters even stand for. The idea was to push prices to idealized levels that no actual provider could possibly match. The result of course would have been to discourage anyone from building competing facilities had the courts not intervened.

Stock market values for start-ups soared as analysts either believed the FCC’s rhetoric or anticipated a giant regulatory wealth transfer. Stock market values crashed when investors realized that none of these local competitors had a viable business plan for adding value. Competition has come: but it has come from cable, VoIP, and wireless, not from regulatory fiat.

The FCC itself later admitted that almost no genuine competition resulted from the agency’s extreme interpretation of the unbundling and resale provisions of sections 251 and 252. The most significant advances from the 1996 Act were the provisions that simply required regulators to get out of the way: the removal of state and local entry barriers in section 253; the required interconnection among networks; and the entry path to long distance for the Bell companies in section 271. The long distance restrictions in the AT&T consent decree had cost consumers billions of dollars in inflated pricing for a service that, once opened to competition, has become essentially free. The lesson we should take away from the 1996 Act is that regulators cannot create competition. They can only get in the way. The FCC’s implementation of the ’96 Act created was a costly mess and a cautionary tale.

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“Be bold!” President Obama directed the FCC in its ironically-named Open Internet proceeding: competition cannot be trusted without extensive regulation to ensure a level playing field; new business ideas are a danger to least common denominator service for all comers. The resulting regulatory scheme will, once again, damage competition, pick winners and losers in the marketplace, encourage regulatory arbitrage, and, we can only hope, be thrown out by the courts.

La plus ça change.
The Telecommunications Act of 1996 resulted from almost a decade of political struggles between the increasingly powerful local telephone and cable television monopolies, versus long distance, satellite and the growing competitive electronics industry. It was based on the belief in a free market philosophy, which assumes that markets are always efficient and that competition will grow if government gets out of the way. This deregulatory experiment failed because market forces were far too weak to do the job. Consequently, the powerful transmission monopolies scored an enormous victory in 1996, gaining significant deregulation—but they also had to swallow updated consumer protections in the process.

Although proponents may have hoped transmission competition would somehow blossom from the Act, this was never economically plausible and instead consolidation of local telephone and cable companies exploded. The domination of the communications and media spaces by incumbents is as great, if not greater, today than it had been before the Act. The protection of consumers and competition has been weakened by the assault on Title II of the Communications Act and the effort to shift services to the other Titles of the Act that afford fewer protections. As a result, the updated FCC regulatory powers were called upon to police the exploding telecommunications sector dominated by transmission monopolies. Had the Act's proponents recognized the likelihood of massive consolidation, they may have provided antitrust enforcers or the FCC with stronger tools to prevent market abuse as the digital revolution unfolded. But they didn’t.

The prematurely deregulated digital communications sector delivers more value to consumers, but that has nothing to do with deregulation; it is entirely a function of new technologies, which would have been deployed under all conditions. Today, the ongoing concentration of power in the hands of dominant cable and telephone based Internet service providers makes the nondiscrimination and consumer protection powers granted to the FCC under the Act critical to promoting fair competition, innovation and affordable access to essential services. So far, enforcement agencies have, at best, struggled to rein in transmission abuses and inflated prices resulting from market concentration in transmission of Internet and video services. Without strong antitrust enforcement and enhanced regulatory intervention,

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the 96 Telecommunications Act is unlikely to ever produce the economic and social opportunities promised by its proponents.
JEFF LANNING *

People frequently comment about how amazing it is that dial-up Internet access and cell phones were in their infancy when the Telecommunications Act of 1996 became law. It is, indeed, remarkable how far we have come in just twenty years. If you stop and think about it, however, it may be even more amazing how little telecommunications had changed in the twenty years (and more) prior to the 1996 Act.

The decades prior to 1996 saw great innovation and change in computers but the biggest developments for telecommunications consumers were relatively small innovations such as answering machines, faxing documents, and long distance competition. More broadly, the biggest change in communications probably was the spread of cable television service, which was still largely analog and trying to adjust to the implementation of rate regulation. It is not hard to see why it was widely believed that the communications sector was not keeping pace with technology, and this was decidedly not just an American problem. Indeed, things were generally far worse elsewhere as most of the world had spent most of the Twentieth Century struggling with government-owned communications monopolies (frequently part of the postal service).

Much is made of the fact that the 1996 Act did not unfold as predicted, and even now it is common to hear passionate discussions about mistakes that were made or ways in which implementation of the 1996 Act may have deviated from Congressional intent. When we take this opportunity for reflection, however, it seems (to me at least) that maybe this state of affairs is exactly as it should be. No, things did not happen as planned, but isn’t that the point? If market outcomes could have been planned, and regulatory oversight could have optimized consumer welfare, the 1996 Act would not have been needed in the first place.

I think we have to admit that, for all of the inevitable flaws in the statute and its implementation, the 1996 Act has been a success overall. Consumers, including the enhanced service providers (edge providers, as we call them today), have done very well. In addition, many of the social bargains struck throughout history, for example in support of public safety and universal service, have been preserved to a significant degree even as some measure of deregulation has been achieved. Looking ahead, however, it is clear that more needs to be done. In particular, network providers of all types face considerable challenges and uncertain futures while dealing with outdated and asymmetrical rules. We need to develop a new legal framework, whether through forbearance, regulatory reform, or legislation, that facilitates

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competition while treating all providers equally, minimizing administrative costs, and promoting investment.
Many hold the common but mistaken view that the successful Clinton-era telecommunications/Internet policies reflected a bipartisan consensus that light-touch regulation was all that was necessary for the Internet to thrive.

True, communications policy was more bipartisan in those days. That derived, however, not from a lack of controversy but from how that era’s great policy divide—between Local and the Long-Distance Phone Companies—had advocates on both sides of the aisle. It is also true that in that galaxy a long time ago, compromise was not a dirty word. Both sides focused, not on press releases and tweets, but rather on how to obtain a healthy percentage of a loaf for their interests. The 1996 Act,1 required the FCC to complete 110 rulemakings within eighteen months. Thanks to an extraordinary process organized by Ruth Milkman (then in the Chairman’s Office and now back as Chief of Staff) in which the stakeholders knew immediately after the Act passed the precise timing for all filings and votes, the Commission met every deadline. Almost without exception, those votes were unanimous, even though the Chair and Commissioners generally started from different perspectives. What some now see as a bipartisan consensus was in reality more a fair and transparent process combined with a bipartisan willingness to compromise to move forward.

The bigger error, however, lies in the myth that all the Internet needed was the benign neglect of the government. A more accurate assessment is that the nascent Internet needed government assistance, just as did the nascent broadcast industry (with spectrum allocations and various protections for local broadcasters), the nascent cable industry (with mandated access to broadcast programming and pole attachment rights), and the nascent direct broadcast satellite industry (with spectrum and cable program access rights) all required in their early stages.

In the case of the Internet, the new platform faced the dominance by the incumbent communications platform, the telephone network, over which it initially rode. That dominance, was, of course, constrained by the application of Title II to the dial-up world, so thousands of ISPs were able to offer an on-ramp to the Internet of that era. But the Telcos had another tool to shape the Internet to their liking—terminating access charges. In the early days of the Internet, the Reagan era FCC wisely prohibited the imposition of

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such charges on data traffic, which is one reason so much experimentation occurred here. Once the Internet went commercial, however, the Telcos again asked the FCC for permission to charge per-minute terminating access charges.

We teed that issue up for a rulemaking in 1997. Chairman Hundt went to visit Senator Ted Stevens, the legendary Chair of the Commerce Committee to persuade him of the wisdom of continuing the no access charge regime. Hundt did not succeed. Stevens, while supportive of many of our competition policies, characterized the policy prohibiting access charges as theft and advocated treating data and voice identically. We, however, responded by meeting with Steve Case, the CEO of AOL. Subsequently, the first e-mail lobbying campaign in history sent the Congress over 400,000 e-mails. Senator Stevens, and the Bell Company advocates who had convinced him to adopt his initial point of view, decided to drop the topic.

In its rulemaking, the FCC explicitly protected data from access charges, saving consumers billions (if ISPs paid the long-distance rate of 3 cents a minute, an hour of web surfing would have led to a monthly bill in the neighborhood of $60 a month) and enabling AOL and others to market an affordable, all you can eat Internet. The Telcos were hardly hurt, as they sold a record number of phone lines. But the important outcome was that the United States led in Internet innovation, as American consumers were willing to try different applications that others charged per minute, such as in Europe, would not have tried. The Stevens episode, and there were many like it, demonstrate that the policies did not emerge from a light-touch regulatory consensus. Rather, the policies reflected a tough-minded goal of assuring that incumbent platforms did not stifle the new, and a political process that did not avoid, but did resolve, conflicts.

Today, people increasingly take advantage of the manifold communications functions the Internet offers over mobile. There too, government played a key role. The early market of the 1980’s, however, was constrained by two government decisions. First, the government only allocated two spectrum licenses per market, limiting competition and leading to mobile initially being a premium product. Second, wire line providers were able to charge high terminating access charges, placing the wireless platform at a significant disadvantage to the wired voice platform.

In the 90’s, the government effectively reversed those decisions. First the FCC auctioned more licenses to create a much more competitive (with, at one point, seven national players) mobile market. Second, the FCC replaced high wireless to wireline terminating access charges with lower reciprocal compensation charges. The benefits of those decisions were felt first in the wireless voice market, which shortly after the reduction of access charges shifted from a premium to a mass-market service that today serves as the foundation of the mobile Internet.

There were many other government decisions that accelerated and benefited the Internet ecosystem, ranging from favorable sales tax treatment to stimulating demand and a build-out to lower income areas by subsidizing connections to schools, to the program access rules, that, by enabling Direct
Broadcast Satellites to compete more vigorously with cable, gave cable the incentive to upgrade its network and add broadband capability which in turn forced the Telcos to upgrade to DSL and fiber. There are many lessons to be learned from these historical patterns, including the role of government research and development in creating new technology alternatives, how the government has to assure incumbent platforms don’t stifle new platforms, and how adjacent, non-symmetric competition drives a new consumer surplus much more readily than competition from new entrants or existing players in a mature market. But anyone who draws the lesson that the Internet arose from a hands-off policy is telling the tale their ideology dictates, rather than accurately reflecting the history those of us in the trenches experienced in confronting the choices and battles that shaped today’s Internet.
Ten years ago, in a longer law review article entitled, *The Law of Unintended Consequences*, I took stock of the impact of the then-decade-old Telecommunications Act of 1996. I posited that the Act was a transitional roadmap, largely resolving past battles between major industry players, but not the best navigation device for charting the long-term rules of the digital road. I concluded that the underlying goals of the Act—promote competition and deregulation in local telephony and video, link schools and libraries to the Internet, and relax broadcast ownership rules—largely were met, although they were sometimes achieved in ways not fully anticipated by Congress.

My observations ten years ago remain valid today.

Over the past twenty years, our robust broadband ecosystem, coupled with the FCC’s light regulatory touch, produced the right conditions for explosive growth and innovation. Digital platforms, web services, connected devices, and mobile technology are changing the way we live and work. In the United States, companies enjoy the marketplace conditions needed to break new ground and to reach countless potential customers for broadband-enabled services (think Amazon, Facebook, Google, Twitter, Expedia, Netflix, Uber, etc.). Technology and ingenuity, together with low-cost capital and a risk-taking culture—not the 1996 Act—have been the main drivers of this progress.

Like many acts of Congress, the 1996 Act has also been plagued by jurisdictional battles. Two decades later the wisdom behind the ill-fated “Title VII” proposal is more apparent. A streamlined regulatory regime for broadband providers might have provided the FCC with a less litigious path to establish and enforce a practical, technology-neutral, light-touch, open Internet regime (not to mention freeing up two decades of FCBA attorney time for more productive debates).

As a result of the digital revolution, we are increasingly confronted by global policy challenges, such as cybersecurity, online privacy, and digital copyright protection. Stakeholders and governments working through these and other complex issues will need to be mindful that the slow-moving...
regulatory process does not always adapt well to the dizzying pace of technological change and disruptive new business models.

Finally, a noteworthy achievement back then seems even more remarkable today: the 1996 Telecom Act required the FCC to complete around 75 rulemakings, many with very tight deadlines. The Commission did so—each one on time and with unanimity.
Soon after the 1996 Act became law, I was serving as Legal Advisor to Common Carrier Bureau Chiefs Kathy Wallman and Gina Keeney. The Act required the agency to undertake dozens of rulemakings—often under aggressive statutory deadlines—and most of those fell within the Common Carrier Bureau’s bailiwick. Suddenly, an already-busy Bureau was immersed in a sea of additional proceedings, addressing a range of new issues: What elements of the incumbents’ networks should be made available to competitors on an unbundled basis? At what prices? Where and on what terms should incumbent carriers be required to interconnect, or allow their competitors to install equipment in their central offices? How should the agency transition from a long history of implicit cross-subsidies to an explicit universal service program? And what was the proper balance of state and federal power in addressing all of these questions? Many of these were new and novel issues. It was both an exciting and very stressful period.

In some ways, it is hard to believe that this was twenty years ago. But in many ways, today’s communications marketplace is nothing like the one the FCC regulated in 1996. Broadband services were still in their infancy in early 1996—indeed, most Americans were first coming to learn the word “Internet.” Wireless voice services existed, but were a specialty offering utilized by very few. And term like “cable telephone service,” “voice over Internet protocol,” and “over-the-top” would have elicited blank stares from almost any FCC staffer. Thus, the decisions the agency reached in implementing the Act very much reflected the realities of the day—a marketplace in which intermodal competition was difficult to envision, and Congress’s goals seemed difficult to effectuate without aggressive treatment of the incumbent local carriers. I was and remain very proud of the work my colleagues and I did to implement the Act under those conditions, and several of my coworkers from that period are among my closest friends.

As technology has evolved, though—and, to be sure, as I have moved from the public sector to a position at a Bell Operating Company—I have been struck by the ways in which the foundations underpinning our work in 1996 have eroded. After peaking at almost 118 million access lines in 2008, incumbent LECs as of December 2013 had only 66 million access lines. In contrast, there are now over 335 million wireless “lines” in service in the United States. Almost 39 million customers are served using VoIP. Many of

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these developments, of course, have more to do with technological advance than with the work we did in 1996. But whatever the reasons, we live in a world very different from the one Congress faced two decades ago. In that light, the two most important questions arising from the 1996 Act may now be these: Can today’s marketplace be governed by a statute written in the era of monopoly phone service and dial-up Internet? And, if not, what must all of us—in the private sector, in government, in the public-interest community, and elsewhere—do to ensure that the next twenty years are as successful for the American communications sector as the last twenty years have been?
Jonathan E. Nuechterlein*

I was a new telecommunications lawyer at the FCC when the 1996 Act was passed. Within the Commission, people greeted the event with two distinct reactions. In public, they revered the far-sighted magnificence of this landmark legislation. In private, they began puzzling over the details and became more and more confused. For example, no one could tell exactly what role Congress wanted the Commission (as opposed to the states) to play in the pricing of network elements and interconnection. This was a glaringly obvious question, so why was it so hard to discern Congress’s answer from the text of this highly detailed law?

The 1996 Act and its interpretive conundrums followed me when I left the FCC later in the year to join the Solicitor General’s office. There I prepared briefs explaining to the Supreme Court why the FCC was right to read the 1996 Act as it did. I spent many long hours staring hard at the cryptic turns of phrase in Sections 251 and 252. What I found was uncanny. For almost every major dispute, Congress had given each side almost equivalent statutory ammunition. An oblique phrase in one corner of the statute would balance a seemingly contradictory phrase in another. The Supreme Court noticed this too, calling the 1996 Act “a model of ambiguity or indeed even self-contradiction.”

This self-contradiction may have been no accident. The legislative enterprise often requires compromise. Sometimes compromise takes the form of a clearly articulated middle-ground solution. But sometimes, as in the 1996 Act, legislators compromise by enacting statutory ambiguity. Such ambiguity consigns important policy issues to years of legal uncertainty and punts their ultimate resolution to agencies and courts. But ambiguity also comes with a political benefit: each legislator can tell disparate constituencies that he or she had their best interests in mind and can blame someone else for any contrary interpretation that wins out.

Of course, Congress faces acute political challenges whenever it enacts major legislation with high commercial stakes. In the telecommunications sector, however, Congress also faces the equally difficult challenge of seeing around the technological bend. The 1996 Act was passed mainly to increase competition among circuit-switched providers of landline telephone services. Congress acknowledged the Internet but did not clearly foresee the broadband revolution and thus had little to say about broadband Internet access (fixed or mobile). By the time I rejoined the FCC

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in 2000, that statutory omission had become painfully clear, as stakeholders began arguing about whether and how the FCC should regulate broadband Internet access. Sixteen years later, that dispute has only intensified.

All this said, it would be unfair to criticize Congress too harshly for politically expedient compromises and lapses of technological foresight. Arguably, the 1996 Act was among the better legislative packages Congress could have been expected to pass in the mid-1990s, given the political constraints and widespread technological assumptions. For example, by centralizing various policy issues at the national level, the 1996 Act enabled the FCC (eventually) to rationalize an increasingly chaotic intercarrier compensation regime and bring universal service support into the modern era. Congress also wisely gave the Commission forbearance authority to undo statutory mandates that outlive their usefulness.

If and when Congress considers new telecommunications legislation of comparable scope, it should draw two main lessons from the 1996 Act and its aftermath. First, as with the forbearance provision, Congress should continue legislating on the premise that competition, when effective, promotes consumer welfare more effectively than traditional regulation can and that policymakers should retain broad discretion to deregulate as appropriate.

Second, because this is a field characterized by unpredictable technological flux, Congress should enact mainly high-level principles and leave most of the details for the Commission and the marketplace to address as industry conditions evolve. There will always be room to question and litigate the wisdom of the FCC’s regulatory choices. Ideally, however, that litigation should concern whether those choices make economic and technological sense in today’s marketplace, not whether they comport with obscure statutory phrases written many years ago with different regulatory problems in mind.
COMMISSIONER MICHAEL O’RIELLY*

I will be forever grateful for the opportunity to work on the Telecommunications Act of 1996, albeit as a very junior staffer. That legislative experience laid a solid foundation for the rest of my congressional career and eventually helped lead to my current position.

Generally, I believe that it is extremely helpful when Congress speaks on a particular issue, especially those that are communications-related, because it clarifies what is expected of regulators and industry participants. Appropriately, Congress should be complimented for enacting the 1996 Act, since it was the first comprehensive overhaul of the statute in over 60 years. And many of its fundamental principles still hold true, especially the idea that competition and free markets should reign over monopolies and regulation.

But in many regards, as can be the case with ambitious legislative efforts, the Act was a melding of different themes and compromises. Certain central provisions that seemed paramount at the time were somewhat backwards-looking and perhaps, in retrospect, naïve. For instance, responding to the judicial breakup of AT&T by opening the then-existing long distance market in exchange for local switched access voice competition. The relevance of those markets quickly faded, but some of those provisions have taken on an unforeseen life of their own. Equally important, the adoption of general and vague statutory language in order to reach consensus has enabled many practitioners and the Commission to abuse such provisions for unrelated, unintended or ulterior purposes.

It is important to note that, at the same time the Act was being implemented, the unregulated tech economy rushed ahead, making many statutory provisions and assumptions obsolete, and leaving the Commission in the dust or even on the sidelines. While certainly there were discussions regarding the nascent Internet during the Act’s formation, no one could have envisioned the colossal role it would eventually assume in the communications regulatory environment or Americans’ daily lives. Since then, the disruptive effect of the Internet has blurred the lines between telecommunications, media and technology industries, and the Commission seems intent on dangerously flexing its regulatory muscle to impose legacy rules on modern technology to avoid being made irrelevant in the future.

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My central lessons from the 1996 Act experience add up to this advice for my friends on Capitol Hill: be specific, include sunset provisions where appropriate to keep new technologies free from old rules and bargains that have nothing to do with them, and be forward-looking. There used to be greater trust between the Congress and the Commission with regards to executing the provisions of a law. That no longer holds, and it is all-important that Congress write exactly what it wants and does not want from the Commission. Do not leave it up to chance. At the same time, spending a majority of energy on the hot topics of the moment, like imaginary net neutrality problems, prevents real focus on shaping the law for decades to come, rather than on the past.
MICHAEL PELCOVITS*

The Telecommunications Act of 1996 provided two important, and very different, mechanisms for increasing competition in wireline telecommunications markets. First, it removed barriers to entry, such as the legal prohibitions and obstacles (such as access to right-of-way) that were essential to new entrants. In the same category, I also include the Act’s imposition of very basic market rules, such as interconnection obligations that were a necessary foundation to introducing competition in previously monopolized markets. Second, the Act enabled a regulation-intensive path to competition, whereby incumbents were required to offer unbundled network elements (“UNEs”) at regulated rates. I believe the first mechanism was a great success and the second a great failure. As the success is relatively obvious, let me focus on the failure.

The concept behind the “regulation-intensive” UNE approach was that certain elements, or components, of the local exchange network were much more difficult for entrants to duplicate than others. This was generally attributed to large economies of scale in the subscriber loop plant. The reasoning went that the only way that the entrants could succeed was by gradually building their own network, and in the interim, they would “lease” the monopoly components of the network still controlled by the incumbents. So much for theory—in practice the new entrants competed successfully only when they leased the entire local network of the incumbents (the so-called UNE platform), and this strategy was yanked out from under the entrants after extended legal and regulatory wrangling. The largest new entrants in the local market at that time, namely the long distance companies, were unable to find another strategy to compete against the incumbents and eventually faded away, in some cases by merging with the Regional Bell Companies.

The moral of the story is that policymakers must keep it simple. Detailed regulation of conduct, i.e. the transactions between a firm with significant market power and its fringe competitors, does not work. It is not simple. My own experience as the Chief Economist of MCI, which was a major player in this process, has left me convinced that regulation is too blunt a tool, and is subject to too time-consuming and too costly a legal process, to improve on the functioning of a market that will otherwise function reasonably well, especially if the market is technologically complex and changing at a rapid pace. I think this is mostly due to the asymmetry in

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information between the players and the regulators, and the formality of the procedures that govern regulation in the United States.

The role of government in these industries, even where there is a significant potential for monopolistic behavior, should be limited to basic structural controls and simple market rules. An example of basic structural controls would be the denial of mergers with significant competitive overlap (as opposed to merger approval with complex regulatory conditions attached). An example of simple market rules would be requirements on dominant providers to interconnect with horizontal competitors. The FCC did a good job developing and monitoring the rules that governed traffic exchange between incumbent and entering local telephone companies.

Have regulators learned this lesson? Obviously not, as the FCC reclassification decision proves. The FCC is once again leaping into the thicket of highly-detailed conduct regulation, albeit with the fig leaf of forbearance covering up the return of old-fashioned conduct regulation.
When I was FCC Chairman I frequently testified before Senator John McCain’s Commerce Committee. The Senator always began with a pointed question to me: “Was the 1996 Telecommunications Act a success, yes or no?” He wanted me to say no, given that he voted against the Act. I always answered emphatically, “Yes.”

The Act, to my mind, had a single compelling virtue. It rejected the longstanding view that communications services were natural monopolies and, as such, there should be a single, heavily regulated provider in each sector. Instead, the 1996 Act placed its faith in markets and lighter regulation as a way of unleashing competitive forces that would lead to increased innovation and better consumer outcomes. This single organizing principle provided a guiding light toward resolving issues, whether looking backward or looking forward. It was a blueprint for untangling the legacy of classic telecommunications regulation by allowing local companies to finally enter long distance markets (and vice versa).2 It also invigorated competition by aligning incentives and removing restrictions for cable companies to enter telephone markets, telephone companies to enter video markets, and opening pathways for new companies to enter.3 As regulatory success goes, this one was exceptional.

Looking forward, the amended Communications Act4 was also a lodestar for addressing the emerging world of the Internet. Congress declared: “It is the policy of the United States to preserve the vibrant and competitive free market that presently exists for the Internet . . . unfettered by Federal and State regulation.”5 This directed regulators to resist the temptation to treat the Internet as a mere improvement of the telephone system and to avoid the reflexive instinct to regulate it as such. My office door was visited by untold numbers of Internet entrepreneurs asking anxious questions as to whether instant messaging, or Skype, or Vonage, or interactive gaming were regulated telecommunications services. Statutory words are rarely crystal clear when applied to emerging services. But the overarching principles of the statute gave direction to interpret this ambiguity in a manner consistent with the goal of not saddling the Internet with

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3. See Telecommunications Act, § 202(i) (amending cable and telephone company cross-ownership restrictions contained in 47 U.S.C. § 533(a)).
burdensome regulations. The bet was that by not doing so, the Internet would grow and reach Americans more quickly. And, by making the Internet more ubiquitous, give sustenance to the budding industry just starting to squeak on the west coast. Again, the results were stupendous. The Internet has deployed faster than any technology in history and many of those squeaks heard in the Valley now roar with global ferocity.

Sadly, the exceptional bipartisan consensus that gave birth to the 1996 Act and its liberating regulatory framework is breaking down. Now, the ambiguity of the Act—only getting worse with time—is being used to resurrect a muscular regulatory model that places renewed (and unfounded) faith in regulators to manage the Internet. The trends are ominous and cause me to rethink how I would answer Senator McCain today. I confess, I am wavering.
The Telecommunications Act of 1996\(^1\) is one of the finest and most successful pieces of legislation passed during my three terms in the United States Senate. It is certainly not perfect and needs to be updated. It was the product of nearly twenty years of options papers, debate, and struggle. Under the leadership of Senators Jack Danforth and Fritz Hollings, it did pass in the Senate once before but failed in the House; thus, when I became chairman of the Commerce Committee in the 1990s, I inherited the fruits of years of hard labor by many people.

We had sort of a magical moment in late 1995 when all the parties finally seemed in agreement to this massive document. During the two years before this, I personally visited all one hundred United States senators to try to get their input and to tell them we needed to pass this on a bipartisan basis, which we finally did with a 97-3 vote.

Basically, the Telecommunications Act of 1996 tried to deregulate (or re-regulate) the whole communications industry. Our goal was to let everyone get into everyone else’s business if they wanted to.\(^2\) We also tried to recognize that new technologies require large international firms. For example, it takes a big international company to put a satellite up or to lay fiber-optic cable in places such as India; thus, we were criticized for giving too many breaks to big companies.

On the other hand, we tried to create a whole host of new opportunities for smaller businesses to sometimes sell the products of a bigger company within their former domain.

And we worked on a daily basis with the labor unions, as they had to be on board for passage. Due to their demands, we had to accept limitations of out-sourcing on a lot of functions that a complete deregulation bill would have allowed. And believe it or not the labor unions were adamantly opposed to our putting any anti-trust language into the bill.

There were many strange twists in the tortuous path to passage. Vice President Al Gore usually spoke for the administration on this bill. Al and I had worked out a fairly complicated set of parameters for regulation of the cable industry, but then suddenly without any fanfare President Clinton returned from a cable convention in Las Vegas and word was sent over to me that the administration would only sign the bill if it only had complete deregulation of cable. I was astounded and disappointed, but most of my

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Republican colleagues were delighted; thus, the cable industry probably became the most deregulated industry in the United States.

In terms of geography, the whole broadcast industry was turned upside down. Whether we like it or not, it is virtually impossible for players such as Sirius Radio to provide local news and local weather; thus, many people outside of urban areas feel they have lost their local radio news reporter and local radio news. This is unfortunately probably true, but we hope that gap has been filled by newer technologies.

Many people who complain about the Telecommunications Act of 1996 are concerned about lack of antitrust enforcement. In my opinion, no president during or since the 1996 Act has aggressively enforced antitrust laws. I have always been a “Teddy Roosevelt-type Republican” and am now an Independent. I believe in a more rigorous enforcement of the antitrust laws. I had not foreseen all of the consolidations that were to occur, particularly in radio, since the ’96 act. The ’96 act had almost nothing to do with anti-trust enforcement. The whole media industry benefits from a laxer enforcement of antitrust laws because the media falls under the Federal Trade Commission. The Federal Trade Commission does not have the staff or the expertise to successfully enforce antitrust laws and the Congress, presidents of both Democratic and Republican parties, and the public have been sound asleep about the enforcement of antitrust laws. We need stronger enforcement, but that is not the fault of the ’96 Act.

We carefully avoided regulating the Internet going forward. We did not fully foresee how big the Internet would become, but leaving it deregulated has probably worked out better than having onerous government regulation.

The Act has worked out well. One economist called it the greatest industrial reconstruction of modern times. Others have said that it allows powerful companies and labor unions to take advantage of a struggling public. We do need a new updated Telecommunications Act to deal with the completely new technologies that we were not aware of in 1995-1996. And we were totally unaware of the national defense challenges that will have to be dealt with in a new telecommunications act.
MICHAEL PRYOR *

I was in the Policy Division of the then Common Carrier Bureau from January 1996 through 1999. From this perspective, the FCC’s primary task was to utilize the framework contained in the 1996 Act to jump start competition in the local telecommunications market. The Act gave the FCC just six months to flesh out a novel regulatory regime establishing the conditions for competition. The resulting Local Competition Order was truly an amazing achievement. It established ground rules for interconnection, identified the incumbent local exchange carrier (LEC) network elements that were to unbundled and offered to new entrants, and created a cost-based pricing methodology (TELRIC).

The 1996 Act’s directive to jump start local competition seemed to compel entry through the use of incumbent LEC, and particularly Bell company, unbundled network elements (UNE). Facilities-based entry did not seem viable in the near term, particularly for residential consumers. The emphasis on UNE-based entry not only seemed consistent with the statutory directive to open quickly local telecommunications markets to competition, but was also seen as the only practical grounds by which the Bell Companies could satisfy the competitive entry showing required by section 271 that Bell Companies needed to provide in-region long distance service. Although some Bell companies attempted early on to demonstrate competitive entry through de minimis wireless substitution, practically the only route to section 271 authority ran though UNE-access, and hence the extraordinary focus on the Bell Company back office (OSS) processes through which competitive carriers gained such access.

Of course, we will never know whether broad, UNE-based competitive entry would have resulted in consumer enhancing competition. The District of Columbia Circuit rejected the FCC’s interpretation of the so-called impairment standard by which UNEs were to be identified. The FCC’s policy migrated toward a preference for facilities-based competition, and over time, facilities-based competition, at least for voice services, arrived through wireless and VoIP services.

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The Telecommunications Act of 1996’s goal was to open telecommunication markets to competition. The Act provided mechanisms and safeguards that were intended to replace heavy-handed regulations with the discipline and incentives provided by competition. Long distance companies wanted access to local voice networks so they could provide one-stop shopping, while the Regional Bell Operating Companies (RBOC) wanted relief from the line of business restrictions imposed on them at the time of the break-up the old AT&T. The Act required the RBOCs to open their local markets to competition before such relief would be granted. As a result, the main focus of the Act’s implementation was on rules and regulations that governed competitive entry into local voice markets. Neither the regulators, nor the firms their rules governed, could foresee how the rise of the Internet and advances in computing and wireless technologies would transform telecommunication markets over the next twenty years.

The Act provided mechanisms and regulatory safeguards intended to open markets to competition. Allowing RBOCs to enter the market for long distance services was easy—the law eliminated the line of business restrictions imposed on them a decade earlier once they were found to have opened their markets to competition. Opening local markets, however, was viewed as a difficult proposition. The provision of local telephone services using traditional technologies benefitted from economies of density, and the Act determined that incumbents should be required to provide competitors access to their local networks.

The Act determined that competitors should have three avenues of entry into local markets: as a facilities-based provider that built its own network; as a reseller of RBOC services; or by leasing pieces of the RBOC network. The third mechanism, which required RBOCs to lease Unbundled Network Elements (UNEs) to their competitors garnered the majority of the attention. Which parts of networks should be unbundled? What prices should be charged for these elements? These and other related questions were

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debated intensely. Millions of dollars were spent on these fights, both at the
FCC and in state regulatory proceedings.

The remaining forms of entry were less controversial. The Act’s
method for setting resale rates resulted in rates that exceeded the prices
associated with UNEs, and this avenue was largely ignored by competitors.
Very few carriers provided facilities-based competition for local service at
the time of the Act. The majority of competitive facilities was for long-
distance business service in dense downtown areas. Potential entrants that
intended to use their own facilities assumed that they would be able to
interconnect with the incumbent using arrangements similar to those used by
long distance companies and competitive access providers.

There were only 34 million cell phone subscribers and price of cell
phone service was much higher than even long distance services in 1996.
State regulators viewed cellular service as a luxury and taxed it heavily so
they could keep the price of local residential services low. Most cellular
traffic originated on a cell phone and terminated on a landline phone. Fees
for terminating cellular calls tended to be high, one to three cents per minute,
and it was not uncommon for charges to only be levied on cellular providers;
cellular carriers, in such cases, were not allowed to collect fees from landline
companies when a call originated on landline phone and terminated on a
 cellular phone. Wireless services were not able to compete effectively with
landline services under these conditions.

While the contentious UNE debates were under way, regulators
addressed the Act’s mandate that interconnection agreements must include
“reciprocal compensation for the transport and termination of traffic.” One
RBOC economist suggested that “If we pay the 1 cent and they pay us 3
cents; that is ‘reciprocal.’” The FCC did not agree and changed “reciproc
al” to “reciprocal and symmetric” in its Order implementing the Act.\(^5\) This
subtle change went through unchallenged. The RBOCs, with the
understanding that eighty percent of cellular traffic terminated on their
networks, went to state PUCs and argued for high termination fees and got
them. But they did not see the Internet coming. AOL, and other Internet
service providers (ISPs), became favorite customers of competitive
providers because ISPs generated billions of terminating minutes and
virtually no originating minutes. High terminating charges resulted in
entrants that specialized call termination. Soon the RBOCs awoke to this
problem and tried to carve Internet access calls from the symmetric model,
but failed.

The RBOCs’ inability to use the regulatory process to protect their
inflated termination fees resulted in a push towards cost-based termination
charges. These low charges affected more than competitors serving ISPs.
Low termination charges allowed wireless carriers to introduce plans such
as “Free nights and weekends” and AT&T’s “Digital One Rate” plan. The
reduction in the price of wireless services, along with the introduction of

\(^5\) See Implementation of the Local Competition Provisions in the Telecomms. Act of
VoIP service, was the beginning of consumer substitution away from traditional landline phones to wireless and other alternatives.

It now seems anachronistic that so much attention was paid to the local voice telephone market when we worked on the Act twenty years ago. The rise of the wireless and data services has resulted in a rapidly decreasing share of landline voice services, and the time for regulating local telephone services has likely passed. Less than fifty-five percent of households have a landline telephone according to the Centers for Disease Control. These changes were not widely foreseen twenty years ago, when the Act envisioned a market with long distance companies competing against the RBOCs using UNEs.

Looking back, it may seem easy to see that wireless and Internet would be the key to communications competition, but at the time the necessary advances were not clear. That is why regulators should not limit markets to a single means of entry, and that they should craft rules that do not favor one technology over another. Advances in technology and the creation of new services suggest that the intense lobbying over rules and regulations that governed the provision of landline voice services were ultimately meaningless. The main benefit of the Act and its implementation is that it outlawed the ability of regulators to block competitive entry the source of competition was unknown at the time. The Act laid the groundwork for facilities-based entry of services and technologies that were not fully developed at that time. While the Act’s focus on voice telephony and unbundled elements may have been misplaced, its rules governing the entry conditions and the exchange of traffic ultimately allowed new technologies and services to find their way to the marketplace.
I will remember the Telecommunications Act of 1996 foremost as the first instance of broad, robust and impactful public interest stakeholder engagement in communications and Internet policy. Even though the Cable Act of 1992 was a pro-consumer and competitive triumph with its provisions, among others, on program access, program carriage, vertical and horizontal ownership limits and other consumer protections, public interest engagement was limited mostly to a handful of public interest and consumer organizations with expertise in communications law and policy. By contrast, from the earliest days of debate over the 1996 Act, nonprofit organizations from the education, children’s, library, arts, disability, civil rights, civil liberties, religious and other fields joined with communications policy public interest organizations to make their mark on the last significant rewrite of our communications laws.

As early as 1993, it became clear that Congress had both the motivation and the support to pass a major revision of the Communications Act of 1934. At the time, I was a young lawyer at the Media Access Project (MAP), one of the very few communications policy advocacy organizations in existence at the time. The “field” largely consisted of MAP, Consumer Federation of America, the Center for Media Education, Action for Children’s Television and the Office of Communications of the United Church of Christ. But as it became clear that Congress was looking to tackle privacy, disability rights, media ownership deregulation, indecent speech online and the deployment of “advanced telecommunications services,” the larger public interest community became engaged. To better organize the different interests, the Center for Media Education formed the Telecommunications Policy Roundtable, where representatives of nonprofit stakeholders met monthly to discuss the draft bill du jour and develop strategies to ensure the protection of competition, consumer rights and democratic values. Among the notable participants in the almost 200 member “TPR” were the American Library Association, the American Civil Liberties Union, People for the American Way, the National Education Association and American Council of the Blind.

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While the members of the TPR didn’t get everything they wanted from the Telecommunications Act of 1996, their impact was unquestionable. Among other things, the ‘96 Act placed into law consumer privacy protections for telecommunications services;\(^7\) universal service mandates for schools, libraries, health care facilities, rural residents and the poor;\(^8\) requirements that equipment, telecommunications services and video programming be accessible to the disabled;\(^9\) a requirement that the Commission examine and eliminate market entry barriers for small businesses;\(^10\) a requirement that the FCC promote competition in “competitive navigation devices”;\(^11\) and a mandate that the FCC examine the state of advanced telecommunications services and take whatever steps necessary to ensure that they are deployed “on a reasonable and timely basis.”\(^12\) Not a bad public interest result for a law that was portrayed at the time as largely a wish list for communications industry interests.

\(^12\) See 47 U.S.C. § 1302 (2012).
The FCC’s implementation of the 1996 Telecommunications Act\(^1\) transformed a great institutional challenge into a great institutional success. Congress required the agency to complete dozens of rulemaking proceedings to implement the bipartisan congressional vision for pushing telecommunications markets toward competition and deregulation. Congress imposed strict deadlines, directing the Commission to complete numerous major rulemakings within six months.

While one can certainly disagree with some of the FCC’s specific decisions, the agency rose to the occasion. Virtually everyone at every level—from junior staff to the Chairman and Commissioners—worked extraordinarily hard as a team to meet the congressional deadlines. The FCC produced decisions at a record pace, with nearly five hundred full Commission decisions in 1996 and over four hundred in 1997. The Commission met all the congressional deadlines and also completed numerous related rulemakings not mandated by the Act (e.g., access charge reform) within the same short time frames. The FCC acted unanimously in virtually all its early 1996 Act implementation decisions, and the courts affirmed the majority of them. The agency did all of this in a technological era very different from today; for example, its “master tracking system” was a huge, hand-written flow chart on the Chief of Staff’s wall.

Implementation of the 1996 Act also led to important structural change at the FCC. Policymakers and stakeholders understood the significance of effective FCC enforcement to ensure compliance with the competitive rules of the road and to protect consumers against any side effects of an increasingly competitive market. Accordingly, in 1999, the Commission established the Enforcement Bureau.\(^2\) I am proud to have served as the first leader of the Enforcement Bureau, from 1999 to early 2005.

The FCC viewed enforcement as a central complement to deregulation. In the words of Chairman Kennard, “in an increasingly competitive communications marketplace,” enforcement was of “enormous importance” in the FCC’s “transition from an industry regulator to a market facilitator.”\(^3\) Chairman Powell also underscored the link between enforcement and deregulation, saying the FCC would “shift from constantly expanding the bevy of permissive regulations to strong and effective

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enforcement of truly necessary ones.” Consistent with this bipartisan approach to enforcement, the Enforcement Bureau focused in the early years of 1996 Act implementation on “firm, fast, flexible, and fair” enforcement of the rules adopted by the Commission to help implement Congress’s pro-competitive, deregulatory vision.

From a personal perspective, being part of the FCC’s implementation of the 1996 Act was an exciting and invigorating experience. While debate can and will continue about the wisdom of various FCC decisions, the agency has a right to be proud of its accomplishments.

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At the time the 1996 Act was enacted, I was an attorney in the now-defunct Competition Division in the General Counsel’s Office at the Federal Communications Commission. An inter-disciplinary unit formed by then-Chairman Reed Hundt, our job as lawyers and economists was to bring (to the extent practicable) greater analytical rigor to, and cohesion across, the various bureaus of the Commission. As with the rest of the talented staff of the FCC, we were all looking forward to the opportunity to implement such a sweeping piece of legislation to facilitate the transition from monopoly to competition.

Despite our enthusiasm, there were many of us at the Commission who recognized that it would be a challenge to find a readily-available facilities-based competitor to take on the local Regional Bell Operating Company ("RBOC") for retail voice service (which was the only service of relevance at the time). Just as now, facilities-based entry into the local market is extremely expensive, and in 1996 there were few comers on the horizon. Indeed, it is important to remember that in February 1996, mobile was a luxury service provided by a duopoly (one of which was the incumbent RBOC), and VoIP technology was still a glimmer in someone’s eye at Bell Labs. (In fact, I can recall conversations with senior folks at the Commission in which we wishfully thought that if only the cable industry would wrap a twisted copper pair around their coaxial cable then all of our competitive problems would be solved.)

Given such skepticism, the Commission dedicated significant staff to implementing the unbundling paradigm set forth in Section 251. I, however, was not among them. Instead, given my background as a former electric utility attorney, I was tasked with shepherding the rulemaking to implement Section 103 of the 1996 Act, which amended the Public Utility Holding Company Act of 1935 ("PUHCA") to allow registered public utility holding companies to enter into the telecommunications business without prior Securities and Exchange Commission approval through an unregulated “Exempt Telecommunications Company” or “ETC.” The hope was that electric utilities, with their significant “spillover” effects (i.e., rights of way, billing systems, access to capital, culture of customer care, etc.), would provide a strong candidate for that elusive second wire to the home.

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proud to say that this was the very first rulemaking the Commission voted on to implement the 1996 Act.4

So how did it work out for investor-owned utilities becoming the proverbial “second wire” into the home? Unfortunately, not well. To begin, the notion of an ETC was a bit ridiculous in the first instance, because rather than just repeal PUHCA entirely, Congress essentially decided to set up a paradigm where you needed more regulation at one agency (the FCC) just to be deregulated at another (the SEC). (To Congress’s credit, it eventually saw the light and repealed PUHCA nearly a decade later in 2005.5) Still, because investor-owned utilities were (and continue to be) subject to aggressive regulation at both the state and federal levels that restricts their use of spillovers, utility entry into the “last mile” was, and is, unprofitable from a “greenfield” perspective. (Significantly, the investor-owned utility experience differs vastly from the municipal entry story, where self-regulation permits municipal utilities to engage in massive cross-subsidization between their electric and telecom businesses.)6 In the mean time, the march of technology moved on: the cable companies realized that they could add a VoIP box (and eventually a cable modem) to their existing plant for relatively little cost and, as such, easily beat the utilities in the race to become the proverbial “second wire” to the home. Given that the economics of the last mile make for a difficult business case for a third wireline provider, it seems that the boat has sailed for investor-owned utilities to get into the facilities-based local telephone business.7 Which brings me to the important (and broader) question of “lessons learned” from the 1996 Act. At bottom, although I understand enacting legislation is a political process, if my academic research and personal experience over the last twenty years have taught me anything, it is that while the 1996 Act may have contained some innovative ideas, perhaps policymakers should have given a bit more thought to the consequences of the proposed legislation before they voted on it. While this caveat certainly applies to Congress’s choice of legislative language (see, e.g., the on-going kerfuffle of whether Section 706 provides the FCC with an independent grant of authority), the 1996 Act is replete with provisions that I have no doubt somebody thought was a great idea but paid little attention to the details.

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For example, as we demonstrate in our paper about the 1996 Act’s unbundling paradigm, which is published in this commemorative issue of the Journal, the unbundling paradigm collapsed upon itself due to (a) a failure of policymakers to understand the economics of the last mile, (b) the paradigm’s failure to correctly align the incentives among the stakeholders, and (c) policymakers’ failure to account for the possibility of technical change.\(^\text{10}\) The exact same factors also led to the FCC’s billion dollar policy dud to try to implement Congress’s desire to create a retail market for set-top boxes under Section 629\(^\text{11}\)—a stand-alone market for set-top boxes is inefficient, and markets abhor inefficiency.\(^\text{12}\) And, let’s not forget the “Open Video System” paradigm of Section 653, \(^\text{13}\) which magnanimously allows telephone companies to enter into the video business without having to obtain a franchise provided that they set aside up to two thirds of their channel capacity for their competitors at regulated rates.

Still, despite its warts, we cannot say the 1996 Act was a total failure. First, the 1996 Act “primed the pump” in consumers’ minds that it was possible to have a competitive market, so for that I suppose we should all be a bit grateful. Second, although there were certainly hiccups, the market has moved from monopoly to competition (although I’m not sure how much corresponding deregulation has occurred with the increase in such competition\(^\text{14}\)). Indeed, for those of us who were at the Commission in 1996, if you would have told us twenty years ago that we would have, in most markets, two wireline firms and four national wireless firms, we would have thrown a party.

So will there be an update to the 1996 Act? I have absolutely no idea. In 1996, the stars and the moons all aligned for a once in a lifetime opportunity, and whether that can happen again in today’s toxic political environment remains to be seen. We should also remember that in 1996, the fight was essentially an “intra-family” squabble—i.e., RBOCs, IXCs, CLECs, cable companies and broadcasters; now, we have a plethora of non-traditional players added to the mix, which will probably make achieving consensus more difficult. Still, if we do get to a point of new legislation, I can only hope that we avoid the temptation of cutting an expedient political deal and instead take a few moments to contemplate what we have learned from the amazing experiment of the last twenty years. Given the tenor of the current telecom debate, however, I am not particularly optimistic.

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The story is told of a European immigrant to the United States, the great inventor Nikola Tesla, who arrived in New York City in the 1880s. Tesla looked around New York, remembered his beloved Europe and said: “What I had left was beautiful, artistic, and fascinating in every way.” And what were his impressions of America? “What I saw here was machined, rough, and unattractive. America is a century behind Europe in civilization.”

His assessment of America, of course, was a bit harsh. Why, in just a few years alone, American civilization would already be hard at work inventing the hamburger, the hot dog, and the ice cream cone . . . .

And yet, a few years after Tesla’s arrival, this rough civilization would soon adopt one of the world’s first wide-ranging antitrust laws, followed in subsequent decades by industry-specific regulatory statutes and agencies. One of the early targets of the Sherman Act was J.P. Morgan, banker, über-industrialist and a man so wealthy that he served as a kind of one-man Federal Reserve Board.

Morgan typified the initial response of American business to regulation. “I don’t want a lawyer to tell me what I cannot do,” he said. “I hire him to tell me how to do what I want to do.” At some time or another, most lawyers have had a client like that.

Here’s the point of these two stories: Curiously enough, Tesla—the eccentric, shaggy-headed European inventor, intersected with Morgan—the glowering, bulbous-nosed American tycoon. At one of their meetings around the turn of the century, Tesla proposed something tantalizing to Morgan, something he called a “world system” of wireless communications. This global web could not only relay telephone calls across the ocean. It could give consumers instant access to news, music, stock market reports, electronic letters and even pictures. Morgan, mesmerized, listened as Tesla predicted: “When wireless is fully applied the earth will be converted into a huge brain, capable of response in every one of its parts.”

I like this story because it reminds us that law can govern progress, but law cannot create it. Trust-busters would force Morgan to sell off his companies, and patent attorneys would bedevil Tesla. But no lawyer could have imagined a prototype of the wireless Internet like Tesla, or would have had the vision to finance early research into it like Morgan.

In regulating competition, a balance is needed between protecting society from abusive practices, and protecting the inventive impulses that create wealth and social progress.

The 1996 Telecom Act¹ should have been a landmark in American deregulation. Instead—its potential was adulterated by the FCC under Chairman Reed Hundt. We now know that its forced sharing created two

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classes of companies—those that built facilities, and those that sought rents off those facilities. Even the startup CLECs were victimized by this scheme. Those that wanted to build out, couldn’t make an economic case for it—not when the facilities of others were free for the asking.

Despite this heavy regulatory thumbing of the scales—one that required Chairman Hundt’s FCC to add more than 10,000 pages to the Federal Register—in the end the only companies that prevailed were the ones that owned and operated facilities.

In the meantime, the industry had to deal with what my friend Peter Huber has called “a stupefying complex labyrinth of rules” that “suppressed competition rather than promoting it” and that “enriched no one but legions of lawyers.” All of these actions, Huber adds, were done with the conceit that they would somehow lead us back to deregulation.

The rules that governed which broadband medium would be regulated, over which part of its length, and toward what purpose, often seemed to emerge from a sausage factory operated by a fractious band of intoxicated butchers. The consequences of their handiwork were the infliction of a living hell on American workers, investors, and telecom companies. As lessons go, you would think that would be one to remember.

Not everyone was taken in of course. Alfred Kahn, the father of deregulation, referred to Chairman Hundt’s TELRIC as TELRIC-BS, the last two words he assured us with a straight face, standing for “blank slate.”

So what were the fruits of Chairman Hundt’s TELRIC-BS and other forms of trying to game the future? An industry that had been responsible for the lion’s share of the productivity gains of the 1990s lost, within the span of four years, 900,000 jobs, $2 trillion in market capitalization, and $280 billion in capital investment. Hardest hit were the makers of telecom equipment, in particular, those betting on a broadband future. At the time, one Corning manager said, “[w]e have been through a hell worse than the Great Depression.”

The implementation of the 1996 Act leaves us, then, with two lessons. The first is that legal prohibitions on entry, no matter how fevered the dreams of regulators, are absolute poison for the deployment of technologies and the development of markets.

The second lesson learned is that respect for property rights encourages investment. If we leave the markets alone, as we mostly have with wireless and with cable, they will amaze us.

It may seem paradoxical to look for wisdom from J.P. Morgan, the arch-monopolist. But a man who could have pondered the creation of the

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3. Id.
wireless Internet more than a century ago is someone worth listening to. Morgan said: “No problem can be solved until it is reduced to some simple form. The changing of a vague difficulty into a specific, concrete form is a very essential element in thinking.” In other words, the more complex a regulatory solution, the less likely it is to be a solution.6

As we look ahead, we must avoid the kind of anticipatory thinking about technologies that move faster than any human can anticipate. We must avoid the arrogance that we are smart enough to be able to impose legal entry barriers or property piggybacking arrangements without them leading to the sort of calamity the 1996 Act teaches us will occur.

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6. Cf. Verizon Comm’ns, Inc. v. Law Offices of Curtis V. Trinko LLP, 540 U.S. 398, 415 (2004) (“We think that Professor Areeda got it exactly right: ‘No court should impose a duty to deal that it cannot explain or adequately and reasonably supervise.’”).
GERARD J. WALDRON*

If one dug into the annals of the House of Representatives in search of how the Telecommunications Act of 1996\(^1\) came to pass, you would find buried under many layers of forgotten bills and unread hearing transcripts the first evidence of what evolved into parts of the 1996 Act in early 1984, shortly after the Bell System was broken up. The question arises of how long did it take to pass the 1996 Act, and the honest answer is twelve years and scores of bills and compromise drafts, thousands of hours of hearings, and generations of Members and staff. That long slog served a purpose, however, for it became increasingly clear to all stakeholders at the start of the 1990s that major statutory changes were needed in order to let key players get into new lines of business, and that those new entrants would benefit consumers by promoting competition and innovation.

Today many companies try to claim the mantle of “disrupter,” but they are only the latest incarnation of that concept. Because that is exactly what we were discussing in the early 1990s: how to encourage new entrants to disrupt the monopoly cable companies (monopolist by law in most of the country); to disrupt the monopoly local telephone company (same); to disrupt the cozy cellphone duopoly (by FCC design); and to disrupt the weakly competitive long distance industry (a legacy of AT&T’s long-standing de facto monopoly). What is remarkable is that those discussions turned into action, and it all happened fairly quickly.

➢ In October 1992, Congress passed the 1992 Cable Act;\(^2\) though that vote went down in history as the only to override President George H.W. Bush’s veto, what is forgotten is that the bill had broad bipartisan support including from the Republican leadership in the Commerce Committees and floor leadership. That bill can be credited as giving birth to the DBS industry and to the disruptive force that DISH and DIRECTV and their corporate antecedents have brought to the monopoly cable companies.

➢ In August 1993, Congress passed the 1993 Omnibus Budget Act,\(^3\) which directed the NTIA to free up 200 MHz of spectrum for next-generation cellular (“Personal Communications Service”), and for the FCC to use auctions to quickly assign the spectrum. That marked

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a radical change: Congress was taking spectrum away from government users and designating it for private use; the FCC was directed to take valuable beachfront spectrum away from microwave users and reallocate to PCS; and instead of this process taking years of comparative hearings, Congress mandated it would be done in several months with spectrum auctions. A look at the history books suggests that the vote was partisan (no Republican voted for the 1993 Act). But that is misleading: building on the bipartisan nature of communications policy in the House Commerce Committee, every page of the spectrum bill was negotiated with Ranking Member Jack Fields and his staff, even though the majority staff knew no Republican would support the bill. That was the proud tradition in the Committee then, it endured right through the 1996 Act, and (thankfully, from my perspective) it exists today.

In 1994, these same staff and policymakers also passed the Communications Assistance for Law Enforcement Act (CALEA).\textsuperscript{4} Perhaps not the proudest accomplishment of that time frame, but still it represented major legislation that was passed on a bipartisan basis in less than twenty-four months.

One bill from that time that did not become law during this two-year flurry of legislating, but did set the stage for a transformative law, was the Telecommunications Act of 1994. (That is not a typo.) In the course of House Subcommittee Chairman Ed Markey and Ranking Member Jack Fields working together in 1992, on cable legislation; in 1993, on spectrum legislation; and in early 1994, on CALEA, it became increasingly clear to them that comprehensive legislation was needed. As a result, they worked collaboratively, along with full Commerce Committee Chair John Dingell and Judiciary Committee Chair Jack Brooks, to construct comprehensive legislation that would remove the local telephone company monopoly, set up a process to allow the Bell companies into the long distance and manufacturing businesses, remove obstacles to allow the cable companies to enter the telephone business, eliminate legal barriers keeping local telephone companies out of the cable business, and create mandates and incentives for local telephone companies to promote deployment of “ISDN,” or Integrated Services Digital Network)—at the time, that was the only technology available to allow for (relatively) high speed information services. The Telecommunications Act of 1994 (Markey-Fields)\textsuperscript{5} and Antitrust and Communications Reform Act of 1994 (Dingell-Brooks)\textsuperscript{6} were passed in June 1994 by overwhelming bipartisan votes: 423-4 and 423-5.

\textsuperscript{5} H.R. 3636, 103d Cong. (1994).
\textsuperscript{6} H.R. 3626, 103d Cong. (1994).
So why do we not celebrate the Telecommunications Act of 1994? Because when those bills went to the Senate in mid-1994, Minority Leader Dole put a hold on them since he was (rightly) convinced that Congress was about to flip to Republican control and he would revise the bills more to the Republicans liking. And that is what happened. The core of the 1994 Act can be found in the 1996 Act—parts, such as Section 254 on universal service, were copied almost intact. Other provisions were flipped from a tilt one way to a tilt the other way, but that is the nature of bipartisan compromise. And many more parts were added, including all the provisions affecting broadcast ownership as well as many other provisions that were added on when it appeared to all the broad range of communications stakeholders that the Telecommunications Act presented a once-a-generation opportunity. So the new chairmen, who took over the telecommunications committees in 1995-1996, had confidence they could pass comprehensive legislation; because so many important bills had been passed in the previous three years, the bipartisan legislating muscles were well trained. And that’s what they did.

Twenty years ago, I entered the world of telecommunications law and policy. In 1996, I joined the Department of Justice’s Antitrust Division as senior counsel to Assistant Attorney General Joel Klein. In that role, I focused on what was then a—if not, the—central issue in telecommunications policy: how to evaluate the prospective entry of the local Bell Companies into long distance markets. Because the Justice Department had played an essential role in overseeing the AT&T consent decree, which restricted the Bell Companies to providing local telephone service, it was afforded the right to weigh in on Bell Company applications to long distance under “any standard the Attorney General considers appropriate.” At the Justice Department, we implemented that mandate by developing a standard that conditioned Bell entry into long distance on a showing that local markets were “irreversibly opened to competition.”

From today’s standpoint, it is easy to forget that the Telecommunications Act of 1996 was passed in considerable part to remove the then-formidable barriers between local and long distance providers. As a result, market-opening processes, which enabled entry into local markets and Bell Company entry into long distance, were at the very heart of the Act, including a now forgotten “fourteen-point checklist.” To implement these measures, the Act relied on a cooperative federalism regulatory regime that ended the legacy of the rigid “dual federalism” regime that held sway under the Communications Act of 1934. In line with the cooperative

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2. The standard was also explained in an affidavit by Marius Schwartz, which was later published in an article. See Marius Schwartz, The Economic Logic for Conditioning Bell Entry into Long Distance on the Prior Opening of Local Markets, 18 J. REG. ECON. 247 (2000); see also Marius Schwartz, Econ. Enforcement Dir., U.S. Dep’t of Justice, Address at the Robert Schuman Centre of the European University Institute: Conditioning the Bells’ Entry into Long Distance (Sept. 9, 1999), http://www.justice.gov/atr/speech/conditioning-bells-entry-long-distance-anticompetitive-regulation-or-promoting; Joel Klein, Address at the American Enterprise Institute: The Race for Local Competition (Nov. 5, 1997), http://www.justice.gov/atr/speech/race-local-competition-long-distance-run-not-sprint.
federalism model, the Federal Communications Commission smartly enlisted state public utility commissions to develop factual records and judgments (on compliance with the fourteen-point checklist, among other things), leveraging their capabilities to make the process more manageable.8

From the vantage point of twenty years later, Bell Company entry into long distance is a foreign concept to those who no longer think of telecommunications markets in terms of local or long distance services or even think of any of today’s providers as Bell Companies. There are, nonetheless, three lessons that can be learned from the experience of the Telecom Act’s Bell entry provisions. First, we should recognize that, for future reforms of the Communications Act, the model of a broad standard grounded in economics (such as the one used by the Justice Department in evaluating Bell entry) provides for a more effective model of regulatory oversight than relying on specific statutory criteria like the fourteen-point checklist. Notably, with technology changing so quickly in this area, any specific criteria risk becoming outdated and, worse yet, hindering sound competition policy. Second, the development of flexible institutional arrangements, such as the cooperative federalism model of working with the states to implement Section 271, needs to be a priority for telecommunications policy going forward.9 And, finally, as the overshadowing of the once-central Section 271 demonstrates, humility is a central value in developing regulatory strategies for a fast-changing industry.10

10. See Nuechterlein & Weiser, supra note 9, at 386-88.
KEVIN WERBACH*

WordPerfect kept crashing.

We were at the moment of truth, assembling the Interconnection Order1 from separate files that teams had worked on frantically for weeks. To our horror, the massive, heavily-footnoted document choked the underpowered PC.

In hindsight, the scene was ironic. The FCC staff implementing the 1996 Act2 had none of the broadband-based tools—cloud storage, online document collaboration, mobile messaging, video chat—which grew out of the digital infrastructure we helped to enable. And I had personally set aside my mostly-completed working paper on internet issues, Digital Tornado,3 to plunge into the minutiae of local unbundling. The FCC’s number one job was to implement the telephone-focused statute Congress passed.

Yet we were not ignorant of the coming technological transformations. It was during the immediate aftermath of the 1996 Act that the FCC put off requests to ban VoIP, declined the Justice Department’s invitation to bolster the Communications Decency Act, refused to allow per-minute access charges for internet service providers, articulated a policy of avoiding knee-jerk legacy regulation of online services, helped lay the groundwork for internet governance with the transition of the domain name system, created favorable regulatory environments for cable and wireless data services, helped the Clinton Administration develop a landmark framework for global electronic commerce, and pioneered open government as one of the first federal agencies to offer electronic comment filing. Not a bad record.

For all the competitive shortcomings (and there are many), today’s communications marketplace is far more dynamic than it was twenty years ago. The even more extraordinary ecosystem of networked digital platforms and services on top was never a foregone conclusion; it owes something to the FCC’s actions during that formative period.

And thankfully, we eventually got WordPerfect to process the order.

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On February 8, 1996, in an event that brought together the nation's political leadership, the Librarian of Congress, titans of the communications industry and, in fact, the two of us, President Clinton signed the Telecommunications Act of 1996\textsuperscript{1} into law. President Clinton told the story of how Thomas Jefferson filled the Library of Congress with his own books after the British burned the Library in the War of 1812 in order to facilitate public access to essential knowledge. The President expressed the hope of all gathered that the new statute would bring the Library’s voluminous ideas to every child in America. In spite of the many legal battles waged over the past twenty years in implementing this landmark legislation, the Telecommunications Act of 1996 has ushered in a new era of Enlightenment in which most Americans instantly can access a world of information equivalent to visiting every library in the world.

At the time of its enactment, many believed that the most important issues addressed by the 1996 law were legal balkanization and technological convergence—issues that demanded regulatory parity. For example, at the signing ceremony, President Clinton emphasized that the Act would open the “local exchange” markets to competitive entry and increase competition in the “long distance” services market. As such, lawyers and regulators devoted considerable attention to regional entry of the Bell Operating Companies (RBOCs) into the long distance market as well as the legislation’s necessary market opening provisions, including the interconnection and unbundling provisions of Section 251.\textsuperscript{2} The RBOCs filed over seventy voluminous Section 271\textsuperscript{3} applications to enter the long distance market, which the FCC resolved over the course of seven years. Additionally, over an eight-year period, the Commission wrote five different orders interpreting Section 251’s unbundling provisions, which the U.S. Court of Appeals for the DC Circuit eventually sustained in 2006. Today, however, there is almost no discussion of the “inter-LATA” or “long distance” telephone markets. This is so because lightly regulated mobile wireless and Internet platforms have supplanted wireline voice as the

primary means of communications. These platforms make jurisdictional and geographical regulatory limitations seem antiquated.

Therefore, the greatest success of the 1996 Act has been its enduring light-touch regulatory approach to broadband Internet access and wireless markets. Information services and the Internet were excluded from the market-opening provisions of the statute and, as a result, cable companies, incumbent telephone carriers, competitive entrants, and mobile wireless providers were able to invest billions of dollars into broadband networks and offerings. Regulatory forbearance and platform parity were keys to making good on the promise of the Act’s preamble: “[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.”

Thus, the genius of the 1996 Act turned out to be that it focused policymakers’ attention on delivery of wireline voice telephony while the Internet, mobile wireless, and broadband developed and eventually supplanted the heavily regulated markets at the core of the legislation.

4. Telecommunications Act, prmbll.
The 1996 Telecommunications Act has often been criticized, including by the Supreme Court, for its lack of clarity. Yet, the Act adopted a balanced approach to communications regulation that is both relevant and, properly understood, a model for the future.

While the Act encouraged facilities-based competition, it also recognized that interconnection, unbundling and resale were necessary “raw materials” that could allow facilities-based competition to develop. Building competitive, stand-alone networks from scratch could only be done in stages, and access to the incumbents’ networks (at fair prices) was necessary to provide nascent competitors the stepping stones to deploying their own competitive networks.

While the Federal Communications Commission (FCC) properly focused on opening markets to new technologies and established a solid framework to expand universal service, its TELRIC pricing and UNE-P decisions tilted the balance created by Congress. These decisions treated the incumbents as natural monopolies, rather than as participants in a newly competitive market. They fueled unrealistically high expectations of competitive players, which contributed to the Dot-Com bust of 2000-2002, and a political dynamic that reverberated against competition. The FCC then over-corrected, withdrawing competitors’ access to fiber, the most essential stepping stone, notwithstanding the Act’s explicit directive that unbundling should be technologically-neutral. A more careful and consistent approach from the beginning would have worked more slowly but more effectively.

The universal service provisions were not contrary to these pro-competitive goals. Rather, the Act continued the movement begun with the FCC’s access charge regime established after the AT&T divestiture to identify and make the previously implicit subsidies more explicit and rational. Subsidies for rural areas, schools and libraries, rural health and lifeline are making progress in part because they are subject to healthy debate in the public arena.

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While broadband was in its infancy at the time, the Act presaged the future by encouraging “advanced” services in both the universal service provisions of Section 254\(^5\) and in Section 706.\(^6\) At the staff level, we debated long and hard how to reconcile the Modification of Final Judgment (MFJ)\(^7\) and FCC definitions of telecommunications (“basic”) and information services (“enhanced”), but ultimately concluded that the FCC’s Computer II\(^8\) and III\(^9\) definitions, even though flawed and overlapping, would allow the FCC the flexibility needed to respond to future change.

The fact that all parties can point to portions of the statutory language in their favor is a reflection of the Act’s balance, not its inconsistency. Democrats agreed to the hortatory, deregulatory preamble sought by Republicans in exchange for the more meaningful regulatory provisions embedded in Title II and Section 706,\(^10\) which directed the FCC to open new markets to competition. The balance we needed to secure votes from both sides of the aisle was also the right policy. We sought to foster entrepreneurship and new entrants while also encouraging incumbents to invest in new markets, such as long distance, wireless and video. In so doing, the Telecom Act of 1996 created an environment that fostered technological innovation and economic growth and established a foundation for the broadband ecosystem that is thriving today.

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8. Amendment of Section 64.702 of the Comm’ns Rules & Regulations (Second Computer Inquiry), Final Decision, 77 FCC 2d 384 (1980).
The central goal of the market-opening provisions of the 1996 Act was to provide mass-market consumers with a choice of multiple wireline telephone companies providing local as well as long-distance service. In particular, Sections 251 and 252 of the Act established rules permitting long-distance companies such as AT&T and MCI to use “unbundled network elements” to enter local markets. Once that happened, Section 271 established rules under which the seven regional Bell Operating Companies (“BOCs”) would be permitted to provide long-distance service. This central goal of the Act was not achieved, largely on account of litigation by the BOCs. The BOCs speak of the litigation following the enactment of the 1996 Act as a sweeping victory for them, but in fact they won a war of attrition. They mostly absorbed losses while winning just enough to hold off competitive entry.

As the Commission was drafting the Local Competition Order that implemented the market-opening provisions of the 1996 Act, my colleagues and I in the Office of General Counsel (“OGC”) were identifying important legal issues and attempting to ensure that the Commission’s implementation of the Act would be upheld in court. One important issue was whether the FCC or the state regulatory commissions had primary authority to adopt rules implementing the Act. This was critical in part because, as Justice Scalia famously stated in his 1999 decision for the Supreme Court in *AT&T Corp. v. Iowa Utilities Board*, the Act was “a model of ambiguity, even self-contradiction.” (Congressman Billy Tauzin famously said in response that, “If you had a law that everybody understood completely, nobody would like it.”) Accordingly, there was a lot of room for disagreement about how to implement the Act, and therefore (a) who had rulemaking authority mattered a lot, and (b) implementation under different rules in every state would, as a practical matter, favor incumbents rather than new entrants. It was no surprise to anyone that this jurisdictional issue would be the focus of litigation concerning the FCC’s implementation of the Act.

In addition, there were three important issues relating to “network elements” that were sure to be litigated. One concerned the pricing rules for network elements, which were required by the statute to be “cost-based” to

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6. *See id.* at 397.
encourage competitive entry. The second issue was whether competitors ought to be required to provide at least some network element themselves or could lease the “UNE platform” of transport, switching, and the loops. The third issue was how to implement the statutory provision requiring competitors to show that they would be impaired without access to a network element in order to be entitled to lease the element.

An issue that OGC did not spot that turned out to be important was whether Section 271 of the Act was a bill of attainder. Bills of attainder are unconstitutional laws that single out persons for punishment, and historically the only laws struck down as bills of attainder have been those punishing confederate supporters after the Civil War and communists during the height of the Cold War. I will not fault us for failing to foresee an argument that Section 271—which benefitted the BOCs by authorizing them to enter long-distance markets closed to them on account of their ability to extend their local monopolies into those markets—in fact unconstitutionally punished them within the meaning of the bill of attainder clause.

After the Commission released the Local Competition Order in August of 1996, the state commissions, the BOCs, and GTE (the eighth large incumbent local telephone company, which merged with Bell Atlantic to form Verizon) quickly challenged the Order in court. Petitions for review were filed in numerous circuits and the Eighth Circuit won the lottery to hear the case. Judges Bowman, Wollman, and Hansen would hold five separate oral arguments over the next few years as the case bounced back and forth between the Eighth Circuit and the Supreme Court.

The Eighth Circuit’s first and most consequential decision was to issue a stay in October 1996 on the ground that the FCC lacked jurisdiction to issue rules concerning most of the provisions of the Act. That decision was reversed by the Supreme Court in Iowa Utilities Board. The government advanced two different jurisdictional arguments. One focused on the various provisions of the 1996 Act itself, which pointed in different directions concerning who had rulemaking authority. The other focused on Section 201(b), the provision of the Communications Act adopted in 1934 that gives general rulemaking authority to the FCC. The Eighth Circuit focused on the contradictory provisions in the 1996 Act, but the Supreme Court emphasized Section 201(b) in holding that the Commission had rulemaking authority with respect to every provision in the Communications Act of 1934, as amended, including provisions added by the 1996 Act. Nevertheless, the stay, while overturned, significantly delayed implementation of Commission’s rules.

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Another consequential decision was a decision by District Court Judge Joe Kendall of the Northern District of Texas on New Year’s Eve 1997 striking down Section 271 as an unconstitutional bill of attainder.\(^\text{13}\) It was as irrational as it sounds to strike down a law that benefitted the BOCs as a bill of attainder. But three different court of appeals decisions followed before the issue was dead and buried.\(^\text{14}\) Because the BOCs would have been able to enter long-distance markets without satisfying the requirements of Section 271 if their bill of attainder argument had somehow prevailed, they had less motivation to attempt to do so until the argument was finally rejected by the courts.

Regarding the pricing rules for network elements, on remand from the Supreme Court’s *Iowa Utilities Board* decision the Eighth Circuit struck down those rules on the merits.\(^\text{15}\) But the Supreme Court reversed in its 2002 *Verizon*\(^\text{16}\) decision and upheld the Commission’s decision to apply a total element long run incremental cost (“TELRIC”) model to determine the prices for leasing network elements. But six years elapsed between adoption of the rules and the Supreme Court’s decision upholding them.

With respect to the other network elements rules, the Eighth Circuit upheld both (a) what the Supreme Court called the “all elements” rule permitting competitors to lease the “UNE platform” and (b) the FCC’s “impairment” rule that essentially presumed that competitors were necessarily impaired without access to any network element they wanted to lease because they would choose to buy rather than lease if they could. In *Iowa Utilities Board*, the Supreme Court upheld the all elements rule. But the Court reversed the Eighth Circuit’s decision upholding the FCC’s interpretation of the impairment requirement. The Supreme Court did not suggest that the statutory impairment requirement set a high hurdle, but rather faulted the FCC for not requiring any showing of need.

When new unbundling rules were issued in 1999, review occurred in the District of Columbia Circuit. In 2002, Judge Williams sent the revised standard back to the Commission in the first *United States Telecommunications Association v. FCC*\(^\text{17}\) decision. Chairman Michael Powell then issued another set of unbundling rules, which Judge Williams vacated in 2004.\(^\text{18}\) The court’s key decision was to overturn the Powell Commission’s conclusion that competitors would be impaired without access to unbundled switching on the ground that an extremely granular and time-consuming analysis was required to justify unbundling.

There had been relatively little competitive entry into mass market telephone markets in the eight years since the Act was passed. The entry that

\(^{13}\) SBC Comm’ns, Inc. v. FCC, 981 F. Supp. 996 (N.D. Tex. 1997).

\(^{14}\) See, e.g., BellSouth Corp. v. FCC, 162 F.3d 678, 683 (D.C. Cir. 1998); BellSouth Corp. v. FCC, 144 F.3d 58, 62 (D.C. Cir. 1998); SBC Comm’ns, Inc. v. FCC, 154 F.3d 226 (5th Cir. 1998).

\(^{15}\) Iowa Utilis. Bd. v. FCC, 219 F.3d 744 (8th Cir. 2000).


had occurred was primarily by cable operators, who were low-hanging fruit because they already had broadband connections to consumers’ homes. Entry by other would-be competitors depended on access to unbundled network elements, and there was no realistic prospect of competitive entry into the mass market without access to switching. MCI and AT&T, whose stock values had collapsed, gave up and sought to be acquired after the D.C. Circuit’s 2004 decision. Verizon bought MCI and SBC bought AT&T (and adopted its name).

The BOCs had ground out a victory by outlasting and then acquiring their two main potential competitors. To recap, in the Eighth Circuit, the BOCs won a jurisdictional victory and overturned the TELRIC rules, but ultimately lost in the Supreme Court on both issues. Similarly, they initially prevailed on the bill of attainder argument that would have let them provide long-distance service without even attempting to open their local markets, but ultimately lost on that issue as well. The BOCs lost the all elements rule in the court of appeals and the Supreme Court. They won the impairment issue in the Supreme Court after losing in the Eighth Circuit, but that should not have been a victory that prevented competitive entry. As the FCC concluded, the statute requires unbundling of network elements when competitors would be impaired without them and nothing in the Supreme Court’s decision is to the contrary. The fact that no mass-market competition developed after the D.C. Circuit struck down the Powell Commission’s unbundling rules shows that competitors were in fact impaired without access to unbundled switching.

Could it have been different? Under considerable congressional pressure, the Commission granted the BOCs authority to enter the long-distance markets before there had been any substantial competitive entry into local mass markets. Here the Commission relied on determinations that local competition was possible rather than that it had been actual competitive entry on a significant scale. With 20-20 hindsight, that was a mistake. In my view, an ounce of empirical evidence is worth a pound of theory. Moreover, in hindsight it was a mistake to rely on competition that depended on the availability of unbundled network elements when the litigation concerning the availability of unbundled switching had not concluded.

But if any one change might have led to mass-market competition by multiple competitors, it would have been to require the BOCs to actually enter other local markets themselves to a significant extent in order to obtain authorization to provide long distance. Thus, for example, Bell Atlantic might have been required to compete with Nynex in the New York metropolitan area rather than acquire it. In order to successfully compete in another BOC’s region, the BOCs would have been forced to support rules that would have permitted competitive entry using network elements, including unbundled switching. Of course, Congress did not require competitive entry by the BOCs, so the FCC could not have imposed such a requirement. The FCC nevertheless attempted to force a BOC to compete in other local markets by conditioning SBC’s acquisition of Ameritech on
SBC’s promise to enter multiple local markets outside its territory, but SBC chose to pay the fines imposed by the FCC rather than compete.

A common view of the rise and fall of the market-opening provisions of the 1996 Act is that it is good as a policy matter that the Act failed to achieve its central goal. That is because there was and is a pressing need for deployment of broadband loops and, it is argued, such deployment was unlikely to occur if unbundling were required. As an initial matter, it should be noted that this argument is an attack on the statute, which provides that competitors are entitled to lease network elements if they would be impaired without them. In any event, if the BOCs had been required to compete with each other, it seems likely that they would have devised rules that supported broadband deployment while permitting competitive entry—otherwise, they would not have been able to compete with the cable operators. And a healthy MCI and AT&T might have spurred rather than deterred deployment.
Answering Four Questions on the Anniversary of the Telecommunications Act of 1996

Harold Furchtgott-Roth* & Arielle Roth†

Most legislation is doomed to obscurity, and, aside from the Fourth of July, it is unusual for Americans to celebrate the anniversary of a government document. But the Telecommunications Act of 1996 is not just any law, and its twentieth anniversary on February 8, 2016 will be noted. It represents a rare attempt by Congress to overhaul an agency. It was an uncommon product of bipartisanship from a cutthroat partisan era. And its legacy is deeply contentious. Those who celebrate the Act claim that it brought competition and economic growth to the communications sector. Those who revile it blame it for all that ails the industry. Many have called for its rewriting, but little consensus exists as to what a new federal communications law should look like.

While countless books and articles have analyzed and chronicled the Act, its twentieth anniversary offers an opportunity to reflect on its legacy and future. This Comment considers this controversial piece of legislation by exploring the following four questions:

(1) What were the political conditions that enabled the passage of the Act?
(2) To what extent was the implementation of the Act faithful to its intent?
(3) How did the communications sector fare in response to the Act?
(4) Is the Act due to be re-written?

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2. One such effort is Harold Furchtgott-Roth’s A Tough Act to Follow? The Telecommunications Act of 1996 and the Separation of Powers (AEI Press 2005), written on the occasion of the Act’s tenth anniversary.
I. WHAT WERE THE POLITICAL CONDITIONS THAT ENABLED THE PASSAGE OF THE ACT?

The successful passage of a law often involves grandiose celebrations. The president signs a bill into law in a ceremony. Major laws have key Congressional supporters as witnesses to the signing ceremony, usually held at the White House. Smiles and photographers abound. Documents and pens are memorialized. The president and Congressional leaders say a few words about the lasting importance of the new law. Journalists dutifully report the event. And then, slowly over the years, amnesia sets in. Few remember; fewer remember accurately; and even fewer care.

Of course, the Congressmen, Senators, and staff will long cherish the mementos of the occasion. In many offices in Washington, one finds elegantly framed copies of signed bills and even a memorialized pen. These are the relics of the bill signing. They remain alive and animated for a year or two. By five years, the signatories have likely left office. By ten years, few remember what the purpose of the law. After twenty years, the relics appear more as prehistoric fossils unearthed in some obscure place many years ago.

If it were an ordinary law, the Telecommunications Act of 1996 would have been long forgotten. But it was born on a grander scale than most. The conditions that facilitated its passage were fortuitous and dramatic. The bill-signing was remarkable in its pompousness. And the Act’s influence has pervaded the communications sector. But whether its passage is remembered accurately is a separate question.

The Telecommunications Act of 1996 was not the product of just the 104th Congress, but of at least the prior ten Congresses. Since the 1970’s, Members of Congress recognized that the Communications Act of 1934 no longer reflected the technological landscape of the communications sector and thus attempted to reform federal communications law. They primarily sought to overhaul the AT&T monopoly, but also saw the need for greater

4. See id.
5. See id.
6. See id.
7. See id.
8. See id.
flexibility in market entry and ownership rules.11 Legislators introduced bills and held hearings, but plans for comprehensive review were passed from Congress to Congress.12

By the 1990’s, the longing for deregulation reached a boiling point. AT&T’s divested companies hoped to escape Judge Harold Greene’s rigid control in implementing the consent decree.13 Incumbent telephone companies sought to enter new lines of business.14 Long-distance companies such as AT&T and MCI wished to enter local telephone markets, and divested Bell companies wanted to enter the long-distance market.15 Cable companies wanted relief from the Cable Act of 1992.16 Broadcast media companies sought relief from onerous regulations, particularly ownership rules.17 States wanted state regulatory powers preserved.18 And practically everyone wanted to ensure that the Internet would escape regulation under the FCC’s vague and catch-all “public interest” standard.

The pressing need for reform coincided with the vigor of the 104th Congress. This Congress was different from its predecessors in two major ways. The 1994 elections reflected a dramatic reversal in fortune for the political parties, with the Republicans sweeping to power in both Congressional chambers.19 The 104th was also an activist Congress, intent on revamping and deregulating government, dramatically reshaping welfare programs, and balancing the budget for the first (and last) time in generations.20

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11. See id. at 360, 386.
12. See SBC Comm’ns, Inc. v. FCC, 154 F.3d 226, 231 (5th Cir. 1998) (explaining that Congress “spent many long and contentious years in drafting a system of comprehensive telecommunications regulation to replace and supplement the MFJ”).
15. See BENAJAMIN ET AL., supra note 10, 385-86; see also 47 U.S.C. §§ 251, 271.
The 104th Congress was also notable for its deep partisan acrimony. January 1996 marked the beginning of an election year and Republicans jockeyed for the chance to replace President Clinton. For his part, the President threw a wrench into the Republicans’ pursuit of smaller government by vetoing bills that would have abolished or reduced the size of federal agencies.\textsuperscript{21} As a consequence of vetoing a Republican spending bill in 1995, the federal government was shuttered for 27 days.\textsuperscript{22}

But on the issue of communications law reform, Republicans and Democrats largely agreed. Given almost universal dissatisfaction with existing federal communications law,\textsuperscript{23} and the desire to foment competition in the communications sector,\textsuperscript{24} overwhelming majorities supported deregulation, and majority and minority leadership cooperated with each other. Indeed, few issues in Congress were less partisan than communications law.

Introduced by Senator Larry Pressler (R-SD),\textsuperscript{25} it passed the Senate 81-18 on June 15, 1995.\textsuperscript{26} Parallel legislation, sponsored by Representative Tom Bliley (R-VA),\textsuperscript{27} passed the House on August 4, 1005 by a vote of 305-117.\textsuperscript{28} After months of conference, the combined legislation passed both chambers by overwhelming majorities on February 1, 1996. The vote was 91-5 in the Senate.\textsuperscript{29} The vote was 414-16 in the House.\textsuperscript{30} With the exception of Senator John McCain (R-AZ), every Republican member of the Senate, all with deregulatory leanings, voted for the Act on final passage.\textsuperscript{31}

\begin{thebibliography}{99}
\bibitem{23} See \textit{BENAJAMIN ET AL., supra note 10, 385-86}.
\bibitem{24} See Telecommunications Act of 1996, pmbl.
\bibitem{27} H.R. 1555, 104th Cong. (1995)
\end{thebibliography}
Public Law 104-104 was signed into law on February 8, 1996. It was not an ordinary bill-signing ceremony. The signing was held at the Library of Congress, rather than at the White House, perhaps as an olive branch by the Clinton Administration towards Republican legislators. Both parties were weary of dispute, after all. It was the first law signed digitally in cyberspace and streamed live over the Internet, in acknowledgment of the vast technological advancements since its 1934 predecessor, and contrary to historical revisionists who suggest that the Internet was unknown in 1996.

Bill-signings were typically brief, featuring only a short speech by the President. The signing of the Telecommunications Act of 1996, however, boasted an entire lineup of speakers. In addition to Vice President Gore, Congressional leaders of both parties, as well as rank-and-file members of both parties, spoke at the event. Each speaker praised the legislation and forecast a great future of the communications sector.

As President Kennedy once said: “Victory has a thousand fathers; defeat is an orphan.” At the signing, speaker after speaker claimed parentage of the Act. Those of us who had actually witnessed the legislative covenants knew that most of these extraordinary claims were false. But our lips were sealed out of concern for the legislation’s fate. Elected officials are granted latitude to assert responsibility for the good and deny responsibility for the bad; staff simply remain silent.

To be sure, the Act contains language inserted on behalf of multiple identifiable members and Senators. But multiple parents and uncoordinated voices do not create a law. As anyone who has worked on the Hill understands, passing a bill is a Herculean effort, requiring careful orchestration behind the scenes. The Telecommunications Act of 1996 was no exception. Congress is a body with 535 egos, each self-important, each in search of something to gain, and each prone to taking offense. Despite bipartisan consensus communications law reform, successful passage was predicated on a fragile coalition.

34. See id.
36. See Lamolinara, supra note 33.
37. See id.
38. See id.
President Clinton seemed jovial at the Library of Congress signing, lingering long afterwards to shake hands with anyone willing. Perhaps he more than anyone else knew the rarity of the moment for the US government.

II. TO WHAT EXTENT WAS THE IMPLEMENTATION OF THE ACT FAITHFUL TO ITS INTENT?

The good feelings of February 8, 1996 did not last long. The Act effectively obliterated decades of regulations that stifled progress in the communications sector. The Telecommunications Act of 1996 required much work by the FCC to write new rules in a short period of time. The FCC set to work.

To the surprise of many, the FCC met all of its deadlines. It wrote all of the required rules—in more regulatory detail than almost anyone could have imagined. While the Act was written by a Republican Congress seeking to promote deregulation, it was implemented by a regulatory agency controlled by Democrats. The result in many cases was more, not less, regulation.

Claiming betrayal by the FCC, many supporters of the legislation turned into ardent opponents almost immediately. The orphanage of defeat—the second clause in President Kennedy’s quote—materialized. Once nearly universally popular, the Act became widely reviled and lawsuits against the FCC mounted throughout 1996 and 1997. Some courts sided with the opponents of the FCC, putting at risk not just specific regulations but the entire fabric of the Act.

The FCC was challenged on almost all of its rulemakings. While many cases bounced back and forth between the FCC and the courts, the Supreme Court’s ruling in AT&T v. Iowa Utilities Board, set the tone for judicial deference to the FCC. Although it primarily concerned state regulatory powers and the FCC’s implementation of local telephone competition provisions, AT&T v Iowa Utilities Board was widely interpreted as imposing deference to the FCC in practically all matters under the 1996 Act.

In upholding the FCC’s regulatory powers in 1999, Justice Scalia, writing on behalf of Supreme Court majority, took Congress to task for the

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41. Many parties, some of which had actively supported the legislation, filed suit against the FCC for its implementation of the Telecommunications Act of 1996.
44. AT&T v Iowa Utilities Board was widely interpreted as imposing deference to the FCC in practically all matters under the 1996 Act.
45. See, e.g., WWC License, LLC v. Boyle, 459 F.3d 880, 890 (8th Cir. 2006) (“we owe deference to the [FCC] based on the fact that Congress expressly charged the FCC with the duty to promulgate regulations to interpret and carry out the Act”); see also, e.g., Verizon v. F.C.C., 740 F.3d 623, 650 (D.C. Cir. 2014); All. for Cmty. Media v. FCC, 529 F.3d 763, 773 (6th Cir. 2008).
vague wording of the Act.\textsuperscript{46} He blamed the FCC’s regulatory activism on ambiguous draftsmanship: “It would be gross understatement to say that the 1996 Act is not a model of clarity. It is in many important respects a model of ambiguity or indeed even self-contradiction.”\textsuperscript{47} Applying \textit{Chevron} deference, Justice Scalia and lower courts gave the FCC wide latitude to interpret the Act\textsuperscript{48} explaining, that “Congress is well aware that the ambiguities it chooses to produce in a statute will be resolved by the implementing agency.”\textsuperscript{49}

The court decisions sanctioning the FCC’s interpretation of the Act have in many cases been misconstrued. After the Supreme Court issued its decision in \textit{AT&T v Iowa Utilities Board}, then-FCC Chairman William Kennard claimed that the Supreme Court had endorsed the Commission’s interpretation of the Act, saying that “[t]he Supreme Court has affirmed the most important components of the national blueprint for competition as designed by Congress and implemented by the FCC. It’s time to stop investing in litigation and focus instead on opening local phone markets to competition.”\textsuperscript{50}

But the Supreme Court did not affirm “the most important components of the national blueprint for competition as designed by Congress and implemented by the FCC,” under the Act.\textsuperscript{51} The Supreme Court merely affirmed that the FCC had wide latitude to implement regulations under \textit{Chevron} deference.\textsuperscript{52} As long as the FCC complied with administrative law, the courts deferred to the FCC’s technical expertise.\textsuperscript{53} For many judges, practically every word of the Telecommunications Act of 1996 involved technical matters, justifying wide discretion.\textsuperscript{54}

This extraordinary latitude was both a blessing a curse for the FCC. While the courts would rarely reverse FCC rules on statutory grounds,\textsuperscript{55} it

\begin{itemize}
\item \textsuperscript{46} See \textit{Iowa Utilis. Bd.}, 525 U.S. at 397 (noting that the act’s ambiguity “is most unfortunate for a piece of legislation that profoundly affects a crucial segment of the economy worth tens of billions of dollars.”).
\item \textsuperscript{47} \textit{Id.}
\item \textsuperscript{48} See \textit{id.} at 377-79; see also, e.g., \textit{Core Commc'n's, Inc. v. FCC}, 592 F.3d 139, 143 (D.C. Cir. 2010) (“The FCC has rulemaking authority to carry out the provisions of [the 1996] Act, . . . [and] the familiar principles of \textit{Chevron} [deference] apply to the FCC's construction.”).
\item \textsuperscript{51} \textit{Id.}
\item \textsuperscript{52} See \textit{Iowa Utilities Board}, 525 U.S. at 380-83.
\item \textsuperscript{53} See, e.g., \textit{id.} at 377-79, 387 (finding Congress delegated broad rulemaking authority to implement the 1996 Act and deferring to FCC’s reasonable interpretation of “network element”).
\item \textsuperscript{54} See, e.g., \textit{U.S. Telecom Ass'n v. F.C.C.}, 290 F.3d 415, 421 (D.C. Cir. 2002) (“We note at the outset the extraordinary complexity of the Commission's task.”).
\end{itemize}
was nearly impossible to improperly implement the law, and the courts would permit future Commissions to rewrite rules as they saw fit. Despite the permanence of statutory language, regulatory decision-making amounted to little more than the expert whim of the day. Depending on the set of Commissioners in power, interpretation could vary wildly.

Although the FCC was subsequently led by various deregulation-driven chairmen, none has scaled back all of the regulation for the Telecommunications Act of 1996. Some regulations, once in place, are difficult to repeal.

III. HOW DID THE COMMUNICATIONS SECTOR FARE IN RESPONSE TO THE ACT?

Although economists usually associate high levels of regulation with slow economic growth, the communications sector has been a catalyst for substantial growth in the United States ever since the passage of the 1996 Act. Despite the regulatory morass, the law opened markets that were previously closed, and enabled the creation of countless new businesses.

The sector accounts for less than 5% of the American economy but disproportionately accounted for more than 19% of economic growth between 1997 and 2002, and more than 9% of economic growth between 2002 and 2007. Even more optimistically, former FCC Chairman Reed Hundt, claimed in 2001 that “[i]n the last 5 years, this sector, while accounting for less than an eighth of the total economy, is responsible for one-third of all the economic growth in the economy.”


57. Cf. id. (explaining agencies are entitled to change regulatory decisions based on their expertise).


59. Cf. State Farm, 463 U.S. at 40-45 (explaining limits on agencies’ deregulatory power).


62. The Telecom Act Five Years Later: Is It Promoting Competition, Hearing before Subcomm. on Antitrust, Business Rights, & Competition of the S. Comm. on the Judiciary,
How much of the economic growth is actually attributable to the Telecommunications Act of 1996? It is impossible to identify the specific contribution of the statute, although it is likely to be substantial. Communications industries—local telephony, long-distance, cable, broadcast, etc.—faced extraordinary legal and regulatory challenges prior to 1996. No doubt, updating the law for these industries increased efficiency and economic activity.

On the other hand, much of the growth in the information sector in the United States was in the wireless and Internet segments, largely left unregulated under the Telecommunications Act of 1996. It is untenable to suggest the Act was responsible for all growth in the communications sector in the late twentieth century. After all, during the same time period, the communications sectors in other countries around the world also grew rapidly. Access to wireless services and to Internet services has been one of the great economic achievements for billions of people around the world, all since 1996.63

Moreover, the FCC’s implementation of the statute led to investment uncertainty and likely harmed growth.64 By 2001, some publications called the implementation of Act disastrous and at least partly responsible for the dot-com bubble of 1998-2001: “Five years later, the telecom industry is a mess. For the first time, industrywide revenues are contracting. Profits are disappearing as prices for service plummet. . . . Such horrific news has investors fleeing the scene. At least a dozen upstarts, from PSINet Inc. (PSIX) to 360networks Inc. (TSIX), have filed for bankruptcy protection. Cash-starved companies have laid off 170,000 workers since January, more than any other sector of the economy, according to Challenger, Gray & Christmas and company announcements. And market forces are ripping apart industry giants.”65

A few months later, CNet observed: “About the only agreement among telecom companies, regulators and legislators is that the landmark Telecommunications Act of 1996 didn’t quite work”.66

Over the past fifteen years, the communications sector has recovered, along with the reputation of the Telecommunications Act of 1996. Video, voice and data communication are no longer predominantly the domain of the companies regulated by the Act. Since so many communications companies born after 1996—including Google, Facebook,


64. See A TOUGH ACT TO FOLLOW, supra note 2.


Twitter, Netflix, and Uber—were left unregulated, the Act is now more a bystander to a communications sector. Other major companies, such as Apple, Microsoft, Cisco, Qualcomm, and Samsung, were much smaller in 1996 and largely escaped the Act’s purview. Nor did the Act merely serve to protect incumbents: some of the largest communications companies in 1996—Worldcom, MCI, AT&T, Lucent, Compaq, no longer exist or were swallowed up by more successful competitors. The Act’s aftermath involved massive new competition and the emergence of new firms in an entirely different and rapidly changing market.

However, this recovery should not be taken for granted. Even though the 1996 Act did not anticipate the current marketplace, the FCC has seldom been relegated to bystander status on account of statutory text. As we know from the FCC’s zeal to regulate broadband, and tortured interpretations of section 706 of the 1996 Act, and of Title II of the 1934 Act, the Commission may very well find further ways to expand its authority to account for changing market conditions.

IV. IS THE TELECOMMUNICATIONS ACT OF 1996 DUE TO BE REWRITTEN?

Almost from the day it was signed into law, skeptics have sought to rewrite the Telecommunications Act of 1996. Rewriting the Act became particularly intense in 2001 and 2002 in the aftermath of the dot-com bust. Although the 1996 Act was expected to promote competition in the communications sector, lawmakers were concerned about the lack of competition in local phone and broadband markets. As CNet noted in 2002, Newly appointed House Committee on Commerce Chairman Billy Tauzin, R-La., "would like to finish the work on the Act," said spokesman Ken Johnson. "The intent of the Act was to deregulate telecommunications, but we don't have competition in broadband." 67

Despite frequent murmurs of rewriting the Act, legislative efforts have not gone very far, primarily on account of the disparity between the current context and that of 1996.

Unlike in 1996, local telephone markets are no longer monopolistic. Gone are stovepipe regulations restricting firms from entering different markets and industries. Judge Greene’s rigid court room is no more. Communications companies are not desperate to change the status quo, and have not lobbied for change to the degree they did in twenty years ago.

Unlike in 1996, moreover, bipartisan consensus is absent. Back then, everyone, regardless of political persuasion, wanted to leave the Internet unregulated. Today, Internet regulation is a hotly debated political issue, whether the question is one of tracking potential terrorists or collecting additional tax revenues. The division in approaches is increasingly partisan, with FCC commissioners voting primarily along partisan lines. For some,

67. Id.
the Internet has become too important to leave unregulated. For others, it is precisely on account of its importance that the Internet should remain unregulated.

Proponents of re-writing the Act point to vast technological changes since 1996. The Internet has turned the communications sector on its head. Instead of accessing video programming via cable and satellite TV subscriptions, consumers increasingly turn to the Internet and over-the-top video providers like Netflix and Hulu. Wireless communication has outpaced wireline telephony. And with technologies like Skype and Facetime, telephony is no longer the sole provider of voice communication.

It is natural that many would promote legislative reform to reflect this changed landscape. But technology continues to change so rapidly that the concept of regulation keeping pace is hard to believe. To the extent that communications technology undergoes further monumental change, re-writing the Act may be an exercise in futility.

Drafters of a new act should also keep in mind industry players’ proclivity to develop technologies with the precise intention of circumventing regulation. Many have alleged that T-Mobile’s Binge On service, which waives data caps for particular video content, was developed deliberately to sidestep the FCC’s network neutrality rules.68 Zero-rating services from Comcast and Verizon have been subject to similar criticism.69 Regardless of whether the FCC ultimately outlaws these services, efforts to outpace the regulatory state through new technologies are bound to persist.

V. CONCLUSION

None of the drafters of the 1996 Act could have predicted the state of the communications sector on the occasion of its twentieth anniversary. And no one knows what the next twenty years will bring. But one thing is sure: the fate of the 1996 Act will remain contentious. Calls for a new statute will intensify as long as technology progresses at a feverish pace. The 1996 Act was a rare accomplishment by the 104th Congress. Whether a future Congress will be up to the task is yet to be determined.


Lessons Learned from the U.S. Unbundling Experience

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Lawrence J. Spiwak, Esq.‡

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I. INTRODUCTION

Prior to 1996, one of the key unresolved issues in telecommunications restructuring was competition over the “last mile”—i.e., that last segment of the network necessary to connect the customer. ⁴ Although the Federal Communications Commission (“FCC”) had opened some monopoly telecommunications markets to entry by the late 1980s (e.g., Customer Premise Equipment (“CPE”) and “long distance” services), the Communications Act of 1934 ³ still reflected a presumption that local telecommunications markets were natural monopolies subject to regulation by both the FCC and state public utility commissions. ⁴ Indeed, despite the somewhat regular deployment of state-of-the-art national and regional long-haul networks and metropolitan fiber rings by a number of carriers, the deployment of alternative wireline networks ended when they reached into the local exchange, leaving dominant control of most switching and transport facilities, and particularly the “last mile” of the local exchange network, to the Incumbent Local Exchange Providers or “ILECs.”⁵

Frustrated by the lack of local competition, Congress passed the landmark Telecommunications Act of 1996.⁶ At the centerpiece of the 1996 Act was the most ambitious regulatory intervention ever attempted: i.e., to stimulate local competition by forcing the ILECs to make unbundled network elements available to competitors at regulated rates.⁷ The notion of stimulating facilities-based competition via a mandatory wholesale model was not without precedent, however. In large part, Congress’s plan was to replicate the experience of competitive development in the U.S. long-distance market a decade before, where early entrants were permitted to resell the capacity of the then-monopoly long distance carrier AT&T.

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1. Readers’ Note: The “last mile” is a term of reference and is not meant to describe a “measured mile.” Instead, the “last mile” can be as small as a few feet or yards. While the “last mile” of the local exchange network is perhaps the most challenging trial for competition policy, the supply-side economics of many other components of the local exchange network, for example switching and transport, also prohibit large numbers competition.


4. See Stuart Minor Benjamin et al., TELECOMMUNICATIONS LAW AND POLICY 385 (3d ed. 2012); see also Spiwak, supra note 2.


7. See 47 U.S.C. § 251 (2012); see also Spiwak, supra note 2, at 33.
thereby allowing the new firms to offer services ubiquitously.\(^8\) Over time, as the business of the new entrants grew, these new competitors would construct their own networks and move away from resale.\(^9\) Following this “stepping stone” theme, the 1996 Act required, among other things, the ILECs to unbundle various components of their local networks and make them available to potential competitors, thus “sharing” with their competitors the inherent economies of scale built into their ubiquitous local networks.\(^10\)

As a result of the 1996 Act, financial resources poured into the communications industry at a frenzied pace.\(^11\) In the fifteen years preceding the 1996 Act, the capital stock of telecommunications firms grew on average at an annual rate of 3.0%. In the few years after the 1996 Act, the annual average increase in telecommunications capital stock was 7.9%.\(^12\) In the five years following the passage of the Act, the U.S. capital stock in telecommunications plant was $194 billion above trend, or about 36% above the forecast level.\(^13\) The increase in capital expenditures in the communications industry actually began in 1994, at which time a sizeable equity bubble began to inflate in the U.S. economy.\(^14\) Part of the rise in capital investment can be attributed this bubble, which burst in the Spring of 2001, and a vigorous decline in industry investment immediately followed.\(^15\) Nevertheless, by 2004, Competitive Local Exchange Carriers (“CLECS”) would be serving about 20 million of their 33 million access lines (about

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9. See id. at 17.
12. Id.
13. Id.
20% of the total market) using unbundled elements made available by the rules implementing the 1996 Act.\textsuperscript{16}

Despite this initial success, via a series of orders by the FCC and court decisions, the scale and scope of the 1996 Act’s unbundling regime was increasingly narrowed, culminating in the FCC’s \textit{Triennial Review Order}\textsuperscript{17} in 2005 that effectively rendered most business plans based on unbundled network elements financially unviable. After that, the effort to stimulate local telecommunications competition via unbundled elements came to a screeching halt. Indeed, from 2004 to 2010, the number of lines serviced using unbundled elements would fall nearly 90% from a peak of about 21 million to only 3 million lines, largely due to the elimination of the unbundled switching element which serviced most of the competitive lines.\textsuperscript{18} The decline continues: over the last three years for which data is available (2007-2010), the number of access lines served using unbundled elements has declined at a rate of 22% annually.\textsuperscript{19} By the end of 2010, unbundled switching was all but gone, with competitive lines served using the switching element falling from about 17 million in 2004 to only 53,000 lines at the end 2010.\textsuperscript{20} With mixed success, the ILECs have requested grants of forbearance from their unbundling obligations, drawing ever nearer the official end of the unbundling experiment in the United States.\textsuperscript{21} As to be expected, most of the competitive carriers who relied on the unbundling regime—including the long-distance telecommunications behemoths AT&T and MCI—are now

\begin{footnotes}
\item[19] See id.
\item[20] See id.
\end{footnotes}
gone, some dying quickly, some slowly, and some eventually acquired by the ILECs.22

Yet, despite the failure of the unbundling paradigm mandated by the 1996 Act, the world did not end. Quite to the contrary, competition in the United States is nonetheless thriving due to new technologies totally unforeseen in 1996. As lines served by unbundled elements declined, the total number of lines served by competitors would soon begin to grow again and eventually skyrocket to over 50 million landlines (by recent measure), with the growth coming mostly from the commercial emergence of Voice-over-Internet-Protocol technology (“VoIP”), which permitted voice services to be provided over broadband Internet connections.23 Local competition in the United States, it turns out, was not the result of new entrants constructing new plant, but from the repurposing of the embedded cable television plant and the migration of many households to the exclusive use of mobile wireless services. Today, between VoIP providers and wireless substitution, the once-dominant ILECs serve fewer than half of all access lines, a decline in market share that few industry analysts thought possible.24

Today, the United States’ experiment with unbundling is all but over,25 with only a few clinging to the possibility of an unbundling renaissance.26 Much modern day support for unbundling networks suffers from a lack of direct experience with its implementation in this country (or else are the residual users of network elements). In this Article, we present a brief summary of the rise and ultimate demise of the United States’ experiment


23. See infra Figure 3.

24. See Jason Bazinet et al., Video, Data, & Voice Distribution, CITI INV. RES. & ANALYSIS (May 13, 2011) (“Telco voice declined to around … 43% of all US households”); see also FCC, TRENDS IN TELEPHONE SERVICE, tbls. 7.4, 8.1-8.2 (2010) (showing that 24.5% of homes are wireless only, and that non-ILEC end-user switched access lines were about 27% at the end of 2008). The most recent survey by the Center for Disease Control finds that 38.2% of American homes are wireless only households and that 15.9% of households with a wireline phone received most of their calls on a wireless phone (suggesting continued growth in wireless only households). See S. Blumberg & J. Luke, Wireless Substitution: Entry Release of Estimates from the National Health Interview Survey, July-December 2012, CDC (June 2013), http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201306.pdf.


with unbundling. With the benefit of hindsight and extensive experience, we contend that three fundamental defects underlying the United States’ unbundling paradigm gave it little prospect for success over the long-term—dooming unbundling nearly from its conception. In so doing, we hope that this Article will provide some guidance to policymakers as they contemplate regulatory interventions across a range of settings.

The formulation and dismantling of unbundling policy in the United States spanned an intense eight years, so our review is by no means exhaustive. We apologize for excluding the discussion of an issue, order, or court decision that the reader may find far more relevant than those we discuss, and we suspect there are many. For those readers with battle scars, we hope this review brings back fond memories of what has to be one of the most exciting periods in the recent history of telecommunications policy.

While it is tempting to place blame on particular regulatory or legal decisions, and even the personalities associated with these decisions, the demise of the unbundling regime in the U.S. was driven (in our view) by three underlying economic causes which policymakers failed to fully comprehend: (a) the expectations of policymakers for competitive “green field” facilities-based entry into the local market were, at the time of the enactment of the 1996 Telecommunications Act, unrealistic; (b) the unbundling regime was incentive incompatible in that the incumbent local phone companies were required to surrender market shares to entrants at regulated prices without any permanent offsetting benefit; and (c) the rise of new alternative distribution technologies such as cable, wireless and over-the-top services that expanded the availability and quality of competing voice services.

Importantly, we make no consumer welfare claims about the desirability of unbundling or its failure. In fact, we pass no judgments on the unbundling regime at all, but merely present what we believe to be the underlying and fundamental economic forces that led to its now trivial role in the development of competition in the United States local telephone market. We do so because we believe these same factors are relevant in a variety of settings, both domestically in the United States and abroad.27

To explore these important topics in greater detail, this paper is organized as follows: In Part II, we begin with an overview of the unbundling paradigm and an analysis of the 1996 Act’s specific unbundling requirements. In Part III, we look at the economic fundamentals of the local market. In Part IV, we discuss the important concept of how regulation can force firms to engage in “sabotage” (i.e., non-price discrimination). Next, in Part V, we describe the rise of alternative distribution platforms that were not even contemplated when the 1996 Act was enacted nearly twenty years ago. Finally, we present conclusions and policy recommendations in Part VI.

II. REVIEW OF THE 1996 ACT’S UNBUNDLING REQUIREMENTS

A. What Gets Unbundled?

A critical implementation issue for the 1996 Act was: What elements of the network are to be unbundled? Since the purpose of unbundling is to facilitate competition, what elements were to be unbundled was a hotly contested issue, with the CLECs seeking to maximize and the ILECs seeking to minimize the list of unbundled elements. The Telecommunications Act of 1996 required ILECs to provide unbundled network elements or “UNEs” to other telecommunications carriers. In particular, Section 251(c)(3) of the Act states that ILECs have a duty to:

provide, to any requesting telecommunications carrier for the provision of a telecommunications service, nondiscriminatory access to network elements on an unbundled basis at any technically feasible point on rates, terms, and conditions that are just, reasonable, and nondiscriminatory in accordance with the terms and conditions of the agreement and the requirements of this section and section 252.

This section required that ILECs provide such network elements “in a manner that allows requesting carriers to combine such elements in order to provide such telecommunications service.” The Act defined the term “network element” as “a facility or equipment used in the provision of a telecommunications service,” specifying that “[s]uch term also includes features, functions, and capabilities that are provided by means of such

30. See 47 U.S.C. § 251. Section 153(51) of the Act defines a telecommunications carrier as “any provider of telecommunications services, except that such term does not include aggregators of telecommunications services (as defined in section 226).” 47 U.S.C. § 153(51). Section 153(51) also states that “[a] telecommunications carrier shall be treated as a common carrier under this Act only to the extent that it is engaged in providing telecommunications services, except that the Commission shall determine whether the provision of fixed and mobile satellite service shall be treated as common carriage.” Id.
32. 47 U.S.C. § 153(53) defines telecommunications service as “the offering of telecommunications for a fee directly to the public, or to such classes of users as to be effectively available to the public, regardless of the facilities used.” 47 U.S.C. § 153(53).
facility or equipment, including subscriber numbers, databases, signaling systems, and information sufficient for billing and collection or used in the transmission, routing, or other provisions of a telecommunications service.

The 1996 Act also established a general federal standard for use in determining the UNEs that must be made available by the ILECs pursuant to Section 251. Section 251(d)(2) provides that:

[i]n determining what network elements should be made available for purposes of subsection (c)(3) of this section, the Commission shall consider, at a minimum, whether—(A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer.

In other words, the FCC must determine a standard for defining how an entrant would be impaired from competing where services of the ILEC are bundled or unbundled to a greater or lesser degree.

To complicate matters, the 1996 Act also preserved a state role in addressing unbundling issues. First, Section 252 authorized states to review and to arbitrate interconnection agreements for compliance with the requirements of Sections 251 and 252 and the FCC’s implementing rules.

Second, Section 251(d)(3) also preserved states’ independent state law authority to address unbundling issues to the extent that the exercise of that authority posed no conflict with federal law. That section provides that:

[i]n prescribing and enforcing regulations to implement the requirements of this section, the Commission shall not preclude the enforcement of any regulation, order, or policy of a State commission that—(A) establishes access and interconnection obligations of local exchange carriers; (B) is consistent with the requirements of this section; and (C) does not substantially prevent implementation of the requirements of this section and the purposes of this part.

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35. 47 U.S.C. § 251(d)(2). Sec. 251(d)(2)(A) is a “necessary standard,” but in practice, the necessary standard is rarely relevant.
36. 47 U.S.C. §§ 252(c)(1), (e)(1)-(2).
38. 47 U.S.C. § 251(d)(3). The states may exercise this state law authority in the course of reviewing interconnection agreements under section 252; see also 47 U.S.C. § 252(e)(3).
The 1996 Act gave the FCC authority only to establish a minimum list of unbundled elements, an issue that continues to work its way around the courts, and the states could freely expand the list as each state saw fit. In fact, many states, including, for example, Illinois and Texas, mandated unbundling under state statutes. The operational rules used by the FCC in this directive created enormous problems and, in the end, all attempts to define impairment in a legally-defensible manner failed, with the courts remanding numerous attempts (see the review in Appendix A, infra).

B. Pricing of Unbundled Elements

Critically, the prices for the unbundled network elements were to be regulated. In addition to the question of what was to be unbundled, the statute established standards to govern the pricing of UNEs in Sections 251 and 252. For UNEs, Section 251(c)(3) provides that elements shall be made available “on rates, terms, and conditions that are just, reasonable, and nondiscriminatory.” Section 252 provides:

\[\text{Determinations by a State Commission of the . . . just and reasonable rate for network elements for purposes of subsection [251](c)(3) . . . – (A) shall be – (i) based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the . . . network element . . . , and (ii) nondiscriminatory, and (B) may include a reasonable profit.}\]


41. 47 U.S.C. § 251(d)(3). Section 251(d)(3) of the 1996 Act provides the State commissions with the authority to establish unbundling obligations in above and beyond the FCC’s national minimums, so long as those obligations are consistent with the purposes of the Act. This section of the Act was necessary because many States had already begun to promote competition by mandating unbundling by the time the 1996 Act was passed.

42. Illinois Public Utilities Act §§ 5/13-505.6, 514, 801.

43. Texas Utilities Code §§ 60.021-022.

44. *See, e.g.*, UNE Remand Order, supra note 40, at 3807-08; AT&T Corp. v. Iowa Utils. Bd., 525 U.S. 366, 389-90 (1999) (the following assumptions made by the Commission are not in accord with the ordinary and fair meaning of the terms “necessary” and “impair”: (1) that any increase in cost or decrease in quality, imposed by denial of a network element, renders access to that element “necessary”; (2) failure to provide a “necessary” element will “impair” the entrant’s ability to furnish the desired services).


46. 47 U.S.C. § 251(c)(3).

Section 252(d)(A)(i) of the 1996 Act required that wholesale prices for the unbundled network elements be “based on the cost (determined without reference to a rate-of-return or other rate-based proceeding) of providing the … network element.” Congress left the details of the particular cost standard to the FCC, and the agency established a forward-looking cost standard called Total Element Long-run Incremental Cost (“TELRIC”), a new cost standard without any precedent in U.S. regulatory proceedings. The FCC concluded that a “cost-based pricing methodology based on forward-looking economic costs … best furthers the goals of the 1996 Act.” In dynamic competitive markets, firms take action based not on embedded costs, but on the relationship between market-determined prices and forward-looking economic costs.

While the FCC defined the relevant cost standard, it was the state regulatory commissions that implemented the standard when setting wholesale prices for unbundled elements. As recognized by the Supreme Court in AT&T Corp. v. Iowa Utilities Board, the FCC could not establish a cost standard so strict that the standard effectively set the wholesale price. Unquestionably, Section 252 of the 1996 Act gave the states the right to set wholesale prices. States therefore had substantial latitude in setting wholesale prices, and were constrained only by the general forward-looking cost framework established by the FCC (i.e., TELRIC).

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49. 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. 29 (1996) [hereinafter First Local Competition Order]; see also Benjamin et al., supra note 4, at 416-18. The use of Long-run Incremental Cost (“LRIC”) had a long history in U.S. regulation, but appending the “Total Element” adjective to the concept rendered such history largely moot. In many respects, the failure of the FCC to stick to more traditional regulatory concepts and parlance opened the door for ILECs to attack the unbundling regime. The legal fight over “TELRIC”—as a new concept—was intense, expensive, and a central strategy for ILEC resistance to the U.S. unbundling regime.
52. Id. at para. 706.
55. See id. at 423 (“The FCC’s prescription, through rulemaking, of a requisite pricing methodology no more prevents the States from establishing rates than do the statutory ‘Pricing standards’ set forth in §252(d). It is the States that will apply those standards and implement that methodology, determining the concrete result in particular circumstances. That is enough to constitute the establishment of rates.”).
57. In one case, the FCC was required to issue its own cost order for unbundled loops given the state regulator’s failure to do so. Petition of WorldCom, Inc. Pursuant to Section 252(e)(5) of the Communications Act for Preemption of the Jurisdiction of the Virginia State
The statute also establishes a resale entry vehicle separate from the availability of UNEs. Section 251(c)(4) provides that ILECs have “[t]he duty . . . to offer for resale at wholesale rates any telecommunications service that the carrier provides at retail to subscribers who are not telecommunications carriers.” Because Section 251(c)(4) applies only to retail telecommunications services that the ILEC provides to subscribers, some ILEC services, such as wholesale-only services and information services, were not available at a resale discount to competing carriers.

C. The Quid Pro Quo of Section 271

In return for opening their local markets to sharing, the 1996 Act permitted the ILECs (specifically, the firms referred to as the Bell Operating Companies or “BOCs”) to enter the long distance market, a market that was already workably competitive. The Bell Operating Companies were precluded from offering interstate long-distance services by the Modified Final Judgment of 1982, which broke up the AT&T monopoly. This quid pro quo was detailed in Section 271(c)(2)(B) of the 1996 Act, which established a 14-point checklist that each ILEC must demonstrate that it has fully implemented prior to providing long distance services. To satisfy the statute, the LEC was required to show that it was providing non-discriminatory access to each checklist item, meaning that the interconnection or element was provided or could be provided in quantities that competitors may reasonably demand and at an acceptable level of quality. The fourteen items included: (a) interconnection; (b) access to unbundle network elements; (c) access to poles, ducts, conduits, and rights-of-way; (d) unbundled local loops; (e) unbundled local transport; (f) unbundled local switching; (g) 911 and E911, directory assistance, and operator services; (h) white pages directory listings; (i) numbering administration; (j) databases and associated signaling; (k) number portability; (l) local dialing parity; (m) reciprocal compensation; and (n) resale.
In practice, Section 271 of the Act would serve both as a complement and substitute for the requirements in Section 251 of the Act, providing some guidance on the specific elements that must be made available, and providing support for the availability of elements and other necessary services in instances where Section 251 was in legal limbo. However, the FCC would eventually reject the use of Section 271 as an alternative statutory requirement beyond the scope of Section 251 obligations. Of course, once long distance authority had been granted, the incentive to comply with the unbundling mandates was materially diminished.

D. Summary

In an effort to affirmatively nudge the local exchange telecommunications market toward a more competitive equilibrium industry structure, the 1996 Telecommunications Act required the incumbent local exchange monopolist to lease elements of their networks to its retail rivals. In determining which network elements should be made available to competitors, §251(d)(2) instructed the Federal Communications Commission to consider, at a minimum, whether (A) access to such network elements as are proprietary in nature is necessary; and (B) the failure to provide access to such network elements would impair the ability of the telecommunications carrier seeking access to provide the services that it seeks to offer. State regulators also played a key role in establishing which portions of the network must be unbundled.

Section 251’s requirements became widely known as the “necessary” standard and the “impair” standards. Because the “necessary” standard applies only to “proprietary” network elements, its application was limited. Impairment, consequently, was the more noteworthy standard under which the availability of unbundled elements was to be determined. The FCC would struggle implementing a workable definition of “impairment,” and had its efforts repeatedly remanded by reviewing courts.

These unbundled elements were to be sold at regulated prices, where such prices must be “just and reasonable” and “nondiscriminatory,” based

65. See Triennial Review Order, supra n. 17.
68. 47 U.S.C. § 251(d)(2)
72. Id. at paras. 17-20.
on “cost,” and “may include a reasonable profit.”74 The Commission interpreted Section 251(c)(3) to imply that the price of a network element should be based on the forward-looking costs that can be attributed directly to the provision of services using that element, which includes a reasonable return on investment, plus a reasonable share of the forward-looking joint and common costs.75 The agency’s Total Element Long-Run Incremental Cost (“TELRIC”) standard was intended not to reflect embedded or historical costs, opportunity costs or universal service subsidies.76 Although hotly contested, the TELRIC pricing standard was deemed appropriate by the 2002 Supreme Court decision in Verizon v. Federal Communications Commission.77 While the theoretical details of TELRIC were the subject of extensive debate and research, in practice the standard was sufficiently flexible in implementation at the state regulatory commissions to support a wide range of prices.78

III. ECONOMIC FUNDAMENTALS OF NETWORK COMPETITION

Put simply, the goal of the 1996 Act was to move from the status quo of one firm providing local telephone service (a monopoly) to multiple firms providing local telephone service (competition).79 As the Supreme Court observed concerning the 1996 Act, Congress intended “to eliminate the monopolies” of the incumbent local exchange carriers (“ILECs”) and to “reorganize markets … deliberate[ly].”80 The goal of eliminating the historical local exchange monopoly was, according the Court, an “end in itself.”81 Put this way, it is immediately apparent that the economic theory of equilibrium industry structure—that is, the number of firms that can successfully serve a market—becomes relevant.

As shown by John Sutton in his seminal book SUNK COST AND MARKET STRUCTURE,82 and discussed in reference to the

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75. See First Local Competition Order, supra note 50, at 3760-78.
76. See id. at paras.1730-31.
78. See, e.g., T. Randolph Beard & George S. Ford, Splitting the Baby: An Empirical Test of Rules of Thumb in Regulatory Price Setting, 58 KYKLOS 331-51 (2005) (“I find that forward-looking economics costs (the relevant cost standard) contribute most to the determination of wholesale UNE prices for UNE-P when compared to embedded costs, retail prices, or the retail opportunity cost of the ILEC. Econometric evidence suggests that retail opportunity cost (Efficient Component Pricing Rule) also plays an important role in wholesale price setting. Overall, the evidence presented here suggests that State regulators have, to a large extent, set wholesale prices between forward-looking cost and the Efficient Component Pricing Rule rate. It appears, as is common in regulatory proceedings, that the interests of both parties have been balanced.”).
79. See AT&T v. Iowa Utilities Board, 525 U.S. at 371.
81. Id. at 475-76.
telecommunications industries by Beard, Ford and Spiwak, under some simplifying assumptions the number of firms than can profitably serve a market (i.e., the equilibrium number of firms, \(N^*\)) is the integer part of 
\[ N^* = \sqrt{S/E}, \]
where \(S\) is market size in terms of expenditures and \(E\) measures the (fixed) sunk entry costs.\(^84\) As shown in this expression, the number of firms supplying a market is positively related to the size of the market (\(S\)), but inversely related to the sunk costs of entry (\(E\)). The larger are fixed/sunk costs, market size constant, the fewer the firms that can profitably supply the market and the higher is equilibrium industry concentration.\(^85\) The larger is the market size, entry costs constant, the lower is the equilibrium industry concentration. At the time of the passing of the 1996 Act, and even now, fixed and sunk costs are prevalent in the local exchange market, to a greater or less extent in particular segments of the local market.\(^86\) Expression (1) may be applied to particular sub-markets of the local exchange in cases where sub-markets may be served under regulatory constraints. For example, entry into the high-capacity business markets is a very different problem than entry into the residential local loop market, where the former was characterized by a relatively high size-to-entry-cost ratio, and consequently competition in business markets occurred first and to a greater degree.\(^87\)

The implication of the economic theory is clear: the number of firms supplying a market is not unbounded when there are fixed and sunk costs. Given that much of the entry cost of telecommunications network is sunk and large relative to market size, industry concentration in telecommunications markets is expected to be relatively high. Indeed, until the 1996 Act, the legal presumption was that the local exchange market was a natural monopoly (i.e., \(N^* = 1\)).\(^88\) While the technology and law governing the telecommunications industry had changed in the late 1980s and early 1990s, as was evident in the long distance segment of the industry, these changes had not meaningfully altered the supply-side economics of the local exchange.\(^89\) Large numbers competition among facilities-based local

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84. The models assume all firms are identical. See, e.g., 54 FED. COMM. L. J. 421, 429, n. 23.
85. In the Triennial Review Order, for example, the Commission observed: “Larger fixed and sunk costs imply that fewer firms are able to survive profitably in the industry.” Triennial Review Order, supra note 17 at para. 80.
87. See BENJAMIN ET AL., supra note 4, at 385-86.
89. See BENJAMIN ET AL., supra note 4, at 340-41, 350-56, 385.
exchange carriers in the mass market was forbidden by the supply-side economics of the industry.  

Recognizing, to some extent, the economic forces working against multi-firm supply in the local market, the 1996 Act aimed to alter the competitive landscape of local telecommunications by addressing the large fixed and sunk costs of constructing last mile (and related) local communications network (e.g., switching), and proposed to do so by splitting the integrated local phone market into wholesale and retail components. In the post-1996 Act environment, firms seeking to offer retail local telephone services needed not construct a local exchange network, but could offer services by acquiring the necessary facilities in a “wholesale market” where such facilities would be bought and sold. In effect, ILECs were required to unbundle various components of their local networks so as to “share” with their competitors the inherent economies of scale built into their ubiquitous local networks. Policies to reduce or otherwise ameliorate the effects of such barriers to entry were expected to strengthen competitive rivalry and improve market performance.

This division of the ILEC into wholesale and retail segments did not, however, fundamentally alter the supply-side economic conditions of facilities-based entry. The Act’s unbundling requirements targeted directly the retail segment, with the aim of lowering entry costs in the hopes of increasing the number of retail providers, and in that regard the Act was successful. By 2004, there were nearly two hundred CLECs providing services using unbundled elements. But the unbundling requirements reduced entry costs almost exclusively for retail segment, doing little to reduce the costs of replicating local loop plant. Building local communications plant remained costly and, for the most part, cost

90. See Beard, supra note 84.
92. See Verizon Communications, 535 U.S. at 467.
93. See id.
95. See 47 U.S.C § 253.
96. Local Competition Report, supra note 7, at tbl. 4.
97. One potential role of unbundling for improving entry conditions into the local exchange was the creation of non-incumbent demand for network. For a full discussion, see Beard, supra note 84.
prohibitive. Very few of the residential and small business customers of CLECs were served over competitor local loop plant.98

As detailed in Beard, Ford and Spiwak, the financial data from facilities-based entrants demonstrated the difficulty with entry into the local market at the time.99 For instance, the entrant RCN mostly targeted residential customers in densely populated markets with its own facilities-based network over which it provided telephone, data and video services.100 According to its financial documents from the late 1990s, the company had $2.75 billion in a network that passed about 1.5 million homes, or 1.1 million marketable homes.101 As such, network costs ran about $1,750 per home passed, $2,500 per marketable home, or about $6,500 per customer.102 On average, RCN’s monthly plant costs (assuming a 15% hurdle rate and 15 year payoff) was about $25 per home passed. Average revenue per subscriber per month was about $130 and direct costs were about 46% of revenues, producing a gross monthly margin of about $68 per subscriber. For revenues to cover plant costs, RCN needed a penetration rate of about 35-40%. The implications are plain: if a 40% penetration is required for profitability, then only two firms can profitably service the same market, and RCN and the incumbent makes two.103 Since RCN’s entry strategy targeted markets where the entry conditions were relatively favorable, these numbers likely reflect a best-case scenario. Beard, et al., estimate that to construct an RCN-style network for every household in the U.S., the plant investment and total entry costs would have been at the time about $300 billion and $600 billion, respectively.104 Clearly, facilities-based

98. As a consequence of the data collection rules, in many cases what was described as a CLEC-owned loop was actually an unbundled loop, particularly in the business markets.
99. See Beard, supra note 84.
101. Marketable homes are those homes that RCN’s network can immediately serve.
102. Values based on RCN’s 1998, 1999, and 2000 Annual Reports. For example, between 2000 and 1999, RCN’s Plant and Property grew by $1.5 billion while its marketable homes grew by about 550,000. In 1999, RCN’s penetration rate into marketable homes was about 40%.
103. With a reasonable guess of the minimum penetration a firm needs to cover its costs, the number of firms that can operate in a market is (the integer part of) the inverse of the minimum penetration (e.g., 1/0.40 = 2.5).
104. These investment estimates are rough and replicated from Why ADCo, Why Now? See Beard, supra note 84. Plant investment is estimated by assuming the cost differentials and population distributions across density zones are similar to those estimated by the HAI Model (v. 2.2.2). RCN’s current network is assumed to be deployed in the two most-dense zones. Non-plant entry costs are assumed to be about $1 for every $1 of plant (see Table 1). Seven years after this estimate was first published, the National Broadband Plan’s team produced an estimate for a nationwide high-speed network that was very close to this number. http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-293742A1.pdf).
entry is incredibly costly, requiring a large penetration rate for financial success.\textsuperscript{105}

Another important misconception policymakers and Wall Street had about the local market was that the cost of entry was limited to just the cost of network construction and architecture. Quite to the contrary, entry into the telecoms business required the additional commitment of significant costs for billing systems, regulatory efforts and responses, pre-positive cash flow general administrative costs and, perhaps most significant of all, customer acquisition and retention costs.\textsuperscript{106} Galbi estimated that the annual marketing expenses for the long-distance segment were sizeable (relative to revenues) and subject to economies of scale.\textsuperscript{107} Other sources indicated that acquisition costs for residential local or long-distance customers were about $150 per customer, virtually all of which was sunk.\textsuperscript{108}

The magnitude of non-plant entry costs was also sizeable. Table 1, replicated from Beard, et al., illustrates the proportion of facilities investment (measured as net plant, in millions of dollars) to total entry costs for a sample of CLECs.\textsuperscript{109} Entry costs are measured as the spent portion of capital invested in the firm including debt and equity. As illustrated by the table, investment in plant was typically a very small proportion of total dollars invested by CLECs. As further demonstrated by Table 1, the ratios of expense costs to plant costs range significantly from ITC’s relatively low ratio of 1.5:1 all the way to Covad’s ratio of 8:1. On average, however, net plant amounted to about 37\% (approximately two-thirds) of total entry costs (for this sample).

In other words, for every dollar of investment in plant and equipment, an additional $2 of entry costs were incurred, on average, by the CLECs.


Plainly, even after the implementation of the unbundling requirements, the economies of scale and sunk costs remained a significant hurdle for competitors, and greatly limited facilities-based entry. Moreover, many of these operational costs related to acquisition, billing, regulation, and working capital applied to entrants using unbundled elements. Profitable CLECs, even those with heavy reliance on unbundled elements, were difficult to find.

The difficulty with replicating even those elements of the network often deemed replicable, such as switching, were demonstrated to be prohibitively costly in the end. This fact was clearly revealed after the FCC’s *Triennial Review Remand Order* where unbundled switching was to be quickly phased out.\(^\text{110}\) According to the FCC, the CLECs using unbundled switching and loops (a package referred to as the “UNE-Platform” or “UNE-P”) would simply migrate to using unbundled loops with their own switching equipment (a package referred to as “UNE-Loop” or “UNE-L”) if unbundled

\(^\text{110}\). Unbundled Access to Network Elements, Review of the Section 251 Unbundling Obligations of Incumbent Local Exchange Carriers, *Order on Remand*, 20 FCC Rcd 2533, para. 222 (2005) [hereinafter *Triennial Review Remand Order*] (“we conclude that neither economic nor operational impediments associated with switch deployment or hot cuts pose barriers to entry sufficient to give rise to impairment on a nationwide basis”).
switching was not available. A review of the evidence does not support the FCC’s position. In Figure 1, the FCC’s count of the number of UNE-P and UNE-L lines over the 1999 to 2010 time period are illustrated. Peaking in 2004, UNE-P lines fell precipitously following the Triennial Review Remand Order. Under the substitution theory, UNE-L should have risen to offset such declines. Yet, as the figure shows, UNE-L did not increase, but instead has also been in a steady decline. For the most part, the technology of the period did not practically permit the combination of unbundled loops (at least those serving residential and small business users) with CLEC-supplied switching. The rise of new technologies capable of providing high-quality voice services also took a toll on CLEC business plans.

By many accounts, the failure of the UNE-L model, on any broad scale, was inevitable. In order to facilitate UNE-L, the ILEC network had to be manually dismantled and reconnected to CLEC switches (via collocation

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111. In the Triennial Review Remand Order, the Commission directed CLECs to migrate their retail customers served using unbundled switching to alternative arrangements by March 11, 2006 (within 12 months of the date the order went into effect). Id. at 148.


The ILEC loops were (for practical purposes) hardwired to the ILEC switch so that customer migrations were very labor intensive. The manual process of physically moving loops from an ILEC frame to a CLEC collocation—a “hot cut”—was a costly and error prone process. Certainly, such manual movement of wires was not scalable to a level commensurate with widespread competition. In retrospect, repeatedly undoing physical connections that had been wired over decades in an effort to minimize human intervention was nonsensical, as a trip to any ILEC wire center would have plainly demonstrated. Thus, the provision of local telephone service using unbundled loops required that, as a practical matter, the unbundled switching element be included, avoiding the costly human effort required for hot-cuts. This reality was problematic for U.S. policy, since the theory of unbundling viewed the migration to self-supplied switching from unbundled switching as a presumably early and relatively easy step in the move toward facilities-based entry in the local exchange. This migration never materialized.

IV. REGULATED ACCESS TO THE NETWORK AND SABOTAGE

In Verizon, the Supreme Court observed that “wholesale markets for companies engaged in resale, leasing, or interconnection of facilities cannot be created without addressing rates.” Intuitively, if access must be mandated, then the rate paid for such access might also need to be mandated, so not only did the 1996 mandate the ILECs to unbundle their networks for competitors, but also established that the rates paid for such elements were

116. See generally Comparing ILEC and CLEC Local Network Architectures, AT&T Presentation to FCC (Oct. 3, 2002) (discussing the structural network differences between ILECs and CLECS).
117. Id. at 19.
118. Id. at 19.
119. Triennial Review Order, supra note 8, at para. 469 (“we find that the number of hot cuts performed by BOCs in connection with the section 271 process is not comparable to the number that incumbent LECs would need to perform if unbundled switching were not available for all customer locations served with voice-grade loops”).
120. See, e.g., Triennial Review Order, supra note 8, at para. 468 (finding that carriers are unable to keep up with the number of hot-cuts needed).
121. Cf. Triennial Review Order, supra note 8, at para. 475 (“[W]e find that current conditions at the national level demonstrate that competitive LECs are impaired without unbundled switching for mass market customers based on the costs and delays associated with hot cuts.”).
122. See Triennial Review Order, supra note 8, at para. 475.
to be regulated.\textsuperscript{124} This regulation of access rate, while perhaps sensible in some respects, also created a problem with incentives.\textsuperscript{125}

As a practical matter, an unbundled loop (with or without switching) is almost always used to serve a customer of the ILEC from which the loop is leased. The ILECs were essentially monopoly providers of local phone service and were the only companies required to unbundle their networks.\textsuperscript{126} An unbundled loop, therefore, meant losing a customer and the profit margin on that customer, and this lost margin is part of the opportunity cost of selling the element. The incentives are plain to see: if the regulated price for the unbundled elements does not cover both costs and the lost margin, then the sale of the element reduces profits and the ILEC does not benefit from the transaction. The spread between the regulated price and the opportunity costs gives the ILEC an incentive to sabotage the transaction (or, sabotage the entire regulatory scheme). To the economist, the term “sabotage” has a very specific meaning—it is the ability of a dominant firm to raise the cost of a rival’s key input of production through non-price behavior.\textsuperscript{127} Regulated unbundled element prices created an inherent tension in the wholesale supplier/retail competitor conflict, and it was the regulated price that produced a strong incentive for resistance and manipulation. While laypersons often attribute sabotage to the presence of market power, economic models show clearly that sabotage is always a consequence of regulating prices in a forced transaction.\textsuperscript{128}

The problem was discussed in a paper by Beard, Ford and Spiwak (2005).\textsuperscript{129} Their economic model modeled a scenario similar to the unbundling regime by assuming, among other things, the following: (a) there is a large, integrated (wholesale and retail) incumbent (e.g., the ILEC) that is supposed to sell unbundled elements to retail competitors at regulated prices; (b) there exists scale economies in network (wholesale) operations.

\begin{itemize}
  
  \item \textsuperscript{124} See 47 U.S.C. § 251(c)(2)-(3), (d)(1).
  
  \item \textsuperscript{125} See, e.g., Triennial Review Order, supra note 8, at para. 330.
  
  \item \textsuperscript{126} Cf. Beard, supra note 49, at 435 (“Nearly all [competitor] entrants, for example, must deal with the ILEC in some way.”).
  
  \item \textsuperscript{127} See T. Randolph Beard et al., Regulation, Vertical Integration, and “Sabotage”, 49 J. Indus. Econ. 319, 320 n.3 (2001) (“[S]abotage is an indirect method of raising rivals’ costs . . . it involves non-price conditions of supply.”).
  
  
  \item \textsuperscript{129} See Beard, supra note 84, at 443.
\end{itemize}
and these may be substantial; (c) wholesale services/elements are required to provide retail services, on a “one for one” basis; and (d) margins and prices are such that retail competition is viable if retail competitors are able to obtain elements at the long run average costs of an efficient competitor, which ensures that competition is viable and thus a reasonable expectation and policy goal. For present purposes, the relevant notation includes the following: $MS$ is the retail market share of dominant firm; $S$ is the wholesale market share of the dominant firm; $\gamma$ is the typical retail margin (revenues less retail costs and element costs); $C(S)$ is the cost of network of “size” $S$, with $C' > 0$ and $C'' \leq 0$; and $\bar{r}$ is the regulated price of “network elements.

Now, consider an integrated firm (and ILEC) with network “market share” $S$ and retail market share $MS$. The marginal opportunity cost of transferring control of one element to a competitor, $t$, is then

$$t = C'(S) + MS \cdot \gamma$$

where the first term, $C'(S)$, represents the ordinary marginal cost of an element given a network of “size” $S$. The second term, $MS \cdot \gamma$, is the potential impact of the sale of the unbundled element on the seller’s profits. The sale of an unbundled loop causes the seller to lose a retail customer with probability $MS$. If the seller has a market share of 90%, then the sale of a loop has a 90% chance of resulting in a lost customer for the seller of the loop. The parameter $\gamma$ is the retail margin, so $MS \cdot \gamma$ is the expected lost retail margin from the sale of an element. Thus, the total cost of the element transfer is $C'(S) + MS \cdot \gamma$ (the marginal cost plus the lost retail margin of the element).

This simple model reveals two key points. First, the larger the market share of the seller, the lower are the seller’s marginal cost; if $S_1 > S_2$, then $C'(S_1) < C'(S_2)$. That is, there are scale economies. Second, the larger is the seller’s retail market share and the larger is the profit margin, the higher are the seller’s opportunity cost ($t$).

Figure 2 illustrates the opportunity cost to the dominant firm from selling a element (or a collection of them used to serve a single account), and compares it to the regulated price for the element ($\bar{r}$).

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130. See id. at 444 n.66. The notation $C'(S)$ indicates marginal cost, where marginal cost is the first derivative of the cost function with respect to the quantity of element produced. The second derivative of the cost function is $C''(S)$. These assumptions merely imply that producing elements is costly ($C'(S) > 0$), but that there are scale economies in this process ($C''(S) \leq 0$). There are no fixed costs, so scale economies are modeled as a declining marginal cost.

131. See id. at 445 n.67. The Efficient Component Pricing Rule (“ECPR”) calls for a price equal to $t$. TELRIC pricing is roughly equivalent to average cost pricing, or price is equal to $C(S)/S$.

132. See id. For simplicity, the retail margin $\gamma$ was assumed to be unaffected by the sale of one element.

133. See id. at 447.
In this figure, \( \bar{r} \) is assumed to be sufficiently high that it exceeds the long-run incremental cost of the dominant firm, but this does not imply that \( \bar{r} \) is remunerative. Figure 2 shows that the dominant incumbent is willing to sell the element at \( \bar{r} \) only if \( MS_1 < MS_1^* \). If market share exceeds \( MS_1^* \), then the opportunity cost (\( t \)) exceeds \( \bar{r} \) and the dominant firm has no desire to sell elements. In the late 1990s and early 2000s, during the period of most unbundling activity, the market shares of the ILECs were close to 100%. In the basic model, it was assumed that the retail competition from unbundled elements did not affect the retail margin. If \( \gamma \) falls as more element sales are made, the incentive not to sell unbundled elements is strengthened.\(^{134}\)

Given the implementation of the unbundling provisions of the 1996 Act, the ILECs were legally required to sell elements and do so at price \( \bar{r} \).\(^{135}\) As just shown, the ILEC does not want to sell such elements if the regulated price is below its opportunity cost. It was required to make such sells, however, and thus might resort to sabotage to reduce them. To see this, let \( z \) be a non-price cost imposed per element on buyers (i.e., \( z \) is a cost to buyers, \( z \geq 0 \), but not a revenue to the seller). If imposing the cost \( z \) is a possible, what level of elements sales would the dominant firm choose? When \( MS_1 < MS_1^* \), the incumbent does not want to sell elements at all. Thus, in such cases, \( z \) will be set at its maximum feasible value to impede sales. Thus, if the dominant firm is able to impose \( z \) on its rivals (that is, “sabotage” the transactions), its incentives are to do so.\(^{136}\) In an effort to counter these

\(^{134}\) Lower retail margins reduce opportunity costs and thus encourage element sales. However, the seller will not purposefully reduce its retail margin through the sale of elements to reduce its opportunity costs.

\(^{135}\) See id. at 448.

incentives, the FCC and state regulators created “performance assessment plans” that monitored for discriminatory performance using statistical testing and imposed penalties when discrimination was found. The enforcement regimes were ineffective, in large part because the statistical sophistication of such programs were beyond the capabilities of the regulators, the transactions were very complex and often interconnected with other transactions, and the penalties were too low.

Accordingly, it was price regulation of unbundled network elements below opportunity cost (though perhaps above some technical measure of cost) that produced the incentive to sabotage unbundling. This sabotage was directed both at the CLECs, or the transactions involving the CLECs, and the entire unbundling regime via litigation and federal and state regulatory activity. Over time, the political, regulatory and legal support for the unbundling mandates would eventually collapse under the relentless assault brought to bear by the ILECs, and, as discussed later, the diminishing size of the local exchange market. While the Supreme Court was generally supportive of the unbundling mandates, many lower courts were not, culminating in the District of Columbia Circuit’s vacation of the Triennial Review Remand Order in United States Telecom Ass’n v. FCC (“USTA

Bureau announced a Consent Decree with Verizon Communications, Inc. (Verizon), under which Verizon will make a “voluntary payment” of $77,000 to the United States Treasury and will take certain remedial actions regarding its collocation practices, Verizon Comm., Inc., Order, 16 FCC Rcd. 16270 (2001); (b) on May 29, 2001, the FCC affirmed its Enforcement Bureau’s $88,000 fine imposed in March 2001 against SBC Communications, Inc. for violating reporting requirements that the FCC imposed pursuant to its approval of the merger application of SBC and Ameritech Corp, SBC Comm., Inc., Order on Review, 16 FCC Rcd. 12306 (2001); (c) similarly, on January 18, 2001, the FCC sought to fine SBC Communications, Inc. (SBC) $94,500 after an independent audit discovered that SBC failed to comply with the FCC’s rules that require incumbent telephone companies to allow competing telephone companies to place equipment in the incumbents’ offices—in particular, that SBC failed to promptly post notices of all incumbent owned sites that had run out of collocation space such that competitors do not waste time and resources applying for collocation space where none exists, SBC Comm. Inc., Notice of Apparent Liability for Forfeiture, 16 FCC Rcd. 1012 (2001); (d) On November 2, 2000, the Federal Communications Commission settled with BellSouth Corporation to have them make a “voluntary payment” of $750,000 to the United States Treasury and to take important steps to improve its compliance with FCC rules relating to the negotiation of interconnection agreements between competing carriers. BellSouth Corp., Order, 15 FCC Rcd. 21756 (2000). Indeed, the FCC’s investigation disclosed that, for more than six months in 1999, BellSouth failed to provide a competitor with cost data to support BellSouth’s proposed prices for unbundled copper loops, despite the competitor’s written request for such data. Id. para. 5. And, in addition to the $750,000 voluntary payment, the Consent Decree obligates BellSouth to adopt procedures for expedited access to confidential information (including issuance of a standard non-disclosure agreement that complies with the relevant FCC rules) and to adopt procedures for competitors to elevate disputes regarding disclosure of confidential information to higher levels within BellSouth. Id. para. 13. In addition, BellSouth will provide training to its negotiators concerning the relevant statutory and regulatory requirements, as well as BellSouth’s revised procedures. Id. para. 14.

137. See infra Appendix A (collecting and summarizing cases).
When the Bush Administration made the affirmative decision not to seek certiorari of USTA II,\textsuperscript{138} the unbundling experiment of the 1996 Act was effectively over (see unbundling line counts in Figures 1 above and 3 below).

V. THE RISE OF ALTERNATIVE DISTRIBUTION PLATFORMS

In the early 1990s, the local telephone market was reasonably characterized as a static monopoly experiencing relatively slow technological innovation. The network was also ubiquitous, but this wide geographic coverage was possible only through multi-billion dollar subsidies, much of which was funded internally by the ILECs.\textsuperscript{140} This was the environment in which the 1996 Act was passed. A surprising fact to many is that the Telecommunications Act of 1996 only had passing references to high-speed Internet service and mobile communications.\textsuperscript{141} At the time, these technologies were not viewed as significant potential providers of local telecommunications services. Yet, today, these two technologies are used to provide over half of the local telephone connections to U.S. households.\textsuperscript{142}

With a relatively static network provided by a monopolist it would seem relatively easy to identify elements of the network suitable for unbundling and likely relatively easy to estimate the cost of such elements. Neither proved easy in the end.\textsuperscript{143} Alternately, in a dynamic setting where new investments in network were required (which are more sensitive to pricing than is embedded plant), whatever difficulties were present in implementing an unbundling regime in 1996 expanded exponentially less than a decade later.\textsuperscript{144}

Unbundling was intended to promote competition with the expected benefit of that competition being lower prices, higher quality, and so forth. Such gains might be expected to be large when the policies are directed at the de-monopolization of the local market. As competition developed from

\textsuperscript{138} See United States Telecom Ass’n v. FCC, 359 F.3d 554 (D.C. Cir. 2004).
\textsuperscript{142} See FCC, TRENDS IN TELEPHONE SERVICE, tbl. 2.3 (2010).
\textsuperscript{144} Id. (As broadband Internet service diffused through the U.S. economy, cable television systems were rolling out broadband and telephone services over their existing plant.)
other sources, however, the benefits of unbundling-facilitated competition became smaller. With the value of unbundling shrinking, the economic case for regulatory-mandated unbundling was reduced. At last count, the one-monopoly ILECs were serving fewer than half of switched access lines (the type of service targeted by unbundling policies for residential and small business customers). Moreover, as part of this competition came from mobile wireless technologies, the market for landline access services, which was the target of unbundling policies, was also in decay. This movement by consumers to wireless services and over-the-top VoIP services (e.g., Skype and cable television operators) weakened the prospect for “stepping stone” facilities-based entry by shrinking the market, as well as attenuating the total expected benefits of any price reductions resulting from element-based entrants.145

In Figure 3, we illustrate the path of access line activity and long distance toll revenues in the U.S. over the past decade on the left-hand side figure.146 In 1999, there were about 181 million landline, end-user switched access lines.147 Today, there are only 95 million access lines (including some VoIP lines). Long distance revenues have fallen from $108 million to only about $60 million (in 2008).148 These declines are facilitated by wireless substitution, a reduction in second lines (in part due to broadband Internet), and perhaps some data collection anomalies. In any case, by FCC counts, the size of the switched access market has been cut essentially in half.149

145. Wireline service prices were regulated during the period of unbundling, softening the price effects of competition (assuming the regulated price was less than the monopoly price).

146. Local Competition Report, supra note 16 (Landline Switched Access Lines, VoIP Lines, and UNE Lines at Table 3); TRENDS IN TELEPHONE SERVICE, supra note 162 (Long Distance Revenues, at Table 9.2); Stephen J. Blumberg & Julian V. Luke, Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, July-December 2010, CENTER FOR DISEASE CONTROL (2011), at Table 1; U.S. households from U.S. Census Bureau, http://www.census.gov/population/projections/nation/hh-fam/table1n.txt.

147. See id.

148. See TRENDS IN TELEPHONE SERVICE, supra note 162, at tbl. 9.2 (Long Distance Revenue).

149. See id.
In the right-hand side figure of Figure 3, we track the type of access technologies used by competitors to the former ILEC monopolists. While unbundling lines have fallen off precipitously since 2004, wireless-only households and VoIP connections have risen quickly.\textsuperscript{150} The post-2004 dip in competitor access lines is partly a result of UNE line losses, but also a consequence of data collection anomalies. VoIP data, for example, was not collected by the FCC until 2008.\textsuperscript{151} Since VolP-lines and wireless-only households shrink the relevant market for competitors using unbundled elements, the prospects for a successful unbundling regime were significantly weakened by the evolution of new access technologies. The competitive implications of unbundling was also much diminished, since price cuts by unbundled element entrants and the quantities to which such cuts apply were rapidly shrinking.

A dwindling local exchange market, both from wireless substitution and VoIP, also created problems for the subsidy schemes used by regulators to support ubiquitous coverage of wireline networks. The 1996 Act, by Section 254, required the FCC to make explicit the plethora of implicit subsidies schemes used to support ubiquity.\textsuperscript{152} Exposing such subsidies, however, was not in the interest of politicians and regulators. Even today, the FCC continues to migrate to a more explicit subsidy regime.\textsuperscript{153} Unbundling competition and intra-modal competition was largely targeted

\textsuperscript{150} See infra Figure 3.
\textsuperscript{152} See, e.g., 47 U.S.C. § 254(b)(5) (2012) (“There should be specific, predictable and sufficient … mechanisms”); 47 U.S.C. § 254(e) (2012) (“Any such support should be explicit…”)
to markets that sourced the subsidy, and thereby threatened the entire Universal Service subsidy regime. Continuation of unbundling was costly under such threats, both politically and in actual subsidy generation. As economist Professor Robert Willig observed, “cross-subsidies are the enemy of competition, because competition is the enemy of cross-subsidies.”154 With the potential benefits of unbundling falling, and its costs rising, the end of the regulatory-supported sharing of networks was inevitable.

VI. CONCLUSION AND POLICY RECOMMENDATIONS

With the Telecommunications Act of 1996, the United States sought to establish competition and deregulation as the foundation for public policy towards the telecommunication industry. 155 Although the Federal Communications Commission had opened monopoly telecommunications markets to entry for more than twenty years prior to the adoption of the 1996 Act, the Communications Act of 1934, which the 1996 Act amended, still reflected a presumption that telecommunications markets were natural monopolies subject to regulation by both the FCC and state public utility commissions. The 1996 Act aimed to alter the competitive landscape of local telecommunications by requiring ILECs to unbundle various components of their local networks and make them available to potential competitors. Such unbundling requires, in effect, that incumbent local exchange carriers “share” with their competitors the inherent economies of scale built into their ubiquitous local networks.

By most accounts, network unbundling was not intended to be an end in and of itself. Rather, as in the successful Competitive Carrier paradigm that brought competition in the long distance industry before it, Congress reasoned that a mandatory wholesale market for local access was the most effective mechanism for entrants to grow their market and thereby warrant the construction of new local access networks by firms other than the ILECs. When these networks were constructed, so the story went, the unbundling mandates could be removed. Whether or not this “stepping stone” approach was an economically reasonable expectation was essential to the unbundling regime’s success. Was there in fact a path to facilities-based entry? Probably not. The economics of self-supply of facilities-based local telephone service were not, and are not today, particularly compelling for new entrants. As explained above, the provision of telecommunication services—whether local, long distance, or otherwise—is in most cases an extremely expensive business and subject to extensive scale and density economies. Many CLECs discovered to their dismay that they could not achieve sufficient economies of scale, scope, or density to warrant even entry using unbundled elements, much less support the capital required to build and operate a facilities-based

local exchange network for the mass market. The transition to facilities-based competition was more successful in the large business market, where the sunk facilities costs of a location-specific circuit could be justified given the relative large size of the customer’s expenditures. For the mass market, entry would come from entirely new technologies operated by established firms.

Furthermore, the failure of the unbundling regime in the U.S. stemmed from the fact the system was incentive incompatible. That is, dominant firms will not facilitate the demise of their dominance without some reward. This is not an irrational concept, because no firm will ever be enthusiastic about consciously going against its own self-interests by selling its rivals their key input of production (e.g., loops and switching). While the 1996 Act required the ILECs to provide such elements, the Act did little to fundamentally alter incentives.

The stale, static, highly subsidized monopolized local exchange market of the early 1990s would soon transition into a dynamic, multi-firm, multi-technology market by the turn of century. The 1996 barely mentioned Internet service or mobile wireless industry, yet these two technologies now provide over half U.S. households with local telephone service. What was possible, from a policy perspective, in a static environment was impossible in the new environment. The benefits of unbundling were diminished by technological change and consumption habits, and the costs were rising. The end was inevitable.

Given the above, are there lessons to be learned from unbundling? We believe that there are. Here are just a few:

Facilities-based entry into local markets remains very costly, and the equilibrium number of firms in many markets, especially local wireline markets, is prone to be very small absent significant technological progress. Accordingly, when either evaluating or crafting a regulatory regime, we recommend that the policymaker establish realistic expectations about the prospects for facilities-based entry. In many wireline markets, duopoly may be the best that can be achieved, but such structure may nonetheless provide excellent market performance. As such, policy should be designed accordingly.

Firms are not passive recipients of regulation, but active responders to and manipulators of it. Accordingly, when either evaluating or crafting a regulatory regime, we recommend that careful attention be paid to aligning incentives. Policymakers should not expect regulated firms to participate actively in a scheme that reduces their profits. We also recommend that enforcement be carefully considered. The regulated “transaction” should be simple enough to monitor and have a relatively low susceptibility to manipulation.

The incentive to sabotage a regulatory regime depends on numerous factors. When either evaluating or crafting a regulatory regime, we recommend that the policymaker understand the relationship between retail pricing structures, including the use and nature of subsidies, and the price of the regulated wholesale product or service offered.
Entrants will seek out profits, and thus attack first those markets that generate any implicit subsidies. Doing so promotes sabotage, and threatens the sustainability of the subsidy regime. When either evaluating or crafting a regulatory regime, subsidies should be made explicit and portable.

Intermodal competition, particularly competition from technologies not subject to heavy regulation, weakens the case for asymmetric policy interventions. Accordingly, when either evaluating or crafting a regulatory regime, we recommend that the present, near-term, and long-term prospects for intermodal competition be carefully studied, and, given the rate of technological progress in modern communications, that the prospects be overstated by a considerable degree.

Different political ideologies obviously have different views about the degree to which government should intervene in the market. Accordingly, the prospects for sustained support for major policy initiatives should be viewed as relatively weak, since what one regulator creates the next can destroy. Thus, when crafting a regulatory regime, some consideration should be given to political viewpoints. If such policies are politically sensitive, then the value of regulatory policies should be discounted accordingly.

Many regulations, including unbundling, are implemented as a strategy for static markets. In a dynamic market where investments in new networks and new technology are necessary, regulation is prone to distort and attenuate investment incentives. When crafting regulations for a dynamic market, therefore, we recommend that special care be taken, particularly at efforts to regulate price.

Finally, we recommend a healthy skepticism regarding the regulator’s ability to properly balance investment incentives. In any cost-benefit analysis, which should be a formal component of any effort to evaluate regulation, there should be a substantial margin between the benefits and costs prior to establishing a regulatory regime in dynamic markets.

Without question, the data indicate that we have come a very long way from the world of local telephone monopolies selling switched access service. (If anything, ILECs are increasingly faced with stranded costs, particularly when regulation forces them to keep legacy switched-services operating.) While unbundling may have arguably been a sensible policy for the monopoly communications world of 1996, in today’s competitive market the case for such hefty (and asymmetrical) interventions is exceedingly weak. Policymakers need now to focus on a designing an entirely new regulatory regime suitable for the marketplace realities of the 21st century. Hopefully, with the benefit of hindsight and lessons learned from the U.S. unbundling experience, future regulatory interventions in the communications marketplace will proceed with more humility and wisdom.
APPENDIX A: RELEVANT FCC ORDERS AND COURT CASES

In this appendix, we summarize the major orders and court decisions related to the U.S. unbundling experiment. To help ensure accuracy, this appendix draws heavily from summaries provided in FCC orders.

A. Local Competition Order

The Commission first addressed the unbundling obligations of ILECs in the Local Competition Order, which adopted the first set of rules designed to implement the unbundling and resale requirements of the Section 251. The Commission stated that for purposes of determining whether access to a proprietary network element was “necessary” under section 251(d)(2), the term “[n]ecessary means . . . that an element is a prerequisite for competition.” The Commission also found that “[t]he term ‘impair’ means ‘to make or cause to become worse; diminish in value.’” The Commission determined that the “impairment” standard required “the Commission . . . to consider whether the failure of an incumbent to provide access to a network element would decrease the quality, or increase the financial or administrative cost of the service a requesting carrier seeks to offer, compared with providing that service over other unbundled elements in the incumbent LEC’s network.”

The Commission adopted a minimum set of unbundled elements including: local loops; network interface devices; local and tandem switching capability; interoffice transmission facilities; signaling and call-related databases; operations support systems functions; and operator services and directory assistance facilities. The Commission established that the ILECs were obligated to combine elements upon request. The state commissions were free to prescribe additional elements.

In prescribing rates, state commissions were to apply the Total Element Long Run Incremental Cost (TELRIC) methodology, which was a forward-looking, long-run, incremental cost methodology. The Commission found that “the price of a network element should include the forward-looking costs that can be attributed directly to the provision of services using that element, which includes a reasonable return on investment (i.e., “profit”), plus a reasonable share of the forward-looking joint and common costs.” As directed by statute, the Commission determined that TELRIC-
based rates should not include embedded or historical costs, opportunity costs or universal service subsidies. The states were to use this general methodology in setting actual rates for unbundled elements.

**B. Iowa Utilities Board v. FCC**

On review in 1997, the Eighth Circuit vacated many of the rules adopted in the *Local Competition Order* as beyond the Commission’s jurisdiction. The court also vacated section 51.315(b) of the Commission’s rules, which barred ILECs from separating UNEs before providing them to competitors, on the ground that “unbundled” means “not combined.” The court also vacated sections 51.315(c)-(f), which required ILECs to combine elements on behalf of competitive LECs on request, on the ground that section 251(c)(3) does not require ILECs to combine elements on behalf of competitive LECs, but only requires ILECs to provide elements in a manner that permits the competitive LEC to do the actual combining. The court also held that section 251(c)(3) requires “unbundled access only to an ILEC’s existing network—not to a yet unbuilt superior one.” Specifically, the Eighth Circuit explained that ILECs can be required to modify their facilities “to the extent necessary to accommodate interconnection or access to network elements,” but cannot be required “to alter substantially their networks in order to provide superior quality interconnection and unbundled access.” Finally, the court upheld the Commission’s interpretation of the “necessary” and “impair” standards.

transmission facilities, signaling and call-related databases, operations support systems functions, and operator services and directory assistance facilities”. The Commission established that the ILECs were obligated to combine elements upon request. The state commissions were free to prescribe additional elements.

As for pricing these elements, the Commission established the Total Element Long Run Incremental Cost (TELRIC) methodology, which was a forward-looking, long-run, incremental cost methodology. The Commission found that “the price of a network element should include the forward-looking costs that can be attributed directly to the provision of services using that element, which includes a reasonable return on investment (i.e., ‘profit’), plus a reasonable share of the forward-looking joint and common costs.” As directed by statute, the Commission determined that TELRIC-based rates should not include embedded or historical costs, opportunity costs or universal service subsidies. The states were to use this general methodology in setting actual rates for unbundled elements. 673-703.

162. Id. at 813.
163. Id.
164. Id.
165. Id. at 813, n. 33 (emphasis added) (citing to the *First Report and Order, Implementation of the Local Competition Provisions in the Telecommunications Act of 1996*, CC Docket No. 96–98, para. 198 (Aug. 8, 1996)).
166. See Iowa Utils. Bd. v. FCC, 120 F.3d at 810-12.
C. AT&T v. Iowa Utilities Board

In 1998, the U.S. Supreme Court reversed the Eighth Circuit’s jurisdictional holdings, concluding that the Commission has jurisdiction to implement the local competition provisions of the 1996 Act.\textsuperscript{167} However, the Court vacated the agency’s interpretation of the “necessary” and “impair” standards, faulting the Commission for its failure to consider the availability of alternative sources of network elements.\textsuperscript{168} The Court also concluded that “the Commission’s assumption that \textit{any} increase in cost (or decrease in quality) imposed by denial of a network element renders access to that element ‘necessary,’ and causes the failure to provide that element to ‘impair’ the entrant’s ability to furnish its desired services, is simply not in accord with the ordinary and fair meaning of those terms.”\textsuperscript{169} The Court stated “that the Act requires the FCC to apply \textit{some} limiting standard, rationally related to the goals of the Act, which it has simply failed to do.”\textsuperscript{170} The Court stated that “if Congress had wanted to give blanket access to incumbents’ networks on a basis as unrestricted as the scheme the Commission has come up with, it would not have included § 251(d)(2) in the statute at all.”\textsuperscript{171} Instead, “[i]t would simply have said . . . that whatever requested element can be provided must be provided.”\textsuperscript{172} At the same time, the Court rejected the “essential facilities’ doctrine” from U.S. antitrust jurisprudence as pertinent to the issue.\textsuperscript{173} The Court found that it need not decide whether the statute requires application of that standard as a matter of law, adding “it may be that some other standard would provide an equivalent or better criterion for the limitation upon network-element availability that the statute has in mind.”\textsuperscript{174}

The Court upheld section 51.315(b) of the Commission’s rules, which barred the separating of network elements already combined before providing them to a competitor if asked for in a combined form, stating that Section 251(c)(3) is “ambiguous on whether leased network elements may or must be separated, and the rule the Commission has prescribed is entirely rational, finding its basis in § 251(c)(3)’s nondiscrimination requirement.”\textsuperscript{175}

\textsuperscript{168} Id. at 391-92.
\textsuperscript{169} Id. at 389-90.
\textsuperscript{170} Id. at 388. For an economic analysis of the Supreme Court’s decision as it related to impairment, see Beard et al., \textit{The Law and Economics of Unbundling and Impairment}, 2 J. L. TECH. & POL. 475, 502 (2003).
\textsuperscript{171} AT&T v. Iowa Util. Bd., 525 U.S. at 390.
\textsuperscript{172} Id.
\textsuperscript{173} Id. at 388.
\textsuperscript{174} Id.
\textsuperscript{175} Id. at 395.
D. The Commission’s UNE Remand Order

In 1999, in response to the Supreme Court’s decision in *Iowa Utilities Board*, the Commission re-examined its treatment of the “necessary” and “impair” standards, as well as the list of UNEs that ILECs must provide.\(^{176}\) In the *UNE Remand Order*, the Commission adopted narrower requirements for determining elements that must be provided under the “necessary” and “impair” standards.\(^{177}\) The agency also modified its list of required unbundled elements, expanding it in certain respects and narrowing it in others.\(^{178}\) The UNE Remand Order was, in many respects, the beginning of the end of unbundling in that the Commission showed itself willing to weaken the unbundling rules in response to Court remand that did not require it to do so.

In response to the Court’s decision, the Commission adopted a new definition of “impairment.”\(^{179}\) The Commission stated that the “ILECs’ failure to provide access to a nonproprietary network element ‘impairs’ a requesting carrier . . . if, taking into consideration the availability of alternative elements outside the incumbent’s network, including self-provisioning by a requesting carrier or acquiring an alternative from a third-party supplier, lack of access to that element *materially diminishes* a requesting carrier’s ability to provide the services it seeks to offer.”\(^{180}\) The Commission held that the “‘impair’ analysis considers the cost, timeliness, quality, ubiquity, and operational issues associated with the use of an alternative.”\(^{181}\)

The Commission also added to its analysis factors to reflect the “at a minimum” language in Section 251(d)(2),\(^{182}\) adding to the necessary and impair standard additional factors to consider, including: (1) the rapid introduction of competition in all markets—“whether the availability of an unbundled network element is likely to encourage requesting carriers to enter the local market in order to serve the greatest number of consumers as rapidly as possible[;]”\(^{183}\) (2) promotion of facilities-based competition, investment and innovation—“the extent to which the unbundling obligations we adopt will encourage the development of facilities-based competition by competitive LECs, and innovation and investment by both ILECs and CLECs, especially for the provision of advanced services[;]”\(^{184}\) (3) reduced


\(^{177}\) Id. at 9-10.

\(^{178}\) Id. at 51-52.

\(^{179}\) Id. at 10.

\(^{180}\) Id. at 3704-05 (emphasis in original); *see also id.* at 3723-50 paras. 48-116.

\(^{181}\) Id. at 3705; *see also id.* at 3730-45 paras. 62-100.

\(^{182}\) Id. at 3721 para. 32.

\(^{183}\) Id. at 10.

\(^{184}\) Id.
regulation—“the extent to which we can encourage investment and innovation by reducing regulatory obligations to provide access to network elements, as alternatives to the ILECs’ network elements become available in the future;”\textsuperscript{185} (4) certainty in the market—“how the unbundling obligations . . . can provide the uniformity and predictability that new entrants and fledging competitors need to develop national and regional business plans[, as well as] . . . whether the rules . . . provide financial markets with reasonable certainty so that carriers can attract the capital they need to execute their business plans to serve the greatest number of consumers[;]”\textsuperscript{186} and (5) administrative practicality—“whether the unbundling obligations . . . are administratively practical to apply.”\textsuperscript{187}

In the end, the Commission concluded that the following network elements must be unbundled: (1) “Loops”—“including high-capacity lines, xDSL-capable loops, dark fiber, and inside wire owned by the incumbent LEC[;]” (2) “Subloops”—“unbundled access to subloops, or portions of the loop, at any accessible point[;]” (3) “Network Interface Device (NID)”—“including all features, functions and capabilities of the facilities used to connect the loop to premises wiring, regardless of the specific mechanical design[;]” (4) “Circuit Switching”—“except for local circuit switching used to serve end users with four or more lines in access density zone 1 in the top 50 Metropolitan Statistical Areas (MSAs), provided that the incumbent LEC provides nondiscriminatory, cost-based access to the enhanced extended link throughout zone 1[;]” (5) “Packet Switching”—“only in limited circumstances in which the incumbent has placed digital loop carrier systems in the feeder section of the loop or has its Digital Subscriber Line Access Multiplexer (DSLAM) in a remote terminal[;]” (6) “Interoffice Transmission Facilities”—“dedicated interoffice transmission facilities, or transport, including dark fiber[;]” (7) shared transport—unbundled access to shared transport where unbundled local circuit switching is provided; (8) “Signaling and Call-Related Databases”—including, but not limited to “unbundled access to signaling links and signaling transfer points (STPs) in conjunction with unbundled switching, and on a stand-alone basis[,]” as well as unbundled access to call-related databases; and (9) “Operations Support System (OSS)”—“consisting of pre-ordering, ordering, provisioning, maintenance and repair, billing functions supported by an ILEC’s databases and information[,]” including “access to all loop qualification information contained in any of the incumbent LEC’s databases or other records, including information on whether a particular loop is capable of providing advanced services.”\textsuperscript{105} Finally, the Commission established a three-year review schedule for the national list of unbundled elements (the Triennial Review process). In effect, the three-year schedule created a near continuous and expensive legal and regulatory battle over unbundling.

\textsuperscript{185} Id. at 11.
\textsuperscript{186} Id.
\textsuperscript{187} Id.
E. Availability of Enhanced Extended Links ("EELs")

The Commission subsequently modified its UNE Remand Order as it related to the use of unbundled elements to provide exchange access services originating and terminating long distance services.\textsuperscript{188} Specifically, the Commission ruled that on an interim basis, “interexchange carriers (IXCs) may not convert special access services to combinations of unbundled loops and transport network elements, whether or not the IXCs self-provide entrance facilities (or obtain them from third parties).”\textsuperscript{189} The Commission provided that this restriction would not apply “if an IXC uses combinations of unbundled network elements to provide a significant amount of local exchange service, in addition to exchange access service, to a particular customer.”\textsuperscript{190} The Commission stated that this temporary restriction on the use of EELs was consistent with its finding in the Local Competition Order that the Commission “may, where necessary, establish a temporary transitional mechanism to help complete all of the steps toward the pro-competitive goals of the 1996 Act, including the full implementation of a competitively-neutral system to fund universal service and a completed transition to cost-based access charges.”\textsuperscript{191}

The Commission later clarified and extended this temporary restriction on the use of EELs by defining “more precisely the ‘significant amount of local exchange service’ that a requesting carrier must provide in order to obtain loop-transport combinations.”\textsuperscript{192} This decision specified three safe harbors for demonstrating that a requesting carrier was providing a significant amount of local exchange service to a particular customer.\textsuperscript{193} The Commission also clarified that “incumbent LECs must allow requesting carriers to self-certify that they are providing a significant amount of local exchange service over combinations of unbundled network elements.”\textsuperscript{194}

F. Line Sharing Order

In the Line Sharing Order, the Commission required ILECs, under the “impair” standard, to provide the high-frequency portion of the local loop ("HFPL") to requesting telecommunications carriers as an unbundled

\textsuperscript{189} Id. at para. 2.
\textsuperscript{190} Id.
\textsuperscript{191} Id. at para. 7.
\textsuperscript{193} See id. at para 22.
\textsuperscript{194} Id. at para. 29.
Certain criteria were established in order to prevent the degradation of analog voice service over such a loop. Limiting the availability of the HFPL to entrant, the Commission determined that “[i]ncumbents are not required to provide unbundled access to the high frequency portion of the loop if they are not currently providing analog voice service to the customer.” The Commission also required that ILECs “condition loops to enable requesting carriers to provide acceptable forms of xDSL-based services over the high frequency portion of the loop unless such conditioning would significantly degrade the incumbent’s analog voice service,” a rule that had the effect of increasing the number of loops for which the high-frequency portion was available.

G. Iowa Utilities Board v. FCC (Remand Decision)

In 2000, on remand after the Supreme Court’s opinion in AT&T v. Iowa Utilities Board, the Eighth Circuit reviewed several more aspects of the Local Competition Order. The court vacated on the merits the Commission’s rule setting out the TELRIC pricing methodology, concluding that costs based on this “hypothetical” network did not reflect the “cost . . . of providing the interconnection or network element” as required by section 252(d)(1)(A)(i). The Court did, however, permit the Commission to rely on forward-looking cost, rather than historical cost, and established that the cost of the element should not include any costs of universal service subsidies. The court also reaffirmed its earlier decision to vacate the Commission’s new combinations rules of sections 51.315(c)-(f).

H. Verizon v. FCC

In 2002, the Supreme Court upheld the TELRIC standard established by the Commission in the Local Competition Order. In so doing, the Court overturned the decision by the Eighth Circuit concerning the lawfulness of

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196. Id.
197. Id.
199. Id. at 750.
200. See id. at 753.
201. See id. at 759.
202. Verizon Comm’ns Inc. v. FCC, 535 U.S. 467, 523(2002) (“We cannot say whether the passage of time will show competition prompted by TELRIC to be an illusion, but TELRIC appears to be a reasonable policy for now, and that is all that counts. The incumbents have failed to show that TELRIC is unreasonable on its own terms.”) (citations omitted).
the TELRIC. The Court specifically rejected the argument that rates for unbundled elements must be based on the historic cost; affirmed the Commission’s decision to base TELRIC on the use of the most efficient telecommunications technology currently available and the lowest cost network configuration in light of the existing location of the incumbent’s wire centers; and rejected the claim that TELRIC is an unreasonable rate making methodology for elements because it does not produce facilities-based competition. Furthermore, the Court upheld the Commission’s rules requiring that ILECs combine elements in certain circumstances even if they are not combined in the incumbent’s network, concluding that rules “reflect a reasonable reading of the statute, meant to remove practical barriers to competitive entry into local-exchange markets while avoiding serious interference with incumbent network operations.”

I. United States Telecom Association v. FCC (USTA I)

In 2002, eleven days after the Supreme Court’s decision in Verizon, the District of Columbia Circuit vacated and remanded for further consideration the portions of the Commission’s UNE Remand Order that adopted an interpretation of the “impair” standard and established a list of mandatory UNEs, and vacated and remanded as well the Commission’s order requiring that the high-frequency portion of the loop be made available as an unbundled element. In doing so, the District of Columbia Circuit criticized what it characterized as the decision in the UNE Remand Order “to adopt a uniform national rule, mandating [an] element’s unbundling in every geographic market and customer class, without regard to the state of competitive impairment in any particular market.” The Court concluded that, under this approach, “UNEs will be available to CLECs in many markets where there is no reasonable basis for thinking that competition is suffering from any impairment of a sort that might have [been] the object of Congress’s concern.” The question of subsidies were central to the Court’s decision. The Court stated that “[o]ne reason for such market-specific variations in competitive impairment is the cross-subsidization often ordered by state regulatory commissions . . . [which] usually brings about undercharges for some subscribers (usually rural and/or residential) and

203. See id. (“[R]evers[ing] the Eighth Circuit’s judgment insofar as it invalidated TELRIC as a method for setting rates under the Act.”).
204. See id. at 513.
205. See id. at 503.
206. See id. at 516.
207. Id. at 535.
208. See United States Telecom Ass’n v. FCC, 290 F.3d 415, 417 (D.C. Cir. 2002) (USTA I) (“[G]rant[ing] both petitions, and remand[ing] both rules to the Commission.”).
209. Id. at 422.
210. Id.
overcharges for the others (usually urban and/or business),”\(^{211}\) and concluded that “the Commission nowhere appears to have considered the advantage CLECs enjoy in being free of any duty to provide underpriced service to rural and/or residential customers and thus of any need to make up the difference elsewhere.”\(^{212}\) The Court also concluded that the Commission had failed to adequately explain how a uniform national rule would help to achieve the goals of the Act, such as the rapid introduction of competition, promotion of facilities-based competition, investment and innovation, certainty in the market place, administrative practicality and reduced regulation.\(^{213}\)

On impairment, the court found that the *UNE Remand Order* improperly “reflect[s] an open-ended notion of what kinds of cost disparity are relevant” for purposes of identifying impairment.\(^{214}\) In particular, the court stated that “[t]o rely on cost disparities that are universal as between new entrants and incumbents in *any* industry is to invoke a concept too broad, even in support of an *initial* mandate, to be reasonably linked to the purpose of the Act’s unbundling provisions.”\(^{215}\) Instead, the Court advised the FCC to balance both the benefits and costs of unbundling, concluding that “[a] cost disparity approach that links ‘impairment’ to universal characteristics, rather than ones linked in (in some degree) to natural monopoly, can hardly be said to strike such a balance.”\(^{216}\) Finally, the court vacated the Commission’s *Line Sharing Order*, finding that the Commission had failed to give adequate consideration to existing facilities-based competition.\(^{217}\)

**J. Competitive Telecommunications Association v. FCC**

In 2002, a few months after the D.C. Circuit’s decision in *USTA I*, the District of Columbia Circuit upheld the FCC’s interim restrictions on the availability of enhanced extended links (EEL).\(^{218}\) The Court held that the FCC has authority to restrict the availability of UNEs to particular services for which there has been a showing that denial of the requested element would impair the competitor’s ability to provide the service.\(^{219}\)

\(^{211}\) *Id.*
\(^{212}\) *Id.* at 423.
\(^{213}\) See *id.* at 436-39.
\(^{214}\) *Id.* at 426.
\(^{215}\) *Id.* at 427 (emphasis in original).
\(^{216}\) *Id.*
\(^{217}\) *Id.* at 428-29.
\(^{218}\) See Competitive Telecomm. Ass’n v. FCC, 309 F.3d 8, 18 (D.C. Cir. 2002) (holding that “on the present record [the Court is] plainly unable to say that the restriction on commingling is arbitrary and capricious”).
\(^{219}\) See *id.* at 12-14.
K. Triennial Review Order

In August 2003, the FCC released the Triennial Review Order, in which it, once more, reinterpreted the “impair” standard and revised the list of unbundled elements. This time, the FCC declared that a requesting carrier is impaired “when lack of access to an incumbent LEC network element poses a barrier or barriers to entry, including operational and economic barriers, which are likely to make entry into a market uneconomic.” The FCC’s new impairment analysis accounted for intermodal alternatives, self-provisioning of network elements, and the potential ability of a requesting carrier to obtain similar facilities from a third party. The relevant structural barriers the Commission considered included: (1) economies of scale; (2) sunk costs; (3) first-mover advantages; (4) absolute cost advantages; and (5) barriers within the control of the incumbent. The Commission also considered such factors as customer class, geography, the nature of the service provided, and the types and capacities of the facilities involved in a requesting carrier’s service offering. In order to implement the new standard, the FCC adopted a set of triggers for the states to apply to determine the extent of actual and potential deployment. Significantly, in order to encourage new fiber deployment, under a new policy that became colloquially known as “new wires/new rules,” the FCC stated that ILECs did not have to offer unbundled access to newly deployed or “greenfield” fiber loops or to the packet-switched features, functions and capabilities of hybrid copper/fiber loops.

L. United States Telecom Association v. FCC (USTA II)

Various parties appealed the Triennial Review Order, and, on March 2, 2004, the District of Columbia Circuit decided USTA II. USTA II upheld the Triennial Review Order but only in part. The District of Columbia Circuit upheld the FCC’S network modification requirements; its determinations regarding Section 271 access, pricing, and combination obligations; its EEL eligibility criteria; its determination, with certain exceptions, not to require

221. See id. at para. 84.
222. See id.
223. See id. at para. 7.
224. See id.
225. Id. at para. 272 et seq.
unbundling of FTTH loops, broadband hybrid loops, enterprise switching, and most ILEC databases; and its decision not to unbundle the high frequency portion of the loop. On impairment, the D.C. Circuit concluded that the Commission’s impairment test now “explicitly and plausibly connects factors to consider in the impairment inquiry to the natural monopoly characteristics... [or] to other structural impediments to competitive supply.”

The USTA II court also upheld the Commission’s authority to take costs into account in its unbundling analysis.

In a blow to the trigger approach, the USTA II court vacated the Commission’s “sub-delegation” of authority to state commissions. The Commission’s nationwide impairment finding for unbundled switching (and dedicated transport), the source for the vast majority of competition from unbundled elements, was vacated and remanded, setting the stage for the end of the switching element.

M. Triennial Review Remand Order

After a protracted political fight, the Bush Administration decided not to appeal USTA II to the Supreme Court. The Court denied certiorari of USTA II in 2004, leaving the USTA II court ruling as the law of the land. Realizing that the protracted legal battle to develop a viable paradigm for the “necessary and impair” standard was finally over, the FCC issued an Order on Remand in 2005 which effectively ended the nearly ten-year U.S. experiment with unbundling. In the Triennial Review Remand Order, the FCC stated that it would retain the unbundling framework it adopted in the Triennial Review Order, but “clarif[ied]” the impairment standard in one respect and “modif[ied]” its unbundling framework in three respects.

First, the FCC “clarif[ied]” that when evaluating whether lack of access to an ILEC network element “poses a barrier... that [is] likely to

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227. Id. at 571-72.
228. See id. at 572 (holding that “there is no statutory offense in the Commission’s decision to adopt a standard that treats impairment as a continuous rather than as a dichotomous variable, and potentially reaches beyond natural monopoly, but then to examine the full context before ordering unbundling”).
229. See id. at 566.
231. United States Telecom Ass’n v. FCC, 359 F.3d 554 (D.C. Cir.) (USTA II).
233. See id. at para. 5.
make entry into a market uneconomic,’ [the FCC] make[s] that determination with regard to a reasonably efficient competitor.’ 234

Second, in response to the USTA II court’s directive, the agency modified its approach regarding carriers’ unbundled access to ILECs’ network elements for certain services, setting aside the Triennial Review Order’s “qualifying service” interpretation of section 251(d)(2), but nevertheless prohibiting the use of unbundled elements exclusively for the provision of telecommunications services in sufficiently competitive markets. 235

Third, to the extent that the agency evaluates whether requesting carriers can compete without unbundled access to particular network elements, the FCC would “endeavor,” as instructed by the D.C. Circuit, to draw reasonable inferences regarding the prospects for competition in one geographic market from the state of competition in other, similar markets. 236

Fourth, as directed by USTA II, the FCC would consider the appropriate role of tariffed ILEC services in our unbundling framework. 237 To this end, the FCC determined that in the context of the local exchange markets, a rule prohibiting access to UNEs when a requesting carrier is able to compete using an incumbent’s tariffed offering would be inappropriate. 238

While the Order on Remand goes into great detail about which elements should be made available and which should not, perhaps the most significant decision was the FCC’s decision to eliminate switching from the list of UNEs that an incumbent must make available at TELRIC pricing, 239 thus effectively driving a stake through the economic heart of many CLEC’s business models. According to the FCC,

Based on the evidence of deployment and use of circuit switches, packet switches, and softswitches, and changes in incumbent LEC hot cut processes, we determine not only that competitive LECs are not impaired in the deployment of switches, but that it is feasible for competitive LECs to use competitively deployed switches to serve mass market customers throughout the nation. Further, regardless of any potential impairment that may still exist, we exercise our “at a minimum” authority and conclude that the disincentives to investment posed by the availability of unbundled switching, in

234. See id. at para. 22 (discussing Triennial Review Order, 18 FCC Rcd 17035, para. 84).
235. See id. (discussing USTA II, 359 F.3d at 591-92).
236. See id.
237. See id.
238. See id.
239. Triennial Review Remand Order, 20 FCC Rcd at para. 204.
combination with unbundled loops and shared transport, justify a nationwide bar on such unbundling.\textsuperscript{240}

While the elimination of mass market switch arguably was a significant overreach by the FCC—particularly given that the 1996 Act made it clear that ILECs would not be allowed into the long-distance business unless they made available “local switching unbundled from transport, local loop transmission or other services”\textsuperscript{241}—the D.C. Circuit in nonetheless upheld the Commission in \textit{Covad v. FCC}\.\textsuperscript{242} And, with the FCC’s decision to eliminate unbundled switching, any business case based upon UNE-P was eviscerated. The unbundling experiment of the Telecommunications Act of 1996, for the most part, was over.

\begin{footnotes}
\footnotetext[240]{Id.}
\footnotetext[241]{See 47 U.S.C. § 271(c)(2)(B)(vi).}
\footnotetext[242]{Covad v. FCC, 450 F.3d 528 (D.C. Cir. 2006).}
\end{footnotes}
Taking the Sting Out of the Stingray:
The Dangers of Cell-Site Simulator Use and the Role of the Federal Communications Commission in Protecting Privacy & Security

Jason Norman*

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I. INTRODUCTION

“The decisions we make about communication security today will determine the kind of society we live in tomorrow.”

- Whitfield Diffie, Cryptography

Data-driven law enforcement has increased at an alarming rate in post-9/11 America. The revelations of widespread data collection programs run by the National Security Agency (“NSA”), in the wake of classified information leaked by Edward Snowden, have given rise to serious public concern that government officials are covertly eroding the privacy of law abiding citizens in the name of national security. The electronic surveillance culture that emerged in the wake of the 9/11 terrorist attacks has given credence to privacy invasion at all levels of law enforcement.

One pervasive surveillance tool is the Stingray. The Stingray can intercept all cellular communications, voice and data, within its broadcast range. This interception can include conversations, locations, email, contacts, and any other private data that the phone has stored in its local memory, all without the user’s knowledge or consent. In a bygone era, the distribution and use of Stingrays were the sole providence of government agencies, but the decrease in cost combined with the increase in publicly available knowledge of the capabilities of the device have put the United States in a dangerous situation. Setting aside for a moment the abusive uses of the Stingray by law enforcement that have recently come to light, and looking solely at the privacy and national security implications of having an insecure cellular network, there is an urgent need for a comprehensive security solution. The most sensible and efficient solution is for the Federal Communications Commission (“FCC”) to mandate that wireless carriers


utilize stronger encryption protocols to secure their networks, and that they enable customer access to existing security features that have been disabled by the SIM card manufacturers at the request of the service providers.

This note will provide background on how Stingrays work, discuss the impact they have on privacy and security, explain why their use undermines our justice system, and review the statutory authority that the FCC has to regulate them. Finally, this note will argue that the FCC should enact rules that mandate stronger wireless encryption standards and allow consumers to have access to existing security features to protect themselves against insecure transmissions.

II. BACKGROUND

A. What is an IMSI Catcher, and How is it Used?

An International Mobile Subscriber Identity (“IMSI” (/ˈɪmzɪ:/)) catcher, the most popular brand of which is the Stingray, emulates a cellphone tower in a way that is impossible for a cellphone to distinguish from an authentic tower. This allows the Stingray to capture any data that a cellphone would normally send to, or request from, a valid tower. This data can include the cellphone’s location, numbers dialed, text messages sent, websites requested, and any other data normally transmitted via airwaves. The use of these devices has become widely known in recent years in light of several lawsuits filed by the American Civil Liberties Union (“ACLU”) and other watchdog organizations. As a result, it was uncovered that the warrantless use of Stingray devices by the Federal Bureau of Investigations (“FBI”) and other agencies has been ongoing for approximately twenty years. If not for the increased use of Stingrays for investigating domestic criminal activity, their rampant use might remain unknown to the public.

The FBI refuses to release the specific capabilities of the device, even going as far as requiring state and local agencies to sign a non-disclosure agreement (“NDA”) before they are allowed to purchase a Stingray. This begs the question, if the Stingray’s capabilities are so sensitive, why are local law enforcement agencies allowed to use them for domestic criminal investigations since the evidence that they garner will necessarily require disclosure to a defendant in a criminal trial?

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7. Id.
Until recently, public perception was that the capabilities of IMSI catchers were similar to devices known as pen registers, which connect to hard-wired telephone lines and record information such as the time, duration, source, and destination of incoming and outgoing phone calls to or from a specific number.10 This is partly because the government has repeatedly obtained warrants authorizing the use of Stingrays under the dated Pen Register and Trap and Trace statutes, which implies that the technology serves the same purpose.11

In 2012, at a technology security conference known as DefCon, Kristin Paget conducted a demonstration using a basic laptop computer and about $1,500 worth of antennas and broadcast equipment, which showed that Stingrays are capable of much more than a simple pen register.12 Paget configured a laptop to run a freely available software program called OpenBTS, which is an open source version of a cellular base tower station.13 Paget successfully tricked thirty cellphones into connecting to the fake tower, at which time the IMSI catcher disabled the encryption on the phones, collected text messages, intercepted actual phone calls, not just the numbers dialed, and captured the encrypted keys used to authenticate the phone to a valid tower.14 A simple software technique will break the encryption keys, allowing the same laptop to connect to a valid cell tower to receive incoming call data as well. Once the tower verifies the IMIS and encryption key of the signal, the cellphone provider cannot distinguish the false signal from the real one, meaning that there is little to no risk that both phones will attempt to connect to a valid tower simultaneously potentially triggering an alert.15 This demonstration clearly showed that Stingrays have a much broader range of capabilities than law enforcement officials have led us to believe.

B. Advanced IMSI Catcher Capabilities

IMSI catcher capabilities include the ability to monitor content as well as location, and the user has no reasonable method of detection. Until 2010, it was thought that when a cellphone was connected to a Stingray for the purpose of data interception that the phone would display being connected to a 2G (second-generation) tower, and the user would see that this has

15. Id.
occurred because the 3G connection indicator would disappear.\textsuperscript{16} This is no longer accurate. Modern cell-site simulators can trick a cellphone into reporting a 3G connection, which would normally use stronger encryption to secure its transmissions, while actually transmitting data in the less secure 2G format.\textsuperscript{17} The mode of security that a cellular device uses is determined by the tower providing the uplink at the time, and so the Stingray downgrades the strength of encryption by sending a simple command to the device it seeks to access.\textsuperscript{18} The type of network a cellphone connects to is important, because a 2G connection often sends data over the airwaves in “plain text”, technically known as A5/0 format, which means that the data is not encrypted and can be read by a Stingray without needing to be decrypted first. The major issue with this is that the user has no way to disable 2G mode on his device, meaning that he cannot prevent insecure connections from being established.

Because the cell-site tells a cellphone what encryption format to use and the user cannot disable an insecure protocol, there is no method available to prevent the transmission of unencrypted data upon a cell tower’s request. There is an existing function on the Subscriber Identity Module (“SIM”) card which, when enabled, will display a warning when a cellphone connects to an unencrypted tower. However, “GSM providers consider such a warning [to be] confusing for the users, so the ciphering indication is usually disabled directly from the SIM card settings.”\textsuperscript{19} Additionally, wireless carriers deliberately disable a consumer’s access to this security feature so that she cannot choose a more secure configuration for her device, even though the function exists.\textsuperscript{20} Despite the best efforts of researchers, no alternative method to enable this functionality through the device software appears to exist. In the current market, only the makers of a device dubbed the CryptoPhone lay claim to the ability to detect cell-site simulators and to notify the user of any unencrypted connections, but with a price tag in excess of $3,000, this brand of security falls well beyond the reach of the average consumer.\textsuperscript{21}

This security flaw is unlikely to be resolved without federal regulation. Among the major cellular providers, AT&T will not phase out the antiquated

\textsuperscript{16} See Darlene Storm, Are Your Calls Being Intercepted? 17 Fake Cell Towers Discovered in One Month, COMPUTER WORLD (Sept. 2, 2014).
\textsuperscript{17} Id.
\textsuperscript{19} Id.
\textsuperscript{20} See id. at 55-57 (“there is no API to be used to access the Administrative Data restricted SIM card area”).
\textsuperscript{21} See Kim Zetter, Phone Firewall Identifies Rogue Cell Towers Trying to Intercept Your Calls, WIRED (Sept. 3, 2014).
2G security protocol until 2017, and Verizon is supporting 2G until 2020. With security upgrades coming along so slowly, it is likely that by the time the change does happen, the 3G and 4G technologies that are scheduled to replace 2G as the new baselines for security will have already been breached in a similar manner. In fact, Harris Corporation, which manufactures the Stingray, is already selling a device named Hailstorm, which upgrades the Stingray, thereby making it 3G/4G/LTE compatible. Moreover, a manufacturer in China sells GSM IMSI catchers purportedly capable of monitoring conversations on 3G networks for $1,800 per unit over the Internet. CDMA, which is the transmission format used by Verizon and Sprint, was initially not thought to be prone to the security issues prevalent in GSM technology, but according to a 2006 release from Harris Corp., a device that they also manufacture named the Kingfish is capable of performing similar functions as the Stingray across both GSM and CDMA platforms.

As part of the Communications Assistance for Law Enforcement Act of 1994 ("CALEA"), telecommunications carriers are required to design or modify their equipment in a manner that allows law enforcement agencies to conduct surveillance on the communications that flow across their networks. The statute requires in part that:

[A] telecommunications carrier shall ensure that its equipment, facilities, or services [...] are capable of (1) expeditiously isolating and enabling the government, pursuant to any court order or other lawful authorization, to intercept, to the exclusion of any other communications, all wire and electronic communications [...] except that, with regard to information acquired solely pursuant to the authority for pen registers and trap and trace devices [], such call-identifying information shall not include any information that may disclose the physical

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25. Code Division Multiple Access is a channel access method used by various radio communications technologies.

26. Global System for Mobile Communications, originally Groupe Special Mobile, a standard for cellular communications developed by the European Telecommunications Standards Institute.


28. See 47 U.S.C. § 1002(a) (listing the requirements of telecom providers to be able to quickly provide law enforcement with access to communications data).
location of the subscriber (except to the extent that the location may be determined by the telephone number). 29

The plain statutory language demonstrates that Congress did not intend to grant law enforcement agencies the ability to track citizens’ locations using their private communications data beyond the information collection that is warranted under the pen register and trap and trace device statute, or other “court order or lawful authorization.” 30

One of the primary purposes of an IMSI catcher is to identify the location of the cellphone subscriber who is under investigation. Law enforcement officials have doggedly refused to disclose Stingray’s technical capabilities, and a deeper examination of the CALEA and the Pen Register Statute provide the reasons why. 31 A full accounting of the Stingray’s capabilities before a judicial panel would quickly lead to severe limitations on its use for violating the Fourth Amendment as well as multiple federal statutes.

Congress is aware that Stingrays are capable of much more than simply tracking the location of a cellular device. On Capitol Hill in 2012, computer scientist and privacy advocate Christopher Soghoian demonstrated IMSI catcher technology to congressional staffs by having them make phone calls while Kurtis Heimerl, a Berkeley communications researcher, used an IMSI catcher in the room. 32 Soghoian then had the staffs end their calls, and proceeded to replay their conversations, which the device had recorded. 33 In addition to recording their calls, the cell-site simulator was able to download “all the data from their phones - emails, contact files, music, videos – whatever was on them.” 34 Soghoian’s demonstration removed any doubt that IMSI catchers are capable of far more advanced surveillance than the limited uses of tracking cellphone locations and collecting dialed phone numbers. Law enforcement agencies want the public to view Stingrays as simple devices because that protects the status quo, and under the current regulatory and legislative system, the status quo equals zero oversight. There are no legal checks and balances in place to ensure that the

30. See 18 U.S.C. § 3121 (Pen registers and trap and trace devices are used by law enforcement to record incoming and outgoing routing information about phone calls including primarily the phone numbers themselves which can then be used to identify the location, and possibly the identity of the person(s) receiving the call(s) using a reverse lookup directory. These statutes do require that the warrant affidavit particularize the specific phone number of the person against whom the warrant is being issued, which differentiates them from how a Stingray operates.)
32. Jeff Stein, New Eavesdropping Equipment Sucks All Data Off Your Phone, NEWSWEEK (June 22, 2014).
33. Id.
34. Id.
use of Stingrays comports with the Fourth Amendment and other privacy protection statutes. Additionally, if the public interest and awareness of Stingrays increases, then the pressure on elected officials to pierce the veil of secrecy surrounding government use of this technology will begin to mount. Should the truly invasive nature of this technology become widely known, the public outcry would result in enhanced oversight, which is directly adverse to the interests of law enforcement agencies who are used to operating without a leash.

Stephanie Pell, an Affiliate Scholar at the Stanford Law School Center for Internet and Society and Cyber Ethics Fellow at West Point’s Army Cyber Institute, wrote, “[t]he communications of Americans will only be secured through the use of privacy enhancing technologies like encryption, not with regulations prohibiting the use or sale of intercepting technology.”35 This sentiment rings true given the relative ease with which anyone with moderate means and the will to do so can procure and use an IMSI catcher for nefarious ends. The threat that unfettered surveillance poses to liberty, privacy, and national security far outweigh the benefits to domestic law enforcement. Given the current state of cellular technology, and the slow pace at which wireless carriers are upgrading their security protocols, our most sensitive communications at both the individual and governmental level are quite literally floating around in the wind. A recent Pew Research Center study on public perceptions of privacy and security found that only nine percent of people surveyed felt very secure in cellular communications, forty-six percent felt either not very secure or not secure at all, but fifty-four percent felt that the content of their phone conversations was very sensitive.36 This dichotomic result illuminates an expansive divide between public interest and public policy, and could have a chilling effect on protected speech.

If our wireless communications network are vulnerable to anyone with a few thousand dollars and a disregard for the law, then the dangers of leaving our cellular infrastructure in its current insecure state are immense. The crimes of identity theft and credit card fraud plague the United States. The 2012 Bureau of Justice Statistics report on identity theft estimates that the direct and indirect costs of the 16.6 million recorded incidents between the two crimes totaling a staggering $24.7 billion dollars for that year alone.37 For an identity thief, the temptation to use a $1,500 IMSI catcher to gobble up data from potentially hundreds, or even thousands of cellphones with negligible risk of detection would be irresistible. CNBC reported last year

that 34% of owners do nothing to secure their sensitive information on their cellphones, not even a pin code to unlock the screen. Stingrays avoid even that minimal security protection entirely by emulating a trusted service provider and connecting to the phone invisibly over the airwaves.\(^\text{38}\) Though research is scarce on this subject, it makes sense that the possibility of a thief snatching sensitive identity information out of thin air does not even register on the security radar for an overwhelming majority of Americans. It is essential that the FCC act to secure wireless infrastructure in order to prevent widespread abuse of the existing security holes.

## III. Legal Landscape of Stingray Use

There is growing concern about the widespread use of IMSI catchers, particularly in local law enforcement efforts directed at minor criminal activity. For several years, there have been increasingly frequent news reports of the employment of invasive surveillance techniques for minor offenses. Increasing public awareness, combined with reluctance by law enforcement agencies to divulge the surveillance methods used to collect evidence in criminal cases, has raised questions about the legality and frequency of Stingray use.

### A. Exponentially Expanding Use of Technology in Law Enforcement

Technology has historically advanced at a faster pace than legislation or regulation can keep pace with, but the continual threat of terrorism has led to unprecedented levels of funding for new technology under the umbrella of national security. The U.S. Department of Homeland Security ("DHS") reported in 2011 that since fiscal year 2003 more than $31 billion in grant money passed from federal coffers to state and local governments “to build and sustain targeted capabilities to prevent, protect against, respond to, and recover from threats or acts of terrorism.”\(^\text{39}\) State and local governments have heavily invested these federal funds in devices designed to collect and analyze data for the stated purpose of providing safety and security, however, the more common use for this technology is for domestic tracking and surveillance.\(^\text{40}\) The secrecy surrounding the procurement and deployment of


IMSI catchers at all levels of government makes it impossible to know the exact amount invested in surveillance technology. The troubling truth of the matter is that these technologies do little to further anti-terrorism efforts, and much to increase government monitoring of law-abiding citizens. This raises serious concerns that the government is increasingly engaged in activities that violate the Fourth Amendment protection against unreasonable searches and seizures.

Government officials use computerized license plate readers, “powerful cameras that . . . enable the government to perform society-wide, retroactive, and warrantless tracking of motorists,”41 to scan the records of the vehicle’s owner for moving violations, outstanding arrest warrants, and even to check whether the owner has a concealed carry weapon permit.42 Every time a vehicle drives through a tollbooth, under certain bridges, passes a red light camera, or drives by a police cruiser equipped with a reader, the system uploads the information and stores it in a database for future reference, and use in a criminal prosecution if necessary.43 While the overt use of video surveillance and tracking systems by law enforcement raises significant privacy concerns, the trend toward the covert use of interception devices such as the Stingray is even more disturbing.

The Department of Justice (“DOJ”) released a report in 2012 that shows a massive increase in warrantless electronic surveillance between 2003 and 2011.44 The document was obtained through extensive litigation between the ACLU and the DOJ over Freedom of Information Act (“FOIA”) requests, which the DOJ did not want to honor.45 The report shows that the number of individuals whose phones were subjected to pen register or trap and trace surveillance tactics46 nearly tripled between 2009 and 2011 alone, and the quantity of email and network data being monitored increased by 361% in the same time period.47 The DOJ’s reluctance to comply with the FOIA requests does raise questions about how much transparency the American public is entitled to, but more importantly it begs the question, what is the DOJ hiding? One such tactic used by the Department is the covert,

41. Id.
43. See id.
45. Id.
46. Pen register and trap and trace surveillance are methods of tracking and tracing the numbers dialed to and from a particular phone number, but that do not allow recording of the content of a communications, only of the addressing information.
47. See Gilens, supra note 44; see also 18 U.S.C. § 3121 (2012) (defining pen registers and trap and trace devices as those connected to a specific telephone number for the purpose of monitoring source, destination, duration, and time of calls placed to and from that specific number).
and often warrantless, searches of the cellphone communications of American citizens.

B. Judicial History of Cellular Communications Privacy

Although IMSI catchers have only recently made their way into mainstream news, their use has been sufficiently pervasive to enlighten, and irritate, both judges and legislators. The abuse of these devices by law enforcement officials has had the odd effect of putting law enforcement agencies at odds with a judiciary that has been largely pro-law enforcement on surveillance issues since 9/11.\textsuperscript{48} Available records show that federal agencies believe that the more widely the capabilities of the Stingray are disclosed in legal proceedings, the shorter the odds are that their use will be allowed. The capacity for abuse in such a powerful device, and the inherent requirement by its design that the rights of innocent citizens will be violated by its use, make it very likely that judges or Congress will strictly constrain its applications. The government’s position is that disclosing the capabilities of the Stingray in litigation will rapidly degrade its effectiveness for fighting crime, because the more widely the capabilities of the Stingray are known, the better prepared the criminal element will be to defend against it.\textsuperscript{49} However, that argument is moot given the vast amount of technical information that is readily available about the device in the public sphere, as discussed throughout this note.

1. United States v. Rigmaiden – An Early Stingray Criminal Case

There have been several civil and criminal cases involving the use of Stingray devices in recent years. An early example is United States v. Rigmaiden, a 2008 criminal case in which federal authorities arrested Daniel Rigmaiden on charges of leading an identity theft ring in Arizona.\textsuperscript{50} The authorities utilized undisclosed technology to track Rigmaiden’s Verizon AirCard, a device enabling a laptop to connect to the Internet via Verizon’s cellular data network, which led directly to the discovery of his location and his arrest.\textsuperscript{51} Rigmaiden argued that his Fourth Amendment rights entitled him to additional discovery regarding the surveillance methods used by the

\textsuperscript{48} See ADMIN. OFFICE OF THE U.S. COURTS, WIRETAP RPT. 2013; see also Tim Cushing, US Courts’ Wiretap Report Shows Wiretaps Are For Drugs and Warrants Are Rejected Only .03% Of The Time, TECH DIRT (July 7, 2014).

\textsuperscript{49} See Kim Zetter, Feds Admit Stingrays Can Disrupt Cell Service of Bystanders, WIRED (Mar. 1, 2015).

\textsuperscript{50} See 844 F. Supp. 2d 982, 987 (D. Ariz. 2012) (“The government located and arrested Defendant, in part, by tracking the location of an aircard connected to a laptop computer that allegedly was used to perpetuate the fraudulent scheme.”).

\textsuperscript{51} Id. at 1.
federal authorities, and that without it he could not effectively argue his Fourth Amendment claim.\textsuperscript{52}

The government opposed this motion, claiming qualified law enforcement privilege, as established in \textit{Roviaro v. United States}, and the court denied Rigmaiden’s motion.\textsuperscript{53} Since that denial, information surfaced suggesting that the device used to locate Rigmaiden’s AirCard was, in fact, a Stingray.\textsuperscript{54} The DOJ argued for more than a year that the use of Stingrays to track suspects does not conflict with the Fourth Amendment because people do not have a reasonable expectation of privacy in wireless communications.\textsuperscript{55} However, upon prompting by a federal judge to disclose more details about how the Stingray works, the DOJ backtracked its position “conced[ing] that its tracking methods did indeed constitute a Fourth Amendment search and seizure”, but that the search was warranted under a previously issued tracking order from Northern California that was used to procure real-time tracking information from Verizon.\textsuperscript{56}

This reversal of position demonstrates the lengths that the DOJ is willing to go to in order to prevent the public disclosure of the Stingray’s capabilities. It also raises an important question. If the Stingray was used solely to collect location data about Rigmaiden’s AirCard, and the authorities already had a warrant that covered real-time tracking data from Verizon, then why did they need to go to the trouble of setting up a Stingray sting, so to speak, in order to track Rigmaiden in order to facilitate his arrest? That information was available directly from Verizon under the existing warrant. Perhaps authorities used the Stingray to gather more information than just Rigmaiden’s location, which could have been determined very easily and much more affordably in traditional ways. A Yale Law Journal article analyzing the various costs associated with tracking a suspect’s location on an hourly basis determined that using a wireless carrier to track a suspect costs between $0.04 and $5.21 per hour, while using an IMSI catcher costs $105.00 per hour.\textsuperscript{57} If the government’s claim of an already existing search warrant were valid, then conducting additional warrantless surveillance would duplicate the same result, would be unnecessary, more expensive and would potentially undermine their case if the evidence were suppressed as a result. Without an additional and valuable benefit to the investigation, using

\textsuperscript{52} Id.
\textsuperscript{53} Id. at 1-2.
\textsuperscript{54} Amor Tor, DOJ: Stingray Cellphone Tracking Device Falls Under Fourth Amendment, but Don’t Ask About It, \textit{ENGADGET} (Nov. 6, 2011).
\textsuperscript{55} Id.
\textsuperscript{56} Id. (conceding that tracking Rigmaiden was a search protected by the Fourth Amendment, but that the pre-existing tracking warrant 08-90330-MISC-RS (N.D.Cal.) authorized the additional real-time tracking in Arizona. The actual warrant document has not been located for reference.).
a Stingray is an illogical tracking method in this situation, given the cheap and effective alternative methods that are readily available.

2. Judicial Reclassification of Stingrays as Mobile Tracking Devices That Are Subject to Fourth Amendment Scrutiny

The government in Rigmaiden attempted to classify Stingrays as Pen Register devices, however, the District Court for the Southern District of Texas, citing Rigmaiden, held in a 2012 pen register warrant denial order that Stingrays are not pen register or trap and trace devices as defined by the statute. The Order focused on the plain language of the statute, which requires that a pen register device necessarily attach to a “specific telephone number.” Stingray devices do not attach to a specific number, but rather broadcast a signal in an attempt to catch as many cellphones in the “net” as possible, including those of law-abiding citizens. The purpose of the warrant application in the Texas case was to determine what cellphone number a suspected narcotics trafficker was using to conduct his business. The implication is that the government did not know the specific number of the suspect. In order to find out which number the suspect was using, it would be necessary to catch all cellular traffic in the given area, and to analyze every device individually to determine the suspect’s information. To accomplish this, all cellphone data captured by the Stingray, including call records, times, durations, and locations, would require analysis in order to narrow the batch of numbers down to the one that the suspect was using. A pen register warrant must be limited to a particular telephone number, which the government did not have in this case. In order to get that number, the government must necessarily conduct a search for it in a way that violates the Fourth Amendment rights of all the cellphone users other than the one in question.

The Fourth Amendment implications in this activity are apparent. Stingray surveillance involves the warrantless search of innumerable citizens’ cellphone activity, and leaves those whose rights are violated with no readily available recourse. There is no requirement under the Pen Register Statute that the government notify individuals when their information has been collected by a Stingray, and in most cases, those whose information was gathered illegally will never even know. There are no federal statutes explicitly governing the use of Stingrays, so there is no legally binding

58. 18 U.S.C. § 3127(3) (defining the term Pen Register); 18 U.S.C. § 3123 (regulating the use of Pen Registers).

59. In Re Application of the United States for an Order Authorizing the Installation and Use of a Pen Register and Trap and Trace Device, 2012 WL 2120492, at *5-6 (S.D. Tex. Jun. 2, 2012) (denying the app’n because Stingrays are not pen registers as contemplated in the statute) [hereinafter In Re App’n].

60. Id. at *2-3.

61. Id.

62. Id. at *1.
requirement to destroy information after it is collected. Barring state law to the contrary, federal and state agencies could store the information indefinitely for use in future investigations.

_Rigmaid and In Re Application_ raise three important findings that are relevant to future Stingray litigation. First, cell-site simulators are mobile tracking devices, not pen registers or trap and trace devices, which means that a search warrant should be required for their use.63 Second, the federal government has acknowledged that the use of a Stingray device is properly analyzed as a Fourth Amendment search and seizure.64 Third, because the Stingray is not a pen register or trap and trace device, the statute that law enforcement relies on to authorize its use, 18 U.S.C. § 3123, is not applicable.

C. Questionable Legality of Law Enforcement Practices

Federal and local law enforcement officers have found a simple way around the pesky Fourth Amendment warrant clause. They use deceptive information on reports and depositions related to criminal proceedings which involve Stingray use, such as referring to any information obtained by a Stingray as having come from a “confidential source” when submitting warrant applications.65 This tactic denies defendants their right to challenge the constitutionality of surveillance methods used by police investigators. As is easily imagined, this tactic has had a very cold reception by members of the legal community.

1. U.S. Marshals Service Requests That State and Local Police Departments Deceive Judges

In a series of e-mails leaked from the North Port, Florida Police Department, Sgt. Ken Castro stated that rather than disclose to the court that Stingray devices were used to track the location of a suspect, that, at the request of the U.S. Marshals Service, all reports or depositions referred to information obtained by Stingrays as having been “received from a confidential source.”66 He also states, “to date this [practice] has not been challenged, since it is not an integral part of the actual crime that occurred.”67 Naturally, there have been no challenges to this practice. The agencies tasked with submitting sworn documentation of the arrest procedures have

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63. _See id._
64. _Id._
67. _Id._
eliminated all references to warrantless surveillance, which by the DOJ’s own admission constitutes a Fourth Amendment search requiring advance judicial review.  

Why would a court think to question police tactics of which it has no knowledge? When the ACLU requested the documentation from the North Port Police Department, the U.S. Marshals Service “swooped in at the last minute to grab the records, claiming they belong to the U.S. Marshals Service and barring the police from releasing them.” Their official justification was that the Marshal Service deputized the detective and therefore the documents belonged to the federal government rather than the police department. The ACLU promptly sought an injunction to prevent further release of documents to the Marshal Service, but the Florida state court, having no authority to demand release of documents held by a federal agency, was unable to demand production of the seized documents.

The practice of hiding information about Stingray use has spread to police departments across the United States. The Los Angeles Police Department refused to discuss Stingray use in the department in the wake of documents obtained by the LA Weekly proving that the department spent more than $340,000 on “Stingray II equipment.” The Oakland Police Department has used Stingrays in its Criminal Investigative Division. Stingrays are in use by state and local agencies in twenty-three states and the number is growing rapidly. The ACLU has confirmed that at least fifty-eight police departments use Stingrays as part of their investigative process, but the number is almost certainly much higher because the procurement of this hardware is a closely guarded secret in many instances.

2. The FBI and the DOJ Go to Extraordinary Lengths to Protect the Secrets of the Stingray

In addition to the actions taken by the U.S. Marshals Service to prevent the capabilities of the Stingray from becoming public through legal proceedings, the FBI has also taken extra-legal steps to that end. In 2012, the

68. See In Re App’n, supra note 59.
69. See Kim Zetter, U.S. Marshals Seize Cops’ Spying Records to Keep Them From the ACLU, WIRED (June 3, 2014).
70. Id.
71. Id.
75. See ACLU, supra note 74.
ACLU received a document as part of a FOIA request showing that the FBI required the Tacoma, Washington police department to sign an ironclad non-disclosure agreement (“NDA”) before granting permission for the department to purchase a Stingray. 76 A NDA is now standard protocol before any state or local police agency can procure a Stingray. 77 By requiring this agreement, the FBI has created a rift between law enforcement agencies and the judiciary. Law enforcement officers are now required by the FBI to hide, mask, or outright lie about the true source of their evidence in judicial proceedings. This calls into question the results of any investigation in which a Stingray was used without a warrant, and mars the credibility of the officers who are put into an awkward and potentially contemptuous position before the court.

An officer that collects evidence using a Stingray is under pressure from four dissimilarly interested groups: (1) the prosecutors, who want to punish criminal defendants; (2) the FBI and the DOJ concerned with protecting the secrecy of the Stingray’s capabilities; (3) the criminal defendant, who is entitled to be informed of the evidence against him and the methodologies used to gather that evidence; and (4) the judges who balance all of these competing interests under the law. Law enforcement officers have demonstrated that they are willing to hide the truth on warrant applications regarding the true source of the information they gather by referring to the Stingray as a confidential source. 78 Prosecutors have shown that they will withdraw evidence from a criminal trial at the risk of putting a criminal back on the street, rather than following a judge’s order to reveal the Stingray’s capabilities. 79 The DOJ has admitted in court that the use of a Stingray is a search within the meaning of the Fourth Amendment, yet they still use them without obtaining a warrant. 80 None of these practices are acceptable.

They deny criminal defendants due process by preventing proper constitutional challenges to the surveillance methods employed, they potentially violate the Fourth Amendment rights of many citizens in the process, and the practice requires law enforcement officers to deceive the very courts the laws of which they are employed by the taxpayers to enforce.

76. Timberg, supra note 9.
77. See id.
79. See CJ Ciaramella, How the Justice Dep’t Keeps Its Cell Phone Snooping a Secret, VICE (June 16, 2014).
80. This practice has purportedly been abandoned following the recent DOJ public policy change regarding Stingray use, although the policy leaves considerable gaps in the coverage of the new self-imposed warrant requirement. The policy and its implications are discussed in more detail below.
All perspectives on Stingray use reveal its corrosive effect on the integrity of the judicial system.

3. Judges and Legislators Have Responded Zealously to the Covert Use of Stingray Devices for Ordinary Criminal Law Enforcement Functions

Far afield from the lofty purpose of protecting national security, the Baltimore police department came under fire by a defense attorney in November 2014 for refusing to disclose the technology used to track his client who was a suspect in a robbery case. 81 When pressed as to how he tracked the defendant, Detective John Haley denied using a Stingray and refused to reveal the technology used to track the suspect citing the NDA the department had signed with the FBI. 82 Judge Barry Williams of the Baltimore Circuit Court reminded Det. Haley that there is no NDA with the court, and threatened to hold Haley in contempt if he did not respond to the attorney’s questions. 83 Rather than force Haley to disclose the details of the technology, the Baltimore prosecutor withdrew key evidence from the case, including the cellphone and a handgun found at the defendant’s home. 84 Wessler, the spokesman for the ACLU, commented that “a secret written agreement does not invalidate the Maryland public records law [and] does not invalidate due process requirements of giving information to a criminal defendant.” 85 There is very little mystery as to whether the device in question in this case was a Stingray, yet the prosecutor felt so compelled to maintain the thinly veiled secret of its use that he withdrew key evidence from a criminal prosecution.

A similar case arose in Tallahassee, Florida when police used Stingray surveillance, and subsequently refused to disclose their method of surveillance at trial. 86 The defendant faced an airtight charge of robbery with a deadly weapon, which carries a mandatory four-year prison sentence. However, because police would not disclose how they obtained evidence using the Stingray to the defense attorney when ordered to do so by the presiding judge, the evidence was excluded and the prosecutor was forced to offer a plea bargain of six months of probation. 87

In Charlotte, a judge has unsealed more than five hundred criminal cases tried between 2010 and 2014 that involved Stingray surveillance and

81. Fenton, supra note 78.
82. Id.
83. Id.
84. Id.
85. Id.
87. Id.
flagged them for review for due process and Fourth Amendment violations.\(^8\) The police had requested that the case files remain sealed because “they were worried about criminal suspects avoiding detection.”\(^9\) The district attorney’s office must now review all of the cases to see the department withheld any information from the defendants in violation of due process, and will then forward any such documents to their attorneys.\(^10\) This will assuredly result in the reopening and appeal of many of the cases, at immense taxpayer expense, thereby denying the due process rights of the defendants. In cases where improper evidence resulted in a defendant’s conviction, the charges may be dismissed altogether, potentially putting dangerous criminals back on the streets. Perhaps the most disturbing revelation is that it is entirely unknown “whether police actually obtained authorization [to use the Stingray] [...] because those records were not among the 529 documents.”\(^11\)

In December 2014, eleven U.S. Senators submitted a letter to Attorney General Eric Holder, and Secretary of Homeland Security Jeh Johnson, inquiring about the U.S. Marshals Service’s use of cell-site simulators called DRTBoxes which were attached to fixed wing airplanes that “collect[ed] the information of thousands of Americans, potentially infringing on the Fourth Amendment and disrupting normal cellphone usage.”\(^12\) The device works like a Stingray, but covers a much broader area in a manner designed to assist in hunting fugitives. According to the letter, in addition to the Marshal Service, the DOJ, Drug Enforcement Agency, DHS, and Immigration and Customs Enforcement are also using the devices.\(^13\) The Senators expressed the sentiment that, “given the extreme lengths to which federal agencies have gone to keep surveillance technologies like this a secret, it is vital that their use be subject to strict oversight by the courts and Congress.”\(^14\) It remains unclear how judicial or congressional oversight would be effective, or even possible, if the law enforcement agencies tasked with disclosing the use of the devices are actively concealing their use.

Some State legislatures have started to take action to limit the use of IMSI catchers within their borders. The Supreme Courts of Florida and Michigan held that warrants are required before police can conduct real-time tracking of cellphone data.\(^15\) The Illinois, Indiana, Maryland, Minnesota, Fl...
Tennessee, Utah, Virginia, and Wisconsin legislatures have passed statutes requiring that police obtain a warrant to track a cellphone in real-time.\textsuperscript{96} From this information, it seems likely that this trend will continue to spread to other states, and perhaps the process will shine some light on the secrecy of the Stingray. However, requiring warrant applications for real-time tracking of cellphones at the state level does not address some major issues, such as: the lack of disclosure of capabilities that go beyond location tracking, the use of the devices by non-governmental entities, or by federal authorities who are not subject to state warrant requirements. A meaningful public debate about the insecurity of American cellular networks against both governmental and criminal intrusion requires transparency, and the argument that publicly admitting the full range of Stingray capabilities would undermine law enforcement efforts is severely weakened by the breadth of technical information that is now available from a wide variety of sources.

It is unclear exactly why law enforcement agencies are so averse to disclosures regarding the use of Stingrays. The known capabilities of IMSI catchers are already broad in scope. It is hard to think of any function that is so critically important that it warrants withdrawing key evidence from criminal prosecutions in order to protect the secret. Anne Weismann, chief counsel of Citizens for Responsibility and Ethics, stated that she “question[s] what possible legitimate federal interest [ ] the FBI and U.S. Marshals have in preventing the public from learning how local law enforcement authorities conduct surveillance.”\textsuperscript{97}

How constitutionally invasive must the functions of a Stingray be if they are unfit for disclosure during criminal judicial proceedings? More importantly, if the local police are using these devices so commonly, what is there to stop criminals, foreign intelligence services, or terrorists from using Stingrays in the same manner to breach our national security, steal our secrets, our identities, or commit other crimes?

4. \textit{Riley v. California} – the Supreme Court Unanimously Holds That the Search of a Cellphone by Law Enforcement Requires a Warrant

In June 2014, the Supreme Court issued its opinion in \textit{Riley v. California}. The Court unanimously held that in order to search the contents of a cellphone, law enforcement officers must first obtain a warrant.\textsuperscript{98} This decision is both timely and consequential when juxtaposed against the continued use of Stingrays in apparent contravention of this principle. Because federal authorities have made the capabilities of the Stingray such

\textsuperscript{96} Id.

\textsuperscript{97} CJ Ciaramella, \textit{How the Justice Dep’t Keeps Its Cell Phone Snooping a Secret}, VICE (June 16, 2014).

\textsuperscript{98} Riley v. California, No. 13-132, 573 U.S. ___ (June 25, 2014).
a closely guarded secret, courts have little knowledge of whether or not the use of these devices conflicts with the recent Supreme Court decision in Riley.\footnote{99}{See Fenton, supra note 78.}

The DOJ conceded in *Rigmaid*\textit{en} that the use of a Stingray constitutes a Fourth Amendment search.\footnote{100}{See *Rigmaid*en, 844 F. Supp. 2d at 987.} This concession when viewed in light of Riley should automatically require the issuance of a search warrant before a Stingray can be used in an investigation. However, because a Stingray searches all devices in its range in order to locate its target, the Fourth Amendment rights of all citizens whose data is collected is violated, not just the rights of the suspect. If the target device ID is unknown, then the data from all of the devices must be searched to locate the one suspect device, but a search warrant for one person does not grant the right to search all. To engage in this type of “door-to-door” searching is akin to the issuance of general warrants like those of King George, which were the very reason the founders drafted the Fourth Amendment.

There is zero judicial oversight in place to protect the rights of the individuals who are not the subjects of an investigation against having their privacy violated in this manner. This practice is functionally the same as allowing law enforcement officers to kick in the door of every house in a neighborhood to search for evidence of a crime that may or may not have been committed by those citizens. Then when the time comes to try the case, the evidence suddenly is not important enough to use because to do so would require admitting how it was obtained, even though the practice is public knowledge. The only feasible remedy for this type of Fourth Amendment violation goes to the criminals who end up on trial, because they have standing to benefit from the exclusionary rule to suppress illegally obtained evidence. For ordinary citizens who have had their private communications monitored and collected, the only remedy available is to file a very costly and time consuming civil rights action under § 1983. This remedy is inherently problematic. The only way in which surreptitious data collection of this type would come to light would be for the subject of the collection to be informed by the government that this action had taken place.

There is no legal requirement imposed on the government to give notice that a Stingray has seized a person’s data, unlike some sections of the Electronic Communications Privacy Act (“ECPA”) which do require this type of notice.\footnote{101}{See 18 U.S.C. § 2518(8)(d) (2012) Procedure for Interception of Wire, Oral, or Electronic Communications (requiring notice be given to a monitored individual within a reasonable time but no longer than 90 days after termination of an interception unless otherwise ordered by a court).} Unfortunately, the part of the ECPA on which the government relies in Stingray use cases,\footnote{102}{See, e.g., *Rigmaid*en, supra note 100.} the Pen Register Statute, does not have a notice requirement because it was not intended to govern the mass collection of data, but it is important to note that this practice is not limited to the use of Stingrays and other similar devices. The government has the ability to intercept communications without a warrant or the notice required by the ECPA, which is a serious violation of the Fourth Amendment. The use of Stingrays and similar devices has raised significant concerns about the privacy of citizens and the potential for the government to engage in mass surveillance without proper oversight.
collection of phone records, which is the precise activity that it is being used to justify.

The Supreme Court in *Riley* states, “[m]odern cellphones are not just another technological convenience. With all they contain and all they may reveal, they hold for many Americans ‘the privacies of life.’”\(^{105}\) In an increasingly networked world, we are gradually but consistently trading privacy for convenience. This tradeoff is generally a personal choice made by an individual in exchange for a benefit, but given the secrecy surrounding Stingray use, the public is entirely excluded from the negotiations. If society is to accept a new type of widespread invasion into its private communications, the proposal should be vigorously debated and legislated in order to limit its use, and subject to sufficient oversight to prevent its abuse. Currently, there is insufficient transparency for a useful public debate, minimal oversight to limit the use and abuse of this surveillance practice, and while there has been some inquiry by Congress there is no active legislation on the matter.

The Court in *Riley* made an important break from *Katz* in that it made no mention of a reasonable expectation of privacy test.\(^{104}\) This could be a watershed moment for privacy legislation, because the reasonable expectation test is necessarily subjective and given the rate at which Americans are trading their privacy for convenience, a court could easily erode the few remaining privacy rights under the justification that society has deemed the loss reasonable.

If *Riley* is an indicator of future results from the Court, then perhaps the judiciary is moving away from the subjective view of privacy adopted in *Katz v. United States* and toward an objective privacy view similar to that of *United States v. Jones*, which followed the traditional trespassory notion of privacy.\(^{105}\) Fourth Amendment challenges to Stingray use under the *Riley* standard would be more likely to succeed than under *Katz*. *Katz* supports the argument that individuals do not have a reasonable expectation of privacy in wireless communications because they travel on public airwaves.\(^{106}\) Congress codified this concept in the Wiretap Act, which states in part, “it shall not be unlawful [...] for any person to intercept or access an electronic communication made through an electronic communications system that is

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103. *Riley*, supra note 98 (citing *Boyd v. United States*, 116 U.S. 616 (1886)).

104. See Susan Landau, *What the Court Didn’t Say in Riley May be the Most Important Thing of All*, LAWFARE (June 30, 2014).


106. See *Katz*, 389 U.S. at 360 (Harlan, J., concurring) (setting forth the reasonable expectation of privacy test). Under the *Katz* test, it is unlikely that a court would find that a person using a device that communicates signals through public airwaves could have reasonably believed that those communications would remain private; Shaina Hyder, *The Fourth Amendment and Gov’t Interception of Unsecured Wireless Comm’ns*, 28 BERK. TECH. L.J. 937, 938 (2013).
configured so that such electronic communication is readily accessible to the general public.”

The Katz test, and later the Wiretap Act, have been the foundation of government interception of radio communications for almost fifty years, and the premise is starting to show its age in the digital era. Even when a person makes a cellphone call from the privacy of their home, a constitutionally protected area, the communications necessarily traverse public airwaves in non-constitutionally protected areas. Interception is no longer conducted at the endpoints of a communication as was the case with pen register and trap and trace devices, which linked to a landline that connected directly to a person’s home, or to a phone booth as was the case in Katz. With a Stingray, the interception takes place directly from the air, and can be conducted from anywhere within the broadcast range of the device. It stands to reason that the Riley standard, which does not appear to rely on the reasonable expectation of privacy test, could functionally replace the Katz test as the new norm for analyzing Fourth Amendment privacy issues related to digital communications. At the very least, Riley appears to indicate that the Court is leaning toward an objective privacy analysis methodology which is more likely to extend Fourth Amendment protections to cover over-the-air communications, and as such would transitively apply Fourth Amendment rules to Stingray surveillance.

D. Department of Justice Releases Enhanced Federal Cell-Site Simulator Use Policy

The DOJ Office of Public Affairs released a statement on September 3, 2015 outlining its “enhanced” policy regarding the use of Stingrays in federal law enforcement investigations and proceedings (“the Policy”). The contents of this document are more telling for what is absent than for what is explicit. The DOJ reiterates its long-held position that cell-site simulators used by the federal government are configured only as pen registers, and do not collect any location data directly from the cellphones being monitored. If that is the only purpose for which the federal government is purchasing Stingrays, then these are the most expensive caller ID machines ever designed. Pen registers and trap and trace devices, as discussed in more detail above, are devices that have the sole capability of

110. Id. at 2.
recording the routing and identification information at the endpoints of a line of communication.\footnote{112} To add any other features to the device changes it in such a way that it is no longer a simple pen register, and therefore does not satisfy the statutory definition as contemplated by Congress.

1. Stingray Data Collection Policy

The Policy further states that department devices “may not be used to collect the contents of any communication […] contained on the phone itself” including “emails, texts, contact lists, images, or any other data from the phone.”\footnote{113} It does not state that the devices \textit{cannot} collect such information from phones, only that the department \textit{may} not do so. This lends credence to the popular belief that Stingrays can, in fact, access and collect data stored on phones from a remote location.\footnote{114}

Strangely, the policy also states that “Department cell-site simulators do not provide subscriber account information (for example, an account holder’s name, address, or telephone number).”\footnote{115} The fact that the DOJ’s policy limits its Stingray configuration to only the functions of a pen register contradicts previous evidence of how the DOJ has used the tool. The sole statutorily defined purpose of a pen register is to collect routing information, i.e. telephone numbers, of incoming and outgoing communications.\footnote{116} It is contradictory for the Policy to state that neither telephone numbers nor subscriber account information (which also includes IMSIs) are collected using department Stingrays, because if that statement is true, then the sole function that the device is purportedly capable of providing does the precise thing that the Policy does not allow. Parsing the language of the Policy reveals that this is actually not what the Policy says, it says rather that cell-site simulators “do not provide” the information.\footnote{117} If the various federal law enforcement agencies did not have such a well-established record of surreptitious behavior designed to conceal even the mere existence of Stingrays from public scrutiny, then it would be less problematic to take agency officials at their word.

There is one major problem with the Department “coming clean” about their use of Stingrays. While the Policy takes positive steps toward protecting civil liberties, aside from the description of the pen register function and the legal authority supporting its use, there were no disclosures

\begin{itemize}
\item \footnote{112. See 18 U.S.C. § 3127(3) (‘‘pen register’ means a device or process which records or decodes dialing, routing, addressing, or signaling information transmitted by an instrument or facility from which a wire or electronic communication is transmitted, provided, however, that such information shall not include the contents of any communication.’’).}
\item \footnote{113. DOJ STINGRAY POLICY, supra note 109, at 2.}
\item \footnote{114. See Stein, supra note 30 (describing the demonstration of an IMSI catcher by Chris Soghoian before congressional staffers of the very features listed here).}
\item \footnote{115. DOJ STINGRAY POLICY, supra note 109, at 2.}
\item \footnote{116. See 18 U.S.C. § 3127 (2012).}
\item \footnote{117. Id.}
\end{itemize}
about what technology is allegedly disabled. Fortunately, while American companies are still extremely resistant to public disclosure of the technical capabilities of IMSI catchers, Israeli based company Ability Limited has no such compunction. Ability manufactures many varieties of cellular interception devices, but the product most similar to the Stingray is the IBIS, or In-Between Interception System, which is also an active interception system. Ability’s product datasheet for IBIS lists features including:

- bi-directional interception of encrypted GSM communication in real-time;
- decryption of A5/1, A5/2 and A5/3 encryption protocols;
- voice and data recording to hard disk;
- downgrading of service area encryption from A5/2 to A5/1;
- selective jamming of network services;
- ability to interrupt ongoing calls or to selectively prevent calls;
- data extraction including IMSIs and phone numbers;
- making and receiving phone calls and SMS on behalf of target phones;
- presence detection and direction finding; and
- invisible and undetectable operation.

It is reasonable to assume that the Stingray provides many, if not all, of the features in this list. If not, this article would need an eye-catching new title about the grave constitutional threat posed by IBIS instead of Stingray.

2. Exigency Includes the Absence of Exigency

A positive addition made by the Policy is the requirement that all federal law enforcement agencies obtain a search warrant prior to using a Stingray to collect a target’s cellphone data. It is arguable that the growing collection of judicial precedent regarding Stingray use had already established that a search warrant is required, and that the DOJ simply advanced the Policy to quell growing unrest by members of Congress and to stave off a less predictable legislative solution to cellular surveillance regulation. The Policy raises significant points of concern regarding the

118. See generally id.
119. IBIS PRODUCT DATASHEET, ABILITY LTD. (last accessed on Sept. 30, 2015), http://www.toplinkpac.com/pdf/IBIS_Brochure.PDF.
120. Id. at 1, 10.
121. DOJ STINGRAY POLICY, supra note 109, at 3.
122. See United States v. Rigmaiden, 844 F. Supp. 2d 982, 1001 (D. Ariz. 2012) (“[T]he government has already conceded the use of the mobile tracking device constituted a search under the Fourth Amendment.”).
legal authority supporting the Policy’s exigency and exceptional circumstances exceptions to the warrant requirement.\textsuperscript{123}

\begin{itemize}
  \item[a.] \textit{A New Mix and Match Exigency Paradigm?}

  The Policy properly references the narrowly prescribed situations that either Congress or the Supreme Court has determined may require such immediate action as to forego the requirement to obtain prior judicial approval in the form of a search warrant. The need to protect human life or avert serious injury is certainly an exigent circumstance, as is the imminent destruction of evidence, hot pursuit of a fleeing felon, or the prevention of escape.\textsuperscript{124} The problem, however, is that the Policy does not limit agencies to the carefully crafted and narrowly applied exceptions available within the context of the Fourth Amendment.

  Even though the DOJ conceded in \textit{Rigmaid}en and implied in the Policy that the use of a Stingray constitutes a search within the meaning of the Fourth Amendment that requires a search warrant, the Policy also allows agencies to conduct Stingray surveillance without a warrant to the extent allowed by the emergency circumstances described in the ECPA Pen Register Statute.\textsuperscript{125} The Pen Register Statute exigencies include the Fourth Amendment exigency for immediate danger of death or serious bodily injury to any person, but they go further, adding “conspiratorial activities characteristic of organized crime; an immediate threat to a national security interest; or an ongoing [felonious] attack on a protected computer.”\textsuperscript{126} What the DOJ describes as a “subset of [the Fourth Amendment’s] exigent situations,” is actually an entirely different and considerably less restrictive set of allowances.

  \item[b.] \textit{Which Came First, the Conspiracy or the Exigency?}

  In \textit{Nabozny v. Marshall}, a case involving the kidnapping of a bank manager and the placement of a wiretap without a warrant, the Sixth Circuit Court of Appeals defined an organized crime conspiracy as requiring at least three people and traditional criminal activities as including extortion.\textsuperscript{127} It is difficult to imagine a situation in which a mobile pen register would be helpful in determining if a) three or more people are conspiring to commit a crime, and b) that the crime they are involved in is one characteristic to organized crime, prior to actually using information collected by the device as the Pen Register Statute requires.\textsuperscript{128} Additionally, if law enforcement

\begin{itemize}
  \item[123.] DOJ Stingray Policy, supra note 109, at 3-4.
  \item[124.] \textit{Id.}
  \item[125.] \textit{Id.}; 844 F. Supp. 2d at 1001.
  \item[126.] 18 U.S.C. § 3125 (Pen Register emergency circumstances relieving officers of the warrant requirement).
  \item[127.] 781 F.2d 83, 85 (6th Cir. 1986).
\end{itemize}
possesses knowledge of a criminal conspiracy prior to needing to use the Stingray, then there is no exigency precisely because of possessing that prior knowledge. Even in the case of a kidnapping, the criminal conspiracy exigency is not necessary because the danger to life and limb already justifies warrantless use of a Stingray.

Kidnapping, for the purpose of extortion, is an activity characteristic of organized crime and, as the Policy states, it is important to provide law enforcement with the best tools available to combat such offenses. However, it is conceivable that “conspiratorial activities characteristic of organized crime,” from the perspective of a law enforcement officer, could include an activist at a Chicago political rally talking heatedly into her cellphone, or a young African-American man protesting excessive use of force by police officers in Baltimore because he could incite a riot.\footnote{See, e.g., Frank Main, \textit{Chicago Police Fighting to Keep Cellphone Trackers Secret}, CHICAGO SUN-TIMES, Mar. 22, 2015; Michael Gould-Wartofsky, \textit{5 Tools the Police Are Using in Their War Against Activists}, THE NATION, May 5, 2015, http://www.thenation.com/article/5-tools-police-are-using-their-war-against-activists/} It is easy to imagine an after-the-fact search warrant affidavit that embellishes the facts surrounding the use of a Stingray just enough to satisfy judicial review of the exigency application, thereby justifying the issuance of an \textit{ex post} warrant legalizing a surveillance action that otherwise would not have survived a probable cause hearing. In fact, law enforcement officers and prosecutors both have a powerful motivation for doing so. If the affiant, upon judicial review of the \textit{ex post} warrant application, does not satisfy the exigency requirements and he had actual knowledge of that fact, the affiant, be it the officer or the prosecutor, could be guilty of conducting illegal surveillance.\footnote{18 U.S.C. § 3125(c); 42 U.S.C. § 1983.} Because the Pen Register and Trap and Trace statutes are part of the ECPA, a person found to have violated the statute faces “imprisonment for not more than five years, […] a fine of up to $250,000,” or both.\footnote{18 U.S.C. § 2511(4)(a) (defining punishments for violations of Title III).} That is a powerful incentive to ensure that a warrant application withstands scrutiny.

\textbf{c. Immediate Threat to National Security According to Whom?}

The Policy also includes “immediate threats to national security interests” as an exigent circumstance justifying warrantless Stingray use.\footnote{DOJ STINGRAY POLICY, supra note 109.} In 2001, the USA PATRIOT Act expanded the definition of terrorism to include acts wholly domestic.\footnote{Uniting and Strengthening America by Providing Appropriate Tools Required to Intercept and Obstruct Terrorism Act of 2001, Pub. L. No. 107-56, § 802, 115 Stat. 272, 376 (2001) (defining the term “domestic terrorism”) (emphasis added).} Under the amended language, a person commits an act of domestic terrorism if they do an act “dangerous to human
life” that violates any American criminal law and “appears to intimidate or coerce a civilian population.” Appearance is a very subjective and flexible concept to interpret, particularly when the decision justifies or denounces an intrusion upon a citizen’s civil liberty, as is the case with Stingray use.

Video evidence discovered during the investigations into several high-profile law enforcement shootings of unarmed civilians have discredited the officers’ attempts to justify their actions based on how the victim’s behavior appeared to them. Had there been no video of these incidents, it is very likely that the officers would not have faced charges, or been found liable in a wrongful death civil action, because of strong deference historically given to a law enforcement officer’s statement. It is reasonable to extrapolate that given the high percentage of cases with video evidence that show the officer’s statement to be either misleading or fabricated in its entirety, that the number of cases without video evidence in which this is also true is proportionately high. There is no reason to think that the culture of “testilying” only pervades cases in which violence is a factor. In fact, there is mounting evidence demonstrating that law enforcement has been, and continues to be, engaged in pervasive deception in order to use Stingrays without oversight, some examples of which point to the policies of, or direction by, federal law enforcement agencies.

When analyzing why the DOJ decided to add national security threats as an exigent circumstance that can justify warrantless surveillance, the Department’s historical treatment of national security threats as a reason to justify surveillance exigency should also be examined for consistency. A 2005 DOJ document titled Electronic Surveillance Issues conducted an in depth analysis of the legal authority for the Department’s treatment of various issues related to the use of electronic surveillance capabilities. The

134. Id.


136. See Amir Efrati, Legal System Struggles With How to React When Police Officers Lie, WALL ST. J. (Jan. 29, 2009) (quoting Judge Alex Kozinski, Ninth Circuit Court of Appeals, “it is an open secret long shared by prosecutors, defense lawyers and judges that perjury is widespread among law enforcement officers. [the exclusionary rule] sets up a great incentive for…police to lie.”); see also Nick Malinowski, Testifying: Cops Are Liars Who Get Away with Perjury, VICE (Feb. 3, 2013) (“A 1987 study from Chicago found that 76 percent of officers agreed that they frequently bent the facts to establish probable cause; 48 percent also said that judges were right in tossing police testimony as untrustworthy.”).

137. See, e.g., Zetter, supra note 65; Zetter, supra note 69; Ciaramella, supra note 97; Fenton, supra note 78.

The DOJ report clarifies this, quoting the Hon. James Carr’s treatise on the Law of Surveillance which says “[t]hough not repealed upon adoption of the Foreign Intelligence Surveillance Act, the authorization in [18 U.S.C. §] 2518(7) to conduct warrantless national security surveillance has been superseded by the more stringent requirement of prior notice to a judicial officer found in 1805(e) of FISA.”

If the FISA preempts the ECPA regarding national security surveillance, then the DOJ cannot use the ECPA Pen Register statute as grounds for claiming exigent circumstances justifying an ex post warrant, and the Policy is incorrect in this regard. FISA applies to surveillance in which one party to the communication is foreign. It is unclear whether FISA also applies in instances of entirely domestic terrorism. Furthermore, if FISA does not apply in a domestic only situation, how would an officer or prosecutor know which law to apply, given that they can only know one end of the facts prior to conducting the surveillance? Logically, FISA should be the applicable law in a national security situation because of the uncertainty involved in determining whether one party to the communication is foreign. If law enforcement knows the identity of all parties to a communication before the exigency arise, then the situation should not qualify as an exigency because the agency was on notice of the activity in sufficient time to request a warrant. Waiting until an exigency arises that was, or reasonably should have been, anticipated, thereby creating a situation which was not exigent but for the agent’s negligence, should not be an accepted or encouraged practice. This should not be acceptable even when the circumstances clearly establish legality, much less when there are important questions surrounding the authority for such an activity.

The civil liberties that the Fourth Amendment is designed to protect are not so fungible that law enforcement agencies should be allowed to act without clear statutory authority to do so, particularly when the actions result in the labeling of a citizen as a terrorist or threat to national security. Therefore, irrespective of the parties to a communication, the FISA statute should be the governing law in situations of national security threat surveillance, and the policy to use the ECPA Pen Register statute as the basis for establishing a national security exigency is improper.
d. What is the Computer Fraud and Abuse Act Doing Here?

The Pen Register Statute’s final emergency circumstance is the “ongoing attack on a protected computer (as defined by 18 U.S.C. § 1030) that constitutes a crime punishable by a term of imprisonment greater than one year.” This is an odd place to come across this particular legislative language, but in the context of the Rigmaiden prosecution, it makes sense.

The lesson that the DOJ learned from Rigmaiden is that it needs a policy in place that allows prosecutors to claim an exception for using a Stingray without a warrant in cases involving computer crime. The Rigmaiden prosecution did not want to reveal the capabilities of the Stingray technology used to track Rigmaiden’s location, and as a result, the prosecution had to concede that tracking his location using a Stingray was a search within the meaning of the Fourth Amendment, and therefore required a warrant or an exigency exception. Had the government not had a pre-existing warrant to legalize the Stingray location tracking, the evidence would have been suppressed under the exclusionary rule. In order to avoid this result in the future, the DOJ has proclaimed that the Stingray is a pen register, and therefore the emergency exceptions to the Pen Register warrant requirement apply. Fortuitously, those exceptions include an attack on a protected computer.

The historical interpretation of the Computer Fraud and Abuse Act (“CFAA”) definition of a “protected computer” is particularly broad. In relevant part, a protected computer includes “any computer which is used in or affecting interstate or foreign commerce or communication.” This definition is as far-reaching as the plenary power of Congress to regulate interstate commerce, and it includes almost any device that contains a microchip. When Congress chose this language for the CFAA and the Pen Register statutes in 1986, the purpose was for law enforcement to be able to trace the source of a computer attack through a telephone line its physical location. At that time, a connection between two computers that were not in direct proximity to one another required one computer to connect to the other via a dial-up modem. Once law enforcement obtained the phone number that

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142. DOJ STINGRAY POLICY, supra note 109, at 4; 18 U.S.C. § 1030 (2012) (defining protected computer as one exclusively used by a financial institution, the U.S. Government, or one that is used in or affecting interstate or foreign commerce.) Essentially a protected computer is any object that connects to the Internet, or contains a microchip and was manufactured in a different state.
143. See Rigmaiden, 844 F. Supp. 2d at 1001.
144. DOJ STINGRAY POLICY, supra note 109.
the attacker was using, they could easily find the location through a reverse lookup directory and arrest the perpetrator.

There is a major problem, however, with using a Stingray in this context. Courts have repeatedly held that prospective real-time cell-site location data is tracking information, and any device that collects such information is a “tracking device” as defined by the ECPA. A “tracking device” under the ECPA is “an electronic or mechanical device which permits the tracking of the movement of a person or object.” Note that the definition does not require that the intended function of a device is to collect tracking information, only that it permits the collection of such data. Given that a Stingray is, in fact, a portable cell-site, any data that it collects that “permits the tracking of a person or object” is subject to the same statutory regulations as all tracking devices under the ECPA. The government has argued that courts are interpreting the definition of a tracking device too broadly, and that Congress intended an electronic tracking device to be a one-way radio homing device. Courts have rejected this logic because the language of the statute is not ambiguous, and does not include language differentiating various types of tracking devices. Even if the Court had not rejected this argument, the definition the government posits for a tracking device describes the functionality of a Stingray exactly. In fact, the DOJ training manual on electronic surveillance repeatedly discusses the Stingray’s predecessor, the TriggerFish, as a “tracking device,” yet they would have the courts define cell-site simulators differently when it suits their purposes at trial. As Judge Smith put it, “if the tracking device label is warranted in the one case, it is warranted in the other. The label should not change merely because the equipment used to obtain the tracking data belongs to the service provider rather than law enforcement.”

Accepting that prospective cell-site location data collected by a Stingray is properly identified as tracking information under the ECPA, can the data be collected legally under the authority of an ECPA Pen Register warrant? The CALEA states the following:

[W]ith regard to information acquired solely pursuant to the authority for pen registers and trap and trace devices (as defined

149. 18 U.S.C. § 3117(b) (defining “tracking device” as an electronic or mechanical device which permits the tracking of the movement of a person or object).
152. See id. at 755, n.12 (citing U.S. DEP’T OF JUSTICE, ELECTRONIC SURVEILLANCE MANUAL, at 44-45 (rev. June 2005)).
153. Id.
in section 3127 of Title 18), such call-identifying information shall not include the physical location of the subscriber (except to the extent that the location may be determined from the telephone number). 155

The statutory language of the CALEA unambiguously states that the government cannot obtain subscriber location information solely under a pen register warrant. 156 Therefore, the DOJ policy allowing the use of Stingrays to track the real-time location of a target cellphone solely on the authority of a pen register warrant is in violation of the CALEA and Pen Register statutes. Because a Stingray collects tracking information in real-time, the Stored Communications Act is not an applicable means to cure the aforementioned statutory deficiency, therefore a hybrid theory combining a Pen Register warrant for the cellphone activity monitoring with a warrant or judicial order authorizing location data disclosure under the SCA is inappropriate for prospective real-time tracking of a target. 157

3. The Impossibility Exception

Finally, the Policy carves out an ambiguous exception for “other circumstances in which, although exigent circumstances do not exist, the law does not require a search warrant and circumstances make obtaining a search warrant impracticable.” 158 In the interest of clarity as to the precise set of circumstances that could give rise to an invocation of this exception, the Policy language requires close examination.

What circumstances, in which locations, might necessitate the mobile interception of an individual’s cellphone, or require tracking a person’s location via their cellphone signal, yet require neither a search warrant, nor a pen register order under any applicable Federal or state statute? This is a puzzling riddle indeed, but the issue is even more complicated. In addition to the lack of any statutory requirement of judicial oversight while monitoring an individual’s cellphone or tracking his movements, the agent who is engaged in these activities must also believe that it would be impossible to apply for a search warrant under the circumstances, even though the Policy only invokes this exception in cases where no exigency exists. 159

157. See In re United States for an Order Authorizing the Disclosure of Prospective Cell Site Information, 412 F. Supp. 2d 947, 957 (E.D. Wis. 2006) (rejecting the government’s hybrid authority argument as “unpersuasive”); but cf., e.g., In re Appl. of the United States for an Order for Prospective Cell Site Location Information on a Certain Cellular Telephone, 460 F. Supp. 2d 448 (S.D.N.Y. 2006) (supporting the hybridization theory).
158. DOJ STINGRAY POLICY, supra note 109, at 4.
159. Id.
To summarize, the “exceptional circumstance” requiring invasive Stingray surveillance is not an emergency that permits an exception, so the Policy does require the agent to obtain a search warrant. However, because the agent says that the situation is so urgent that it would be impossible for him to apply for one, it’s ok to skip the warrant this time, even though the courts and Congress have unambiguously legislated the very limited situations in which it is acceptable to forego a warrant. Additionally, the agent “must first obtain approval from executive-level personnel at the agency’s headquarters and the relevant U.S. Attorney, and then from a Criminal Division DAAG.”\footnote{Id. (emphasis added).} The logic driving this strange exception is suspiciously circular. Ultimately, if an agent can satisfy all of the requirements to establish an exceptional circumstance, and then successfully obtain approval from three DOJ executives to use the Stingray, then why is it impracticable to ask an agent to follow the proper warrant application procedures? The word they should have used instead of “impracticable” is “hassle,” as in, “this warrant application form is a hassle, can’t I just wait until after I find out if I actually need a warrant to fill it out instead?”

It seems that until the Supreme Court rules on whether cell-site simulator use constitutes a search within the meaning of the Fourth Amendment, in any situation when an agency thinks obtaining a warrant would be “impracticable,” and obtaining a Pen Register warrant is not required by state law, the agency has the option to forego the warrant requirement. The only real obstacle to doing an end run around the mandatory warrant requirement set forth in the Policy is getting a nod from three people who are actively interested in pursuing an investigation. With no clarification as to what “impracticable” means in the real-time surveillance context, there is no way to claim that using the justification is improper. The situation does not require a search warrant by law, and internal DOJ policies are non-binding guidelines, so even if the issue is raised at court, there is no justification necessary by agency officials. If the meaning implied by the Policy is the standard Oxford definition, then situations covered by this exception are limited to those in which obtaining a warrant is “impossible in practice to do or to carry out.”\footnote{Oxford English Dictionary (online ed. 2015) (last visited Oct. 4, 2015), http://www.oxforddictionaries.com/us/definition/american_english/impracticable.} Given how flexible the available options are to obtain a warrant in the information age via pay phone, cell phone, business phone, email, fax, over the Internet, or even by knocking on a magistrate’s door, it should be a rare event indeed for the “impossibility exception” to ever be invoked. (Disclaimer: continuing to read this indemnifies me from any liability for damages to body or property incurred at the hands of said magistrate.) It will certainly be worth monitoring the coming years to see how many times the “impossibility exception” is used in practice, given how extremely narrowly tailored the circumstances should be in reality.
IV. FCC REGULATIONS PROHIBIT CELLPHONE SIGNAL JAMMING BY STATE AND LOCAL LAW ENFORCEMENT AGENCIES

FCC regulations prohibit signal jamming in all but very narrowly proscribed federal law enforcement activities.\(^\text{162}\) Stingray devices are capable of jamming cell signals as part of the mechanism used to force devices to connect to the simulated tower. By jamming other signals, the Stingray becomes the strongest tower signal available and devices automatically opt for the stronger signal to maintain connectivity.\(^\text{163}\) This practice violates FCC rules prohibiting signal jamming, and there should be further investigation into the potential for the Stingray to interfere with wireless communications.

An enforcement advisory released by the FCC in December 2014 states that “[f]ederal law provides no exemption for use of a signal jammer by [. . .] police departments, or other state and local authorities. Only federal agencies are eligible to apply for and receive authorization.”\(^\text{164}\) If the speculation that Stingrays use signal jamming is accurate, then they are an illegal device and the FCC should enforce the prohibition of their sale to, and use by, state or local law enforcement agencies. However, therein lies the primary problem in determining whether Stingrays are legal or not, without a mechanism for judicial or congressional oversight of the capabilities of Stingrays, the legality of these devices is mere speculation.

While investigating a bank robbery case in New Jersey, Assistant U.S. Attorney Osmar Benvenuto submitted a pen register warrant application in 2012 for the authorization of Stingray surveillance, and in the sworn affidavit, he states “[b]ecause of the way the Mobile Equipment sometimes operates, its use has the potential to intermittently disrupt cellular service.”\(^\text{165}\) This sworn statement shows that there should be a heightened concern about the interference caused by Stingray use, and that the FCC should take more stringent action restricting the distribution of these devices to state and local officials due to their signal jamming potential.

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\(^\text{162}\) See 47 U.S.C. § 302a(b).
\(^\text{163}\) See Cyrus Farivar, Cities Scramble to Upgrade “Stingray” Tracking as End of 2G Network Looms, ARS TECHNICA (Sept. 1, 2014) (“Handsets operating in 2G will readily accept comm. from another device purporting to be a valid cell tower, like a stingray. So the stingray takes advantage of this feature by jamming the 3G and 4G signals, forcing the phone to use a 2G signal.”).
\(^\text{165}\) Cyrus Farivar, To Locate Bank Robber FBI Unusually Asked for Warrant to Use Stingray, ARS TECHNICA (Mar. 3, 2015).
V. THE FCC SHOULD REQUIRE WIRELESS CARRIERS TO FOLLOW THE ENCRYPTION STANDARDS ESTABLISHED BY THE COMMUNICATIONS SECURITY, RELIABILITY, AND INTEROPERABILITY COUNCIL

The FCC regulates surveillance equipment for use by law enforcement under 47 C.F.R. § 15.511 pursuant to 47 U.S.C. § 301. The FCC has been under pressure to investigate the use of cell-site simulators for some time now\(^{166}\), and has recently formed a task force to investigate potential abuses of cell-site simulators by foreign intelligence services and private individuals.\(^{167}\) There has been no action taken to investigate abuses by government agencies that purchase the devices under the authority of the FCC.\(^{168}\) Chairman Wheeler responded to concerns raised in a letter from Rep. Alan Grayson by deferring authority over the enforcement and legality of the use of Stingrays to the FBI, the Department of Homeland Security, and the Department of Justice.\(^{169}\) This is an interesting position to take considering that the FCC issues the licenses for manufacturing and marketing of these surveillance devices.\(^{170}\) It would appear to be within FCC jurisdiction to determine the legality of a device prior to issuing a license for its manufacture. Wheeler did state, however, that Title III of the Communications Act gives the FCC “statutory authority to address the threat posed by illicit IMSI catchers and to work closely with [the] industry on mechanisms to secure our nation’s wireless networks and to ensure the privacy of consumers’ conversations.”\(^{171}\) A key step toward both of these goals is to enhance the encryption standards and security features for all devices communicating over wireless networks.

\(^{166}.\) Letter from Alan Grayson, House of Representatives, to Tom Wheeler, Chairman of the FCC (July 2, 2014) (submitting questions to the Chairman to determine what can be done to limit the danger of IMSI catchers).

\(^{167}.\) See Craig Timberg, Feds to Study Illegal Use of Spy Gear, WASH. POST (Aug. 11, 2014).

\(^{168}.\) See id.

\(^{169}.\) See Letter from Tom Wheeler, Chairman of the FCC, to Alan Grayson, House of Representatives (Aug. 1, 2014).


\(^{171}.\) Id.
A. Why the FCC Should Enact a Rule Requiring All New Cellular Devices to Comply with the Encryption Standards Established by the CSRIC Prior to License Issuance

The FCC has long been tasked with protecting the privacy interests of the American public. Under the Telephone Consumer Protection Act, the FCC and the FTC limit unsolicited telemarketing calls.\textsuperscript{172} The FCC’s caller ID rules mandate that consumers be able to block their phone numbers from being visible to the person receiving the call.\textsuperscript{173} Another rule protects the privacy of personal telephone records.\textsuperscript{174} One of the primary roles of the FCC is to protect the privacy of communications against unwanted intrusion, so it is reasonable to think that the agency has the authority to enact regulation preventing an unknown third party from accessing the data transmitted to or from a person’s cellphone without his or her knowledge or consent.

In 2011, the FCC established the Communications Security, Reliability, and Interoperability Council (“CSRIC”).\textsuperscript{175} One of the directives of the CSRIC is to “develop and recommend best practices and actions the FCC can take to improve the security of mobile devices and networks.”\textsuperscript{176} The cybersecurity best practices established by the 2011 council state the following regarding encryption practices in the industry.

\begin{quote}
[W]hen network operators, service providers, and equipment suppliers use an encryption technology in the securing of network equipment and transmission facilities, cryptographic keys must be distributed using a secure protocol that a) ensures the authenticity of the recipient; b) does not depend upon secure transmission facilities, and c) cannot be emulated by a non-trusted source.\textsuperscript{177}
\end{quote}

Given the widespread use of Stingrays, it is clear that industry leaders failed to implement these practices. If the industry had followed the CSRIC’s encryption practices, then the Stingray would not be able to trick devices into connecting to the false signal because the encryption would be authenticated locally on the device and at the provider’s network hub rather than at the cell tower. This would dramatically limit the possibility of over-

\begin{itemize}
\item \textsuperscript{172} 47 U.S.C. § 227; see also PROTECTING YOUR PRIVACY, FCC (Mar. 31, 2014).
\item \textsuperscript{173} 47 C.F.R. § 64.1601(d) (mandating the use of *67 to block caller ID)
\item \textsuperscript{174} 47 C.F.R. § 64.2005 (governing the use of customer proprietary network information without customer approval).
\item \textsuperscript{176} \textit{Id.}
\item \textsuperscript{177} FCC, CSRIC BEST PRACTICES: CYBERSECURITY & ENCRYPTION, No. 9-6-8028 (emphasis added).
\end{itemize}
the-air interception because without the decryption key, either the interceptor would have to spend significant time to crack the encryption, or the device owner or service provider would have to provide access. This modification to cellular technology would not only secure the networks against interception by nefarious parties, but would also act as a check and balance against the power of law enforcement in much the same way as the CALEA defines the standards telecom companies must follow in providing surveillance access. It is unfortunate that the findings of the CSRIC have been largely ignored by the telecom industry. The reasons why there is such reluctance to move toward better security are unclear. It is clear, however, that so long as cellular devices remain subordinate to cell-sites in determining what level of encryption to use, Stingrays will easily be able to bypass cellular security by instructing the device to use zero encryption, effectively undermining the entire security protocol.

Law enforcement agencies vehemently oppose enhanced security standards for cellular equipment. In 2014, when Apple and Google began configuring their new cellular devices with local encryption enabled by default that the manufacturer cannot decrypt, the FBI publicly expressed outrage at the idea that law enforcement would no longer have ready access to data from these devices, arguing that added security poses a significant threat to national security. While local encryption does not directly impact the ability of the Stingray to intercept over-the-air communications, it is notable to see the fervor with which law enforcement agencies respond to companies increasing encryption security. They argue that increasing encryption poses a national security concern, given how much information is stored on a cellular device, and how helpful that information can potentially be in prosecuting criminal activity, including terrorism. When considering the value of an additional layer of communication security, we must consider more than just law enforcement’s desire for access to private information when we balance the risks against the rewards of such an advancement. It is also the case that should carriers implement end-to-end encryption as suggested by the CSRIC, that law enforcement would still be able to access encrypted communications, they would simply need to obtain a court order to do so as has been the case since the implementation of the CALEA.

The NSA is also gravely concerned about the mounting public pressure on and by lawmakers to strengthen encryption, which would have a dramatic impact on the agency’s ability to intercept communications. Reports surfaced that in 2010, Gemalto, the SIM card manufacturer that provides chips to AT&T, Verizon, T-Mobile, and Sprint, was hacked into by Britain’s Government Communications Headquarters (“GCHQ”), with support from the NSA, for the sole purpose of stealing SIM card encryption.

179. See id.
keys. The presentation from GCHQ, which was leaked from the NSA by Edward Snowden, declares “GEMALTO – successfully implanted several machines and believe we have their entire network.” By stealing SIM card encryption keys, governments can decrypt communications in real-time, which affects billions of cellphone users around the world. Perhaps this act by the NSA demonstrates how well encryption actually works. It is logical that if wireless carriers move their encryption authentication away from the cell towers as suggested by the CSRIC, then one of the largest security problems with wireless networks would be resolved, rendering Stingrays ineffective unless law enforcement possesses the encryption key for an individual user. This security method would not cause compliance problems with the CALEA because telecom companies can still provide either backbone access for legitimate government surveillance, or the decryption key for individual subscribers pursuant to a court order permitting mobile surveillance.

The FCC has taken important steps toward secure telecommunications by establishing cybersecurity best practices at the policy level through the efforts of the CSRIC. However, there are currently no mechanisms for enforcing the standards, and further, federal law enforcement agencies are publicly opposing the efforts made by companies who follow them. This sends mixed signals to the industry, and it is the FCC’s role as an independent regulatory agency to require compliance with established standards, regardless of outside pressures. In this particular case, the FCC should issue a rule that requires carriers to adhere to the CSRIC encryption standard in order to have new device licenses approved. Prominent members of the telecom industry established the encryption recommendations, so it should not be onerous to require compliance. This would not require retrofitting all devices, and could be phased in over time allowing companies to adopt the new encryption protocol without significantly disrupting their business models.

B. Title II of the Communications Act Grants the FCC the Authority to Regulate the Encryption Standards of Cellular Device Manufacturers and Service Providers

With the adoption of the Open Internet Order by the FCC, Title II of the Communications Act now regulates mobile broadband service. This is critically important to the regulation of wireless services because in the near future a majority of wireless carriers will convert their voice networks to

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182. See Scahill, supra note 180.
strictly IP based communications (Voice over 4G/LTE).\textsuperscript{183} This change will put all voice communications squarely under the purview of Title II because all cellular IP traffic travels across mobile broadband networks. Title II contains a provision requiring telecommunications carriers to protect the privacy of customer information.\textsuperscript{184} 47 U.S.C. § 222(a) requires “every telecommunications carrier [. . .] to protect the confidentiality of proprietary information of, and relating to, other telecommunications carriers, equipment manufacturers, and customers.”\textsuperscript{185} If “proprietary information” includes data like user account information, browsing records, text messages, and location data, then the FCC has an obligation to enforce the statute against wireless carriers in the form of baseline encryption standards because data that can easily be intercepted is not adequately protected. The most comprehensive method of enforcement would be mandatory adherence to the established CSRIC best practices for encryption of mobile communications, which would secure customer’s proprietary information against interception by third parties as implicitly required by 47 U.S.C. § 222(a).

VI. THE FCC SHOULD REQUIRE SIM CARD MANUFACTURERS TO ENABLE CONSUMER ACCESS TO EXISTING SECURITY OPTIONS THAT ARE CURRENTLY DISABLED

The option to notify a wireless user when the device receives a request to connect to an unencrypted tower is available, but permanently disabled by the SIM card manufacturer at the request of wireless carriers.\textsuperscript{186} The carriers appear to be unwilling to enable this option of their own accord because enabling the option increases the volume of customer support calls.\textsuperscript{187} While it is clearly preferential to the carriers to do business this way, it is in the best interest of customer security and privacy to allow the consumer to choose to receive notification about encryption failures.

The FCC has forced carriers to enable existing functions in the past. In 2013, the FCC “reached a deal with [. . .] major U.S. wireless carriers that requires the carriers to disclose how and when cellphones on their network can be unlocked.”\textsuperscript{188} While the purported goal of that agreement was to foster innovation and consumer choice, it seems that improving consumer security

\textsuperscript{183} See Marguerite Reardon, \textit{The New Age of Wireless Calling}, CNET (Aug. 30, 2014).
\textsuperscript{184} 47 U.S.C. § 222.
\textsuperscript{185} 47 U.S.C. § 222(a).
\textsuperscript{187} See id.
\textsuperscript{188} Dara Kerr, \textit{The Ban on Unlocking Phones is Lifted as Regulators and Carriers Finally Work Out the Details of the New Policy}, CNET (Dec. 12, 2013).
is a goal that the FCC should be very interested in pursuing. Indeed, Congressman Grayson stated in a letter to Chairman Wheeler that:

> Americans have a reasonable expectation of privacy in their communications, and in information about where they go and with whom they communicate. It is extremely troubling to learn that cellular communications are so poorly secured, and that it is so easy to intercept calls and track people’s phones. 189

The rewards of enabling a notification option that alerts consumers before transmitting their data over an insecure network are vastly more beneficial than the minor task of flipping the on switch at the SIM card manufacturer. Device manufacturers can disable the option by default if they so choose, but ultimately, the consumer should be empowered to choose his or her own security level, rather than being forced into insecurity by a company’s cost-avoidance tactic.

### VII. CONCLUSION

Both federal and state governments, even in light of the recent DOJ Stingray Policy, are insistent on protecting the secrets of the Stingray from public scrutiny under the auspices of national security and criminal justice. However, if security and justice are their true motives, the policy of secrecy is an utter failure. Countless criminal convictions are now under scrutiny for due process violations because investigators did not disclose their surveillance methods not only to the judges, but also to the district attorneys that prosecuted the cases. Evidence obtained using a Stingray is often inadmissible in criminal trials because law enforcement agencies refuse to disclose their surveillance methodologies in violation of a defendant’s rights, allowing criminals to walk free who would otherwise be in jail. The argument that allowing the capabilities of a Stingray to become public would make criminals harder to investigate is fallacious if the evidence gathered to convict those very criminals is left out of the trial once they are caught, or worse, results in a reversal or appeal of the conviction at massive taxpayer expense. That is to say nothing of the privacy concerns that widespread use of covert surveillance raises for law-abiding citizens, or the potential for civil rights violations stemming from unsanctioned and unmonitored surveillance by the government.

Since its inception, the United States has placed a high value on strong protections against intrusions by the government, whether it was opposition to general warrants under the rule of King George, or objections to the modern federal government intruding on private communications using covert technology. Americans still value their privacy. It may seem

189. Letter from Alan Grayson, House of Representatives, to Tom Wheeler, Chairman of the FCC (July 2, 2014) (submitting questions to the Chairman to determine what can be done to limit the danger of IMSI catchers).
that the opposite is true in the age of Facebook, Instagram, and Twitter, but there is a clear distinction between an individual having an option to trade some of his privacy for convenience, and the government sneaking around, covertly monitoring law-abiding citizens’ cellphone communications, giving the public no say in the matter at all.

If a public debate had been held to decide whether society is willing to trade its privacy for a sense of security that would be one thing. However, this practice has been going on for twenty years or more without a single piece of legislation enacted to limit the use of Stingrays or to provide oversight to prevent the abuse of this technology. Recently, the use of the Stingray was held to be a search within the meaning of the Fourth Amendment, and the Supreme Court has held that any search of a cellphone requires a warrant. The problem is that law enforcement officers have displayed their willingness to deceive judicial officials; therefore, it is difficult to believe that the practice will stop based on judicial holdings and policy documents alone. As Stephanie Pell eloquently said, “the communications of Americans will only be secured through the use of privacy enhancing technologies like encryption, not with regulations prohibiting the use or sale of intercepting technology.”

The FCC needs to act in order to ensure that cellular communications remain private, at least and until Congress decides to investigate and act on this issue. Defending the privacy of American citizens’ communications against abuse by the use of secretive technology falls to the FCC. The abuses by law enforcement agencies are a symptom of a larger problem, which, if left unchecked, could lead to national security breaches, stolen trade secrets, espionage, or even terrorist activity, if it has not already. An insecure communications network is the Achilles heel of a strong nation, and while unchecked mass surveillance by law enforcement is profoundly disturbing, the thought that anyone with moderate technical knowledge and a few hundred dollars in their pocket can eavesdrop on 99% of our communications is terrifying. The FCC must take the steps necessary to secure the homeland against this very real and rapidly growing threat.

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Protecting Political Speech and Broadcasters from Unnecessary Disclosure: Why the FCC Should Not Expand Sponsorship Identification Requirements for Political Issue Ads

Shannon Rohn *

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I. INTRODUCTION

“[I]t could not be less folly to abolish liberty, which is essential to political life, because it nourishes faction, than it would be to wish the annihilation of air, which is essential to animal life, because it imparts to fire its destructive agency.”

- James Madison

The First Amendment of the Constitution provides that “Congress shall make no law...abridging the freedom of speech; or the press.” Political speech, especially, is “central to the First Amendment’s meaning and purpose.” Furthermore, the “First Amendment has its fullest and most urgent application to speech uttered during a campaign for political office.” Those that try to protect this fundamental civil liberty and the forces that suppress speech have long been at odds, especially as related to political speech. Since the Supreme Court’s decision in Citizens United v. Federal Election Commission, which found that the First Amendment prohibited governmental limitations on political expenditures by non-profit and for-profit organizations, many critics have cited concerns about donors and special interest groups with deep pockets controlling the political landscape. With unlimited expenditures, these organizations did undoubtedly change the political landscape: they produced more political advertising that focused on a range of topics during election cycles and they contributed to the range of political knowledge and opinion available to the public. But despite this increase in political speech, there are still those that look to limit the influence of third party groups through expansive disclosure requirements

1. The Federalist No. 10 (James Madison).
2. U.S. Const. amend. I.
4. Id. at 339; see also Carey v. FEC, 791 F.Supp.2d 121, 134 (“The right to speak effectively would be “diluted if it does not include the right to pool money through contributions, for funds are often essential if ‘advocacy’ is to be truly or optimally ‘effective.’”).
6. Id. at 311.
7. See, e.g., Lili Levi, Plan B for Campaign-Finance Reform: Can the FCC Help Save American Politics After Citizens United, 61 Cath. U. L. Rev. 97, 98-100 (2011) (discussing the “feared” Citizens United effect, where “non-candidate groups, carefully structured to take advantage of the limits to election-law disclosure requirements, spending potentially unlimited funds to air veiled partisan political ads without accountability to voters”).
for broadcasters which ultimately would abridge the speech of these groups in a way that is contrary to the Constitution.9

Organizations concerned about these third party ads and the donors behind them have sought the help of the Federal Communications Commission (“FCC”) to increase sponsorship identification requirements in an attempt to bring more transparency to political advertising.10 In July 2014, the Sunlight Foundation, Common Cause, and the Campaign Legal Center filed two complaints against two television stations that ran ads funded by Political Action Committees (“PACs”) that were entirely funded by one person.11 The complaints alleged that the stations violated Section 317 of the Communications Act of 1934, as amended, as well as Section 73.1212 of the FCC’s rules by not “fully and fairly disclosing the true identity” of the ads’ sponsors or using reasonable diligence to obtain information about the sponsors.12

While transparency in political advertising is certainly a reasonable objective, these recent complaints are problematic for several reasons. First, the complaints ask the FCC to require individual broadcasters to perform the inappropriate task of investigating third party organizations in order to determine their donation structure.13 This is a job more properly placed within the Federal Election Commission’s (“FEC”) jurisdiction, since it handles the formation of Political Action Committees (“PACs”) and disclosures of donations on a regular basis.14 Second, there are already

10. See, e.g., Compl. of Campaign Legal Ctr. et al., Against ACC Licensee, LLC, MB 13-203 (July 17, 2014) [hereinafter ACC Licensee Complaint], http://apps.fcc.gov/ecfs/comment/view;ECFSSESSION=8KLGW1sK81JgTeR2s6chBFzysdRFvsVTth1pVnJ0WQ1p6fmRLr19517216651-1566059965?id=6018182311; Compl. of Campaign Legal Ctr. et al., Against Sander Media, LLC, MB 13-203 (July 17, 2014), http://instituteforpublicrepresentation.org/wp-content/uploads/2014/07/KGW-Complaint-Final.pdf.
11. See ACC Licensee Complaint; see also Sander Media Complaint.
12. See id.
13. See id.; see also David Oxenford, Identification of Sponsors of Non-Candidate Political Ads May Be More Controversial This Election Season as FCC Suggests that Broadcasters May Need to Determine Who is Behind Third Party Ads, BROAD. L. BLOG (Sept. 2, 2014) (discussing the difficulties broadcasters would face in determining the “true sponsor” of third party political ads if the rules were to change), http://www.broadcastlawblog.com/2014/09/articles/identification-of-sponsors-of-non-candidate-political-ads-may-be-more-controversial-this-election-season-as-fcc-suggests-that-broadcasters-may-need-to-determine-who-is-behind-third-party-ads/.
safeguards in place that ensure adequate disclosure to the public about third-party organizations who produce political advertising. Broadcasters must have information about the organization in their public and political files, including the name of the organization, the name and phone number of the donor who buys the ad time, and the specifics of when the ad aired.\textsuperscript{15} Furthermore, it is in the broadcaster’s interest to ensure the information in third party ads is true, because unlike the FCC’s “no censorship” requirement, which protects broadcasters from liability with regard to the truthfulness of candidate ads,\textsuperscript{16} third party issue ads may subject the station to civil liability if the information in the ad is defamatory, although this is a more remote possibility.\textsuperscript{17} Thus, broadcasters must already engage in due diligence before they are presented to the public.

Third, and most importantly, extended disclosure requirements would chill political speech by providing another incentive for broadcasters to shy away from third party ads. Since they are not subject to the “no censorship” requirement,\textsuperscript{18} stations may choose to forego third party ads partially or entirely. It is foreseeable that broadcasters would choose not to publish such ads if they are required to not only diligently create a public file on the ad buy, and investigate the content of the ad for defamation, but also investigate how the organization was funded and if the structure of funding would require further disclosure.\textsuperscript{19} Thus, if the FCC places more disclosure requirements on broadcasters, it runs the risk of curbing political speech, chilling public debate, and curtailing liberty.

This Note argues that the FCC should not require television stations to further investigate PACs in order to determine the donors of organizations who buy airtime for political ads. The PACs complained of by the Sunlight


\textsuperscript{16} See 47 U.S.C. § 315 (a) (2012) (broadcasters “shall have no power of censorship over the material broadcast under the provisions of this section” and noting that the requirement of “no censorship” applies only to “legally qualified candidate[s]”); see also 47 C.F.R. §73.1940 (2015) (defining “legally qualified candidate,” which does not include corporations, unions, or non-profit organizations).


\textsuperscript{18} See 47 U.S.C. § 315 (a).

Foundation were properly registered with the FEC,\textsuperscript{20} and the FCC already has its own political advertising rules in place that require adequate disclosure of information about political issue ads and protect the public from defamatory information.\textsuperscript{21} Most importantly, requiring broadcasters to investigate donors’ contributions places an unnecessary burden on broadcasters that heightens the possibility of chilling political speech. A broadcaster may choose to forego running an ad that would enhance the risk of fines or criminal prosecution and the public would lose the value of the speech that would have been aired. Rather than focusing their energy on seeking expanded disclosure requirements from the FCC, groups like the Sunlight Foundation should focus on expanding disclosure about donations through the FEC. The FCC’s political advertising rules already require enough information in sponsorship identification and provide adequate protection against defamation from third party groups.

This Note will proceed in three parts. First, it provides background on third-party political advertising. This will start with a discussion of the \textit{Citizens United} case, the issues that arose, and the changes that were implemented. Next, it explores the rise of third-party issue ads. Then, it outlines the rules for broadcasters\textsuperscript{22} surrounding political advertising of third party groups. This section concludes with an explanation of the Sunlight Foundation complaint and the FCC’s dismissal of the issue. Second, this Note analyzes the current disclosure requirements and explores the reasons why expanded sponsorship identification requirements would be counterproductive. This section also proposes a solution for groups that seek more public disclosure from third party political organizations. Finally, this Note concludes by summarizing these major points and finding that expanded sponsorship identification requirements for broadcasters are not necessary or helpful.

II. BACKGROUND

While campaign finance has changed a great deal recently, as a result of \textit{Citizens United}\textsuperscript{23} and its progeny, the rules that guide political advertising have remained largely unchanged since the passage of the Communications Act of 1934. While some have suggested that the changes in campaign finance require more extensive disclosure rules for political advertisement

\begin{itemize}
  \item \textsuperscript{20} See Thomas Adams, \textit{NextGen Climate Action Committee Statement of Organization}, FEC ID: C00547349, FEC (filing the requisite forms to satisfy the FEC data requirements for establishing a political committee), http://docquery.fec.gov/pdf/542/13031094542/13031094542.pdf; \textit{see also} FEC, \textit{Quick Answers to PAC Questions} (guiding the interested party through the instructions and necessary form to establish a PAC). FEC Form 1, the onlye form required to start off, is 4 pages long and only covers the bare minimum of pertinent information) (last visited Jan. 13, 2016), http://www.fec.gov/ans/answers_pac.shtml#connected.
  \item \textsuperscript{21} See 47 C.F.R. Part 73.
  \item \textsuperscript{22} This Note only focuses on broadcasters, not cable stations.
  \item \textsuperscript{23} \textit{Citizens United v. FEC}, 558 U.S. 310 (2010).
\end{itemize}
broadcasting, the current rules are actually extensive and sufficient to provide viewers with adequate information about the sponsors of political advertisements.

A. Citizens United Changed the Political Campaign Landscape in Several Important Ways by Allowing Unlimited Political Expenditures by Third-Party Organizations, Corporations and Unions for the Purpose of Express Advocacy

During the 1970’s, campaign finance issues received a great deal of Congressional attention, resulting in the passage of the Federal Election Campaign Act of 1971 (“FECA”), which aimed to increase disclosure of campaign contributions and place limits on those contributions.24 FECA was later amended through the Bipartisan Campaign Reform Act of 2002 (“BCRA”), which reformed FECA by addressing soft-money contributions and electioneering communications.25 The BCRA banned national party committees and candidates from using soft money contributions, which are funds not subject to federal limits, and also curtailed issue advocacy by banning electioneering communications paid for by corporations, including non-profits that focused on single issues like abortion or the environment.26

Initially, the Supreme Court upheld BCRA’s provisions against constitutional challenges in its 2003 decision in *McConnell v. Federal Election Commission.*27 However, the Court began to strike down parts of the act in several subsequent cases that preceded **Citizens United.** Three years after upholding BCRA in *McConnell,* the Court in *Randall v. Sorell,* found that Vermont’s limits on campaign contributions were too restrictive and thus violated the First Amendment.28 One year later, the Court partially dismantled BCRA’s limit on electioneering communications through a plurality opinion in *Federal Election Commission v. Wisconsin Right to Life, Inc.,* paving the way for the proliferation of issue-advocacy advertisements by holding that the prohibition on using corporate funds to finance electioneering communications violated the corporations’ free speech rights, as applied to issue-advocacy advertisements.29 Finally, in *Davis v. Federal

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26. See id.

27. *McConnell v. FEC,* 530 U.S. 93, 142 (2003). The Court in *McConnell* found that the BCRA provision banning national political parties from using “soft money” did not violate their free speech and association rights because the governmental interest in preventing actual or apparent corruption in federal candidates was sufficient to justify contribution limits. *Id.*

28. See *Randall v. Sorrell,* 548 U.S. 230, 232 (2006) (finding that, “Contribution limits that are too low also can harm the electoral process by preventing challengers from mounting effective campaigns against incumbent officeholders, thereby reducing democratic accountability.”).

29. *FEC v. Wis. Right to Life, Inc.,* 550 U.S. 449, 452 (2007) (asserting that “the Court should give the benefit of the doubt to speech, not censorship.”).
Election Commission, the Court struck down BCRA’s “Millionaire’s Amendment,” which had allowed candidates challenging individuals who self-funded more than $350,000 to operate under relaxed donor and political party donation limits.\textsuperscript{30}

Citizens United followed the Court’s line of earlier cases by striking down another BCRA provision that limited political speech.\textsuperscript{31} Citizens United held that the government may not, under the First Amendment, suppress speech based on the speaker’s corporate identity.\textsuperscript{32} In that case, a non-profit organization, Citizens United, wanted to make a video portraying a negative view of then-Senator Hillary Clinton within thirty days of a primary.\textsuperscript{33} Doing so would have violated Section 203 of the BCRA,\textsuperscript{34} which bans the use of independent expenditures from corporations and unions for “electioneering communications.”\textsuperscript{35} The Court held that the BCRA Section 203 ban on the use of corporate treasury funds for express advocacy was unconstitutional.\textsuperscript{36}

Justice Kennedy, writing for the majority, explained the dangers of limiting corporate expenditures for express advocacy by discussing the First Amendment implications of such a ban.\textsuperscript{37} He wrote:

“Quite apart from the purpose or effect of regulating content . . . the Government may commit a constitutional wrong when by law it identifies certain preferred speakers. By taking the right to speak from some and giving it to others, the Government deprives the disadvantaged person or class of the right to use speech to strive to establish worth, standing, and respect for the speaker’s voice. The Government may not by these means deprive the public of the right and privilege to determine for itself what speech and speakers are worthy of consideration. The First Amendment protects speech and speaker, and the ideas that flow from each.”\textsuperscript{38}

\begin{itemize}
\item \textsuperscript{30}Davis v. FEC, 554 U.S. 724, 735 (2008) (finding that the Millionaire’s Amendment “impermissibly burdens his First Amendment right to spend his own money for campaign speech.”).
\item \textsuperscript{31}Citizens United, 558 U.S. at 365 (finding that BCRA § 203 violated the First Amendment political speech rights of a non-profit organization by barring the use of general treasury funds to make independent expenditures that expressly advocate the election or defeat of a candidate for federal office within 30 days of a primary election).
\item \textsuperscript{32}See id. at 365 (“We return to the principle established in Buckley and Bellotti that the Government may not suppress political speech on the basis of the speaker's corporate identity. No sufficient governmental interest justifies limits on the political speech of nonprofit or for-profit corporations.”).
\item \textsuperscript{33}See id. at 364 (noting that an electioneering communication is ‘‘any broadcast, cable, or satellite communication’’ that ‘‘refers to a clearly identified candidate for federal office’’ and is made within 30 days of a primary or 60 days of a general election.’’).
\item \textsuperscript{34}52 U.S.C. § 30,104.
\item \textsuperscript{35}See Citizens United, 558 U.S. at 364 (noting that an electioneering communication is ‘‘any broadcast, cable, or satellite communication’’ that ‘‘refers to a clearly identified candidate for Federal office’’ and is made within 30 days of a primary or 60 days of a general election.’’).
\item \textsuperscript{36}Id. at 365.
\item \textsuperscript{37}See id. at 340.
\item \textsuperscript{38}Id. at 340-41.
\end{itemize}
Thus, the Court protected Citizens United and other like organizations from content censorship, and prevented the government from chilling speech under the guise of regulating campaign finance.

Until *Citizens United*, the government essentially favored other speakers over corporations and deprived listeners of their right to determine if that corporate express advocacy was worthy of consideration. This was especially problematic to the majority in light of their holding that corporations do have First Amendment rights, and that “[c]orporations and other associations, like individuals, contribute to the ‘discussion, debate, and the dissemination of information and ideas’ that the First Amendment seeks to foster.” Thus, if corporations are banned from engaging in political speech, then the public misses out on information and opinions that could shape individuals’ electoral decisions. In addition, Justice Kennedy warned of the chilling effect on speech if more rules are applied to organizations wishing to engage in political speech, writing that, “[a]s additional rules are created for regulating political speech, any speech arguably within their reach is chilled.”

The Court, however, did not invalidate provisions of the BCRA that required disclosure of donations. The Court justified disclaimers and disclosures of advertising sponsorship, finding that, “[a]t the very least, the disclaimers avoid confusion by making clear that the ads are not funded by a candidate or political party,” and “disclosure permits citizens and shareholders to react to the speech of corporate entities in a proper way.”

The Court supported more transparency in the political process, and found disclosure to be in line with the First Amendment because it “is a less restrictive alternative to more comprehensive regulations of speech.” Justice Kennedy also emphasized that effective disclosures of sponsorship would be aided by the rapid advances of the Internet, noting: “With the advent of the Internet, prompt disclosure of expenditures can provide shareholders and citizens with the information needed to hold corporations and elected officials accountable for their positions and supporters. Shareholders can determine whether their corporation’s political speech advances the corporation’s interest in making profits, and citizens can see whether elected officials are ‘in the pocket’ of so-called moneyed interests.”

Thus, inherent in the value of disclosures is the assumption that these disclosures, through public files and the like, would inform the electorate of the sources of funding responsible for the political ads on the air and the
advent of the Internet would make information about corporations engaged in express advocacy further available to those viewers who chose to undertake further research.\textsuperscript{48} These effective disclosures would provide the electorate with information that would prevent the appearance of corruption without limiting the First Amendment rights of organizations that engaged in political speech.

**B. Since Citizens United, There Has been a Proliferation of Issue Advocacy Campaigns**

Through \textit{Citizens United} and its preceding cases, the Court paved the way for more political speech from corporations and non-profit entities. The decision changed the landscape of political advertising dramatically, and was incredibly controversial. \textit{Citizens United} had a substantial impact on the elections that followed. Since the ruling, outside groups spent significantly more on elections, and the cost of running a campaign soared.\textsuperscript{49} Further, several subsequent cases that followed \textit{Citizens United} also helped to change the landscape of political campaigning.

In \textit{SpeechNow.org v. Federal Election Commission}, the District of Columbia Circuit held that a provision of FECA limiting individual contributions to political committees that only made independent expenditures (i.e., express advocacy not made in conjunction with a candidate or political party) violated the First Amendment principles established in \textit{Citizens United}.\textsuperscript{50} The Court further noted that, “the government has no anti-corruption interest in limiting contributions to an independent expenditure group such as SpeechNow.”\textsuperscript{51} This decision paved the way for the creation of “Super PACs” or “independent expenditure only groups.”\textsuperscript{52}

Traditional PACs, or separate segregated funds (“SSFs”), are political arms of corporations, labor unions, membership organizations, or trade associations.\textsuperscript{53} These political committees can solicit donations from individuals associated with the parent organization.\textsuperscript{54} However, PACs are limited in the amounts that they can give to candidates and political parties,
and can only receive a limited amount in donations from individuals.\textsuperscript{55} Specifically, traditional PACs can only contribute $5,000 to each candidate per election, and can only receive $5,000 annually from individuals, among other requirements established by FECA.\textsuperscript{56} Super PACs, by contrast, can raise unlimited sums, not only from individuals, but also corporations, unions, and associations.\textsuperscript{57} Super PACs can also spend unlimited sums on independent expenditures, which advocate directly for or against a candidate.\textsuperscript{58} Both PACs and Super PACs must disclose their donors to the FEC.\textsuperscript{59}

Because of their unlimited spending abilities, Super PACs have come to dominate the modern American political campaign. After \textit{Citizens United} and \textit{SpeechNow}, about eighty Super PACs immediately formed and spent $90.4 million, with more than $60 million spent on advocating for or against specific candidates.\textsuperscript{60} During the 2012 cycle, Super PACs raised about $826 million and spent $799.2 million.\textsuperscript{61} The number of Super PACs jumped from eighty during the 2010 cycle to nearly eight hundred during the 2012 cycle, although only about four hundred and fifty were active in fundraising.\textsuperscript{62} In 2010, these organizations spent about $65.8 million on independent expenditures that directly supported or opposed federal candidates, and spent nearly $620.9 million doing the same in 2012.\textsuperscript{63} The spending was also far more likely to oppose rather than support a candidate.\textsuperscript{64} During the 2014 election cycle, Super PACs accounted for nineteen percent of state-level political ad dollars, which translated to approximately 30,000 more political ads than in 2010.\textsuperscript{65}

\textbf{C. The FCC Regulates Political Speech Through a Series of Rules for Radio, Broadcast Television and Cable}

The FCC has a great deal of sponsorship disclosure rules for political programming, all of which were upheld in \textit{Citizens United} and its progeny.\textsuperscript{66} Broadcasters have been subject to some form of sponsorship-identification

\begin{itemize}
\item \textsuperscript{55} \textit{Id.}
\item \textsuperscript{56} \textit{Id.}
\item \textsuperscript{57} \textit{See Garrett, supra} note 53, at 3-4.
\item \textsuperscript{58} \textit{Id.}
\item \textsuperscript{59} \textit{Id.}
\item \textsuperscript{60} \textit{Id. at} 13.
\item \textsuperscript{61} \textit{Id.}
\item \textsuperscript{62} \textit{Id. at} 14.
\item \textsuperscript{63} \textit{Id. at} 15.
\item \textsuperscript{64} \textit{Id. at} 16.
\item \textsuperscript{65} \textit{Baye, supra} note 8.
\item \textsuperscript{66} \textit{See Citizens United}, 588 U.S. at 366 (finding that BCRA provisions that required televised electioneering communications to include a disclaimer identifying the person or entity responsible for the content of the advertising, as well as provisions that required any person spending more than $10,000 on electioneering communications to file a disclosure statement with the FEC did not violate the First Amendment protection of political speech).  
\end{itemize}
requirements since the passage of the Radio Act of 1927. The goal of these early requirements was to prevent radio stations from disguising advertising as program content, not to impose significant investigation obligations on broadcasters.

Section 19 of the Radio Act of 1927 provided guidance on sponsorship identification, stating that:

All matter broadcast by any radio station for which service, money, or any other valuable consideration is directly or indirectly paid, or promised to or charged or accepted by, the station so broadcasting, from any person, firm, company, or corporation, shall, at the time the same is so broadcast, be announced as paid for or furnished, as the case may be, by such person, firm, company, or corporation.

Although the Federal Radio Commission, and its successor, the FCC, did not deal with sponsorship identification in their initial supervision of radio, the provision still made its way into the Communications Act of 1934, with only minimal changes in language. The current provision, Section 317, which governs sponsorship identification, states:

“[a]ll matter broadcast by any radio station for which service, money, or any other valuable consideration is directly or indirectly paid, or promised to or charged or accepted by, the station so broadcasting, from any person, shall, at the time the same is so broadcast, be announced as paid for or furnished as the case may be, by such person.”

This is the most basic rule of sponsorship identification, which serves to inform the public of the funding source behind advertisements on radio and television.

Section 317 also contains a “reasonable diligence” standard, in which it requires broadcasters to gather “information to enable such licensee to make the announcement required by this section,” from its employees and others with whom it deals. However, the “reasonable diligence” requirement, like the requirements in the Radio Act of 1927, does not require a significant investigation on the part of the broadcaster to determine the

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69. See Loveday v. FCC, 707 F.2d 1443, 1451 (D.C. Cir. 1983) (explaining that “[t]he legislative history of the Radio Act of 1927 shows that the sponsorship identification provision imposed only a very limited obligation upon broadcasters: to announce that a program had been paid for or furnished to the station by a third-party and to identify that party. We have neither found nor been pointed to any indication that Congress contemplated that section 19 might require broadcasters to investigate whether a party purchasing commercial time was acting on his own behalf or as an agent for someone else.”).
70. Kielbowicz, supra note 68, at 334.
71. Id. at 335.
72. 47 U.S.C. § 317 (2012). This requirement applies to television and radio. See id. Cable operator-originated programming was incorporated into this requirement through 47 C.F.R. § 76.1615 in 1969. See Kielbowicz, supra note 68, at 334.
truthfulness of the sponsor’s statements in buying the ad time. 74 As noted by the District of Columbia Circuit in Loveday v. FCC:

“Congress' ratification of these Commission regulations did not impose any burden of independent investigation upon licensees. We have seen that the language of section 317, of itself, does not do so, and it is equally plain that the regulations do not. Subsection (c) of the regulations requires disclosure by the licensee but does not require investigation. The inference that the licensee is required to disclose only what he knows without investigation is fortified by the further statement in subsection (c) that where an agency relationship exists “and such fact is known to the station,” the licensee must identify the principal rather than the agent.” 75

The Loveday Court made clear that the requirement of “reasonable diligence” does not place an investigatory burden on broadcasters, but merely ensures that the station is disclosing what it actually knows about the sponsor paying for the ad. 76 In the interest of not placing an excessive burden on broadcasters, Section 317 also provides an avenue for the FCC to waive the requirement of a sponsorship announcement if, “in any case or class of cases with respect to which it determines that the public interest, convenience, or necessity does not require the broadcasting of such announcement.” 77

As advertising expanded throughout the mid-twentieth century, the FCC took a renewed interest in disclosure laws following several scandals surrounding political programming. 78 As a result, the FCC promulgated a new regulation to guide the enforcement of Section 317 in 1944. 79 The initial rules, which remain largely unchanged today, include the requirement that stations denote the nature of support received from the sponsor. 80 For programs with corporate sponsors, or other similar groups, the station had to supply the source, as well as a public file with information about the organization’s leaders. 81 Later, after the payola scandals in the 1950s, in which record promoters paid radio stations to play certain music on the air without the public’s knowledge, Congress amended Section 317 to criminalize non-disclosure of the true sponsor and extended the requirement to station employees. 82

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74. Loveday, 707 F.2d at 1454.
75. Id.
76. See id.
77. 47 U.S.C § 317 (a)(2)(d).
78. Kielbowicz, supra note 68, at 338. During the Presidential election of 1944, both parties created ads to be distributed for radio. Id. However, some stations labeled the ads “political announcements,” and did not identify the sponsor. Id. After a complaint, the FCC reminded stations that Section 317 applied to political advertisements, and then issued further rules to guide the enforcement of the section. Id.
79. See id. at 342; see also 47 C.F.R. § 73.1212 (2015) (containing the current administrative rules which guide sponsorship identification).
80. See 47 C.F.R. § 73.1212.
81. Kielbowicz, supra note 68, at 342.
82. See Levi, supra note 7, at 136 (explaining the scope of Section 317 and the development of criminal sanctions for non-disclosure after the payola scandals).
The current rules that guide sponsorship identification stipulate that when a station is provided “money, service, or other valuable consideration [that] is either directly or indirectly paid or promised to, or charged or accepted by such station,” then the station shall announce, “that such matter is sponsored, paid for, or furnished, either in whole or in part.” The rules also require that the sponsorship announcement shall:

“fully and fairly disclose the true identity of the person or persons, or corporation, committee, association or other unincorporated group, or other entity by whom or on whose behalf such payment is made.”

Furthermore, when an agent makes arrangements with the station on behalf of another person, and the fact is known to the station “by the exercise of reasonable diligence,” then the announcement should include the name of the person or persons who are sponsoring the commercial, not the agent.

The rules also require that a station maintain a public file, containing information about political ads that viewers and other individuals can access.

“Where the material broadcast is political matter or matter involving the discussion of a controversial issue of public importance and a corporation, committee, association or other unincorporated group, or other entity is paying for or furnishing the broadcast matter, the station shall, in addition to making the announcement required by this section, require that a list of the chief executive officers or members of the executive committee or of the board of directors of the corporation, committee, association or other unincorporated group, or other entity shall be made available for public inspection.”

Shortly after the rules were adopted, the FCC considered a complaint that prompted clarification of what was “reasonable” with respect to investigating the true identity of a person or persons that paid for broadcast time. The FCC found that whether a broadcaster’s investigation is “reasonable” requires a case-by-case determination. The FCC further noted that the possible difficulty in identifying the true sponsor “does not justify a station licensee in adopting a general rule that it will not make time available for the discussion of controversial subjects or for broadcasts by duly qualified candidates for public office.”

There are additional requirements for ad time devoted to candidates for public office. Specifically, broadcasters are bound by an equal

84. 47 C.F.R. § 73.1212(e) (2015).
85. Id.
86. See id.
87. Id.
89. See id. (explaining an example that would require further broadcaster investigation as follows: “[f]or example, if a speaker desires to purchase time at a cost apparently disproportionate to his personal ability to pay, a licensee should make an investigation of the source of the funds to be used for payment.”).
90. Id.
opportunities requirement, a censorship prohibition, and an allowance of station use requirement. Stations are required to allow all legally qualified candidates for public office to use their station for advertisements. The station is also required to afford equal opportunities for ad time to all other candidates for that office. Furthermore, the station has no power to censor the material that the candidate puts forth, and must air the ads as they receive them.

Broadcasters must also maintain, for public inspection, a political record of broadcast time that is made by a legally qualified public office candidate, or broadcast time that “communicates a message relating to any political matter of national importance,” including messages that relate to a legally qualified candidate, election to federal office, or an important national legislative issue. Political files must contain detailed information, added immediately and maintained online for two years, including information such as the rate charged for the broadcast time, the time the ad is aired, the candidate to which the ad refers and the office sought by that individual, as well as information about the purchaser such as the name, address, and a list of executive officers if it is an organization purchasing the time.

The FCC created new rules for the political file requirement in 2012, which enhance the transparency in disclosure. The FCC rules require major television broadcasters affiliated with ABC, CBS, Fox, and NBC networks in the top 50 designated market areas to post their political file date on the FCC’s website, and this regulation took effect on August 2, 2012. Other stations were required to join in this requirement by July of 2014.

93. Id.
94. Id.
95. Id.
96. Id.
98. See 47 U.S.C. § 315(e)(2) (2012). The full list of requirements states that the political file must contain the following: “(A) whether the request to purchase broadcast time is accepted or rejected by the licensee; (B) the rate charged for the broadcast time; (C) the date and time on which the communication is aired; (D) the class of time that is purchased; (E) the name of the candidate to which the communication refers and the office to which the candidate is seeking election, the election to which the communication refers, or the issue to which the communication refers (as applicable); (F) in the case of a request made by, or on behalf of, a candidate, the name of the candidate, the authorized committee of the candidate, and the treasurer of such committee; and (G) in the case of any other request, the name of the person purchasing the time, the name, address, and phone number of a contact person for such person, and a list of the chief executive officers or members of the executive committee or of the board of directors of such person.” Id.
100. See GARRETT, supra note 99, at 10-11.
101. Id.
Overall, the rules that guide political broadcasting are quite extensive, especially in the realm of online public and political files. Broadcasters must make available a great deal of information about sponsors who purchase airtime, whether that sponsor is an organization, a candidate, or a political party, even when the viewer only sees a small disclaimer on the screen during the ad. This is required because, as the FCC put it in 1946, “[a] listener is entitled to know when the program ends and the advertisement begins.”

D. Several Organizations Sent Complaints to the FCC Regarding Compliance with the Sponsorship Identification rules for Political Advertising

In July 2014, the Sunlight Foundation, Common Cause, and the Campaign Legal Center filed two complaints against two television stations, which ran ads funded by Super PACs that were entirely funded by one person. The complaints allege that the stations violated Section 317 of the Communications Act, as well as Section 73.1212 of the FCC’s rules by not “fully and fairly disclosing the true identity” of the ads’ sponsors or using reasonable diligence to obtain information about the sponsors.

The first complaint concerned ads that aired on WJLA-TV in Washington D.C. in September and October of 2013. The ads were sponsored by NextGen Climate Action Committee Super PAC, and contained the required sponsorship identification at the end of the commercial to indicate the Super PAC’s sponsorship, as well as the website where viewers could find out more information about NextGen. The ads negatively portrayed then-Virginia gubernatorial candidate, Ken Cuccinelli as a corrupt individual who accepted lavish gifts and helped an out-of-state energy company avoid paying for drilling on Virginians’ land.


103. Compl. of Campaign Legal Ctr. et al., Against ACC Licensee, LLC, MB 13-203 (July 17, 2014) [hereinafter Compl. Against ACC Licensee], http://apps.fcc.gov/ecfs/comment/view;ECFSSESSION=8KLGW1sK81JgTeR2s6chBFyysdRFvsVThh1pVnJ0WQ1p6JmfRLr1l9517216651-1566059965?q=id=6018182311; Compl. of Campaign Legal Ctr. et al., Against Sander Media, LLC, MB 13-203 (July 17, 2014) [hereinafter Comp. Against Sander Media], http://instituteforpublicrepresentation.org/wp-content/uploads/2014/07/KGW-Complaint-Final.pdf.

104. See Compl. Against ACC Licensee, MB 13-203, at 1-2; see also Compl. Against Sander Media, MB 13-203, at 2.


106. See id. at 5-6. The second ad’s disclaimer reads: “PAID FOR BY NEXTGEN CLIMATE ACTION COMMITTEE, WWW.VACLIMATEVOTERS.ORG.”

107. See id. at 4-6.
The complaint alleged that WJLA did not disclose the “true identity” of the sponsor as required by the FCC because Tom Steyer, NextGen’s founder, not NextGen as an organization, was the true identity that should have been portrayed on the ad. The complaint further alleged that WJLA failed to exercise reasonable diligence because they did not research NextGen to find out that Steyer was the only donor, and thus failed to publish Steyer’s name in the ad as its sponsor. As evidence of the station’s lack of reasonable diligence, the complaint pointed to a WJLA news report that talked about Steyer’s funding of a Super PAC, readily available information from FEC disclosures, and NextGen’s website, which indicated Steyer’s fundamental role in the Super PAC.

The Sander Media complaint concerned ads that aired on KGW in Portland, Oregon between May 5 and May 19, 2014. The ads were placed by the American Principles Fund, a Super PAC founded and primarily funded by Sean Fieler, a New York hedge fund manager. The ad in question attacked then-Senate candidate Monica Wehby for not being as conservative as another candidate, Jason Conger. The ad contained the required sponsorship disclosure at the end; stating, “American Principles Fund is responsible for the content of this advertisement.” Similar to the WJLA complaint, the KGW complaint alleges that the station neither identified the true sponsor, whom it believed to be Sean Fielder, nor engaged in reasonable diligence, because this information was readily available from the group’s FEC filings.

Both complainants contend that, “[w]hen an organization has a single donor, that organization represents the will and opinion of only that single donor because that person controls the purse strings.” Thus, the complaints conclude that it is misleading to tell the public that an organization, rather than a natural person, is sponsoring a political ad, because then the public is clueless that the ad is funding an individual’s political agenda.

The FCC found that there was not a “sufficient showing that the stations had credible evidence casting into doubt that the identified sponsors

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108. See id. at 6-8.
109. See id. at 8-10.
110. See id.
111. See Compl. Against Sander Media, supra note 107, at 2.
112. See id. at 4. Fielder represented 98.6% of the Super PAC’s donations.
113. See id. at 4-5.
114. See id. at 6. The disclaimer reads: “AMERICAN PRINCIPLES FUND IS RESPONSIBLE FOR THE CONTENT OF THIS ADVERTISING. PAID FOR BY AMERICAN PRINCIPLES FUND. NOT AUTHORIZED BY ANY CANDIDATE OR CANDIDATE’S COMMITTEE.”
115. See id. at 6-9.
116. See Compl. Against ACC Licensee, at 7; see also Compl. Against Sander Media, at 7.
117. See Compl. Against ACC Licensee, at 7-8; see also Compl. Against Sander Media, at 7-8.
of the advertisement were the true sponsors."¹¹⁸ Further, the FCC essentially denied the reasonable diligence claim even though they found the complaint against WJLA presented some evidence that WJLA had knowledge about the relationship between Tom Steyer and NextGen Climate Action Committee in stating, “we exercise our discretion not to pursue enforcement in this instance, given the need to balance the ‘reasonable diligence’ obligations of broadcasters in identifying the sponsor of an advertisement with the sensitive First Amendment interests present here.”¹¹⁹ The FCC however, did note that their approach may have been different if the complainants had notified the stations of the true sponsors.¹²⁰ Thus, the FCC left the question of further sponsorship identification requirements for single-donor and primarily single-donor super PACs, where the licensee has actual notice that an individual is sole-funder of an organization open-ended. While the FCC considered the actual knowledge of the broadcaster, it also carefully tiptoed around the First Amendment issues at play.

III. ANALYZING THE FCC’S SPONSORSHIP IDENTIFICATION RULES: WHY LESS IS MORE

The current rules guiding broadcasters in sponsorship identification are sufficient to provide adequate disclosure of political ad sponsors. The complaints from Sunlight Foundation, Common Cause, and the Campaign Legal Center problematically seek to place an vague investigatory burden on broadcasters to question the legitimacy of properly FEC registered organizations by insisting that their organization should not be the only disclaimer in the ad. Requiring further on-air disclosure would be unnecessary, given the existing requirements of the public and political files. Viewers already have access to information about the ad buy, the donations to the organization, and further information readily available on the organization’s website. Furthermore, it is already in the best interest of the station to only responsibly air third party issue ads because those ads are not subject to the no censorship rule, and broadcasters can be liable for defamatory information contained in those ads. Most importantly, further requirements for disclosure would have the negative effect of chilling political speech because forcing broadcasters to further investigate third party ads that were the product of Super PACs would provide an incentive to simply not air such ads. Some stations may even refuse to air any third party ads, as some already do.

This result would be contrary to the goals of the FCC, as noted in its response to the above complaints, as well as the Supreme Court in Citizens United. Protecting political speech is of the utmost importance, and since the current regulations provide sufficient transparency in political advertising,

¹¹⁹ Id.
¹²⁰ Id.
further requirements are unnecessary. The FCC should not require individual donors of third party organizations, like PACs or Super PACs, to be identified on air as sponsors of political advertisements. Under Section 317(d) of the Communications Act of 1934, the FCC can waive the announcement requirement in cases in which it “determines that the public interest, convenience, or necessity does not require the broadcasting of such announcement.” While these three considerations would not support removing sponsorship identification here, they do weigh against further requirements on broadcasters with regard to political advertising from third parties.

Furthering the sponsorship identification requirements for third party ads would first be inconvenient to broadcasters, as it would put them in an inappropriate and seemingly vague investigatory role, even where they have no legitimate reason to believe that the named sponsor is not the true sponsor of the ad. This lack of clarity would dis-incentivize broadcasters from airing Super PAC ads. Furthermore, it is unnecessary to publish the names of individual donors, even where there is only one principal donor to the organization, because that information is readily available to individuals on the station’s political file, the organization’s FEC disclosures, or even other easily searchable alternatives. Lastly, the public interest in protecting political speech weighs against further requirements because of the chilling effect it would have on political speech. Stations may decide not to run third party ads if they run the risk of being non-compliant by not researching and publishing donor names. Further, organizations may be less likely to engage in political speech if they fear that donor names would become the entire focus of their advocacy, as opposed to the organization’s message. Ultimately, necessity, convenience, and the public interest favor the sponsorship identification requirements that are already in place.

A. The FCC Should Not Require Broadcasters to Publish Individual Donor Names in Sponsorship Identification for Political Advertisements Because Such a Requirement Would be Inconvenient for Both Broadcasters and Organizations That Wish to Engage in Political Speech

The FCC should not require broadcasters to add individual donor names to its sponsorship identification because such a requirement would place an inappropriate investigative burden on broadcasters that would conflict with their normal duties.

Section 317 of the Communications Act requires that broadcasters engage in “reasonable diligence” when attempting to ascertain information from individuals and organizations wishing to publish political issue ads.122

121. 47 U.S.C § 317(d) (2012).
122. See 47 U.S.C. § 317(a)(2)(c) (2012) (requiring that the broadcaster “shall exercise reasonable diligence to obtain from its employees, and from other persons with whom it deals
However, this requirement has not been construed to require a great deal of investigation on the part of the broadcaster.123 In further defining the reasonable diligence requirement, the FCC found that broadcasters must fully and fairly disclose the true identity of the sponsor,124 but that a “reasonable” investigation could only be determined on a case-by-case basis.125 The example the FCC provided for a situation that required more investigation than simply gathering information from the sponsor was when “a speaker desires to purchase time at a cost apparently disproportionate to his personal ability to pay.”126 Thus, the FCC placed a limited duty on broadcasters, primarily requiring them to gather information from the sponsor and take them at their word, provided that there were no obvious signs of deceit.

Adding to the reasonable diligence requirements of Section 317 would be inconsistent with FCC precedent, because it would require the broadcaster trying to air the ad to investigate a properly FEC registered organization, regardless of signs of deceit. The burden would come in the form of changing the broadcaster’s role from a business accepting bids for air time to an investigator of an organization’s funding and a judge of who is fit to censor content which contains political speech. In *Loveday*, the District of Columbia Circuit noted that, “Section 317 can hardly have been designed to turn broadcasters into private detectives.”127 Doing so would require them to engage in activities they are not equipped to handle, like “subpoena[ing] documents or compel[ling] the attendance of witnesses.”128 Because broadcasters are not investigators nor judges, they should not be burdened with the task of determining which donors need to be disclosed on air, or questioning legitimate organizations whose only goal is exercise their right to engage in political speech. In fact, there is already an organization which authorizes these organizations and requires them to submit information about their donations. Broadcasters should not be doing the FEC’s job.

Further sponsorship identification requirements would also inconvenience both broadcasters and organizations wishing to engage in political speech by delaying or even prohibiting their ad from airing. By making broadcasters investigate each organization that wishes to buy ad time, “the result would be to judicialize the process of being allowed to utter a political statement.”129 If the broadcaster is required to investigate every organization, then the broadcaster must take the time to conduct such an investigation directly in connection with any program or program matter for broadcast, information to enable such licensee to make the announcement required by this section.”).123. *See Loveday*, 707 F.2d at 1454 (finding that “Congress’ ratification of these Commission regulations did not impose any burden of independent investigation upon licensees.”).  
124. *See 47 C.F.R. § 73.1212(e) (2012).*  
126. *Id.*  
127. *Id.* at 1457.  
128. *Id.* (noting that “Broadcast companies are not grand juries.”)  
129. *Id.*
investigation, and the organization buying the ad time runs the risk of their ad being delayed, and even not run at all.\footnote{130}{See id. (finding that, “Congress cannot be presumed to have intended to place that burden, expense, and delay upon political speech. In the absence of such cooperation by the parties with whom stations deal, the alternative would be a field investigation by agents of the stations, involving requests for documents and interviews and, perhaps, observation of suspected persons.”).}

In their complaints to the FCC about the single-donor Super PACs, Sunlight Foundation and the other organizations essentially fault the television stations for not being investigators into the “true” sponsors of the ads in question.\footnote{131}{Compl. of Campaign Legal Ctr. et al., Against ACC Licensee, LLC, MB 13-203 (July 17, 2014), http://apps.fcc.gov/ecfs/comment/view;ECFSSESSION=8KLGW1sK81JgTcR2s6chlBFyys dRFvSVTh1pVnJ0WQ1p6JfmRLr!1951721665!-1566059965?id=6018182311; Compl. of Campaign Legal Ctr. et al., Against Sander Media, LLC, MB 13-203 (July 17, 2014), http://instituteforpublicrepresentation.org/wp-content/uploads/2014/07/KGW-Complaint-Final.pdf.}

Particularly in the NextGen Climate Action complaint, the complainants point to the station’s own news program covering Tom Stayer’s involvement in the Super PAC as proof that they should have known he was the true sponsor, and thus should have published his name.\footnote{132}{See Compl. Against ACC Licensee, at 8-9.} This argument ignores an important possibility: maybe the broadcaster \textit{did} know about Stayer, but, knowing that NextGen was a legitimate organization, found no reason to question its purchase of ad time or require further sponsorship identification. Expanding the sponsorship identification requirement wouldn’t necessarily require a broadcaster to go to extraordinary lengths to find out about the donation structure of a Super PAC, as this information is available in many places. But this requirement is still inconvenient because it puts the broadcaster in a role it has not been in as a constant investigator and judge, and a role where there is already another federal agency to do that job.

In order to exercise due diligence, the complainants would have required the stations to supplant information that is already provided by the FEC and question legitimate organizations in order to ensure that individuals, rather than organizations, appear as sponsors.\footnote{133}{See id.} Without more indicia of deceit by the organization, this kind of inquiry is not required by Section 317, and is inconvenient for the broadcaster. Thus, requiring further investigation from broadcasters would be inconvenient because broadcasters are not investigators nor judges.
B. The FCC Should Not Require Broadcasters to Publish Individual Donor Names in Sponsorship Identification for Political Advertisements Because Such a Requirement is Unnecessary Given the Current Public File Requirements and the Readily Available Nature of the Information

It is unnecessary to publish individual donor names on the ads because announcing the name of the Super PAC behind the ad provides sufficient information to viewers who may want to determine the organization’s purpose in funding that commercial. For additional information about the organization behind the political ad, viewers are able to access the broadcaster’s public file for information on the ad, the FEC filings on the organization, or simply use an Internet search to easily obtain the information.

Broadcasters are required to keep additional information that is not aired in political ads in a file, which can be viewed by the public online. The broadcaster must publish a great deal of information about the ad and the organization, including the name of the candidate the ad concerns, the name of the person and organization purchasing the ad time, the contact information for the organization, and a list of the chief executive officers of the organization. Armed with only the name of the organization behind the ad in the television disclosure, viewers are able to search for the organization online, access its FEC donation disclosures, and view the station’s political file on that organization, which would contain pertinent information such as the name of the person who purchased the time, the contact information for the organization, and a list of the chief executive officers for the organization.

The complainants seem to contend that the broadcasters were not reasonably diligent in researching the Super PACs behind the ads because the name of the groups’ sole donors were not disclosed in the ad itself. But, as discussed above, the broadcasters may have had the information, but did not think it was their role to investigate a legitimate organization. Additionally, the broadcasters may have concluded that it was unnecessary to put the donor name in the ad because the information was so obvious and widely available. For example, through WJLA’s public file on Next Gen,

136. See id.
137. See Compl. Against ACC Licensee, at 8-10; see also Compl. Against Sander Media, at 8-9.
the FEC disclosures, and NextGen’s own website, it is very easy to see that Tom Steyer plays a central role in the Super PAC. Because that information is so easy to obtain, it is similarly easy for viewers to find that information, and thus they are not “misled,” as the complaints claim, if the ad they see only contains NextGen as the sponsor.

The complaints in question simply do not target the correct problem, nor do they identify the correct remedy. Rather than lobbying the FCC to expand its disclosure requirements, it may be more worthwhile to make sure the FCC keeps broadcasters diligent about their existing responsibility to maintain thorough public files, which can be utilized by the public to gain more information about the organizations that run ads on a particular station. Because broadcasters are required to keep pertinent information about political ads and organizations behind them in their public files, it is unnecessary to require the broadcaster to provide this information in the sponsorship identification.

C. The FCC Should Not Require Broadcasters to Publish Individual Donor Names in Sponsorship Identification for Political Advertisements Because Such a Requirement Would be Contrary to the Public Interest in Encouraging and Airing Political Speech

Lastly, and most importantly, the public interest in protecting political speech weighs against requiring broadcasters to publish individual donor names. Stations already have the discretion to decide whether or not to publish third-party non-candidate political ads, because there is no requirement to run those ads, unlike ads that come directly from candidates. Putting an extra burden on broadcasters to investigate the individuals who fund these ads provides another disincentive to broadcasters who might consider airing these ads. If the barriers to PACs wishing to have their political speech heard through broadcasting are too high, then the FCC would be chilling political speech.

The regulations currently guiding broadcasters when publishing political ads weigh heavily in favor of broadcasting such material. In the case

139. See FEC, ITEMIZED INDIVIDUAL CONTRIBUTIONS - NEXTGEN CLIMATE ACTION COMMITTEE (July 9, 2014) (providing a list of itemized individual contributions), http://www.fec.gov/fecviewer/CandCmteTransaction.do
140. See NextGen Climate (Apr. 9, 2015), https://nextgenclimate.org/.
142. See 47 U.S.C. 315(a) (noting that the requirement of “no censorship” applies only to “legally qualified candidate[s]”); 47 CFR §73.1940 (defining “legally qualified candidate,” which does not include corporations or non-profit organizations); see also Oxenford, supra note 16.
of candidates’ ads, broadcasters are required to give access to the airwaves and are prohibited from censoring content put forth by candidates and their respective committees.143 Even though other types of political ads are not included in this “no censorship” requirement, the FCC has still noted that sponsorship identification difficulties do not “justify a station licensee in adopting a general rule that it will not make time available for the discussion of controversial subjects.”144

However, unlike candidate ads, third party political ads carry extra responsibilities for the broadcaster. In addition to sponsorship identification requirements, the broadcaster carries liability if the content in the ad is untrue or defamatory.145 This requirement helps to ensure that broadcasters are careful in putting forth truthful and useful political commentary for the public. Thus, there is no need to require broadcasters to further investigate organizations behind these ads because they already have a duty to do so.

If sponsorship identification requirements were extended, political speech would be chilled in the process. Because broadcasters have a choice not to air political ads that are not from candidates, they may choose not to publish certain ads if it appears that investigating the organization behind that ad would entail too many expenses or too much time. The result of this kind of determination would be the censorship of political speech that would be useful to the public when they are making decisions in voting. Broadcasters engaging in this type of censorship would contradict the Supreme Court’s policy in Citizens United, which sought to extend political speech to more organizations.146 Broadcasters would be engaging in identifying “preferred” political speakers, based on their ability to be investigated, rather than by the speech they are engaging in.

If sponsorship identification requirements were extended for stations, like those in the complaints, then the broadcasters may have chosen not to air ads from Super PACs that were funded primarily by one person. Even though the Super PACs were properly registered with the FEC and sought to publish truthful information about candidates for office to the public, they could have been censored simply because their organization would have required too much investigation. The public would have then lost out on a political ad that helped them make their voting decision, and the Super PAC would have lost its ability to engage in political speech. Because extending sponsorship identification requirements goes against the public interest in encouraging and airing political speech, then the FCC should not make extra sponsorship identification requirements for broadcasters.

145. See 47 U.S.C. 315(a) (noting that the requirement of “no censorship” applies only to “legally qualified candidate[s]”); 47 CFR §73.1940 (defining “legally qualified candidate,” which does not include corporations or non-profit organizations); see also Oxenford, supra note 16.
IV. CONCLUSION

Political advertising has seen amazing changes since *Citizens United*. More organizations are able to effectively fundraise from individuals and make independent expenditures in the interest of advocating for or opposing a candidate for public office. These organizations have spent a great deal of money on ads that inform the public about the candidates for whom they may consider voting. What has not changed are the FCC’s regulations regarding political issue ads. Broadcasters still carry the same responsibilities, and are thus not overburdened with the influx of these kinds of ads.

However, if the FCC were to extend its sponsorship identification requirements to address some of the complaints it has received, the result would be an extra investigatory burden on broadcasters, a limit on political speech for the organizations trying to buy ad time, and a loss of useful political information for the public. Because of these problems, the FCC should not require television stations to further investigate PACs in order to determine the “true” sponsors of political ads. The requirements of the FCC are already sufficient to ensure that there is transparency in the political advertisement process. Furthermore, requiring more extensive disclosure would cut against the convenience, necessity, and public interests that the FCC has in protecting political speech. To extend the sponsorship requirements would only help to abolish the liberty of political speech, and cut off essential access to the airwaves just because some see the donors behind them as destructive.