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Can You Hear Me Now? The Race to Provide America with Universal, High-Speed Wireless Coverage

Dina Neda Rezvani

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CAN YOU HEAR ME NOW? THE RACE TO PROVIDE
AMERICA WITH UNIVERSAL, HIGH-SPEED WIRELESS
COVERAGE

Dina Neda Rezvani^{*}
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ABSTRACT

As the United States becomes increasingly dependent on universal, high-speed wireless services, infrastructural limitations are producing tension. The interests of consumers, telecommunications companies, state and local authorities, and businesses, as well as national security, are all at stake. Yet legal uncertainty stemming from a split among federal circuit courts hampers the development of solutions. The courts diverge on the interpretation of a key provision of the Telecommunications Act (TCA), 47 U.S.C. § 332(c)(7)(B), that regulates wireless service providers' ability to erect new towers. There is great need for a national standard to give mobile providers a uniform means of accommodating growing demand. Without such a standard, courts apply the TCA incongruently, affecting consumers and providers alike and ultimately impacting critical infrastructure. The Federal Communications Commission or Congress should set a uniform standard, rather than relying on the courts to confront the issue unevenly on a case-by-case basis.

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TABLE OF CONTENTS

Introduction.....	116
I. The Telecommunications Act.....	122
A. The Act.....	122
B. The Legislative History.....	123
II. The Circuit Split.....	125
A. Showing a “Significant Gap” in Coverage.....	126
1. The “One-Provider Rule”.....	126
2. The “Multiple-Provider Rule”.....	127
A. Showing Necessity.....	129
1. The “Least Intrusive” Standard.....	130
2. The “No Viable Alternatives” Standard.....	131
III. The Stakes.....	132
Conclusion.....	133

INTRODUCTION

Today’s mobile phones are revolutionizing the way we live: from our phones we can summon street views of towns across the globe, turn off the lights in our homes while sitting in an airport lounge, or broadcast a television show from the previous night while commuting by train. The advanced data-transmitting technology that powers this revolution depends on the availability of massive bands of radiofrequency waves, collectively referred to as “spectrum,” for its survival.

Demand for data is rapidly increasing. Approximately 88% of adults in the United States—some 315.5 million people—subscribe to mobile services.¹ As of 2011, nearly one-third of U.S. households use mobile phones instead of landlines for voice access.² Moreover, approximately 17% of mobile phone users rely

¹ Lee Rainie, *The State of Mobile Connectivity*, PEW INTERNET & AM. LIFE PROJECT (Aug. 15, 2012), <http://www.pewinternet.org/Presentations/2012/Aug/The-State-of-Mobile-Connectivity.aspx>.

² Stephen J. Blumberg & Julian V. Luke, *Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January–June 2011*, NAT’L CTR. FOR HEALTH STATISTICS AT THE CTR. FOR DISEASE CONTROL (Dec. 21, 2011), <http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201112.pdf>.

on their phones for primary access to the Internet.³ "Annual investment in U.S. wireless services grew more than 40% between 2009 and 2012, to \$30 billion from \$21 billion, and is projected to rise to \$35 billion in 2013."⁴

Towers communicate with wireless devices through radiofrequency waves.⁵ Radiofrequency spectrum, as regulated, is a finite resource, and it has become increasingly scarce.⁶ The Federal Communications Commission (FCC) estimates that demand for spectrum will soon be greater than supply.⁷ The FCC is actively working to solve this dilemma, recently issuing a notice of proposed rulemaking that would provide greater spectrum to

³ Aaron Smith, *Cell Internet Use*, PEW INTERNET AND AM. LIFE PROJECT (June 26, 2012), available at <http://pewinternet.org/Reports/2012/Cell-Internet-Use-2012.aspx>.

⁴ Office of the Press Sec'y, Exec. Office of the President, *Fact Sheet: Administration Provides Another Boost to Wireless Broadband and Technological Innovation*, (June 14, 2013), available at http://www.whitehouse.gov/sites/default/files/spectrum_fact_sheet_final.pdf (determining that the U.S. wireless broadband industry contributes more than \$150 billion in GDP annually).

⁵ Office of the Press Sec'y, Exec. Office of the President. *Fact Sheet: Doubling the Amount of Commercial Spectrum to Unleash the Innovative Potential of Wireless Broadband* (Jun. 28, 2010), available at <http://www.whitehouse.gov/the-press-office/fact-sheet-doubling-amount-commercial-spectrum-unleash-innovative-potential-wireless>.

⁶ *Id.* ("As the revolution in mobile broadband and related technologies unfolds, the demand for spectrum will continue to increase—leading to increasing fears of a “spectrum crunch” . . . Mobile broadband technologies enable consumers and businesses to access unprecedented amounts of voice, data, and video applications through wireless networks. Demand for commercial wireless data services that are secure and reliable is expected to increase exponentially in the next decade as new services and technologies develop.”).

⁷ See Julius Genachowski, Chairman, Federal Commc’n Comm’n, Speaking at International Consumer Electronics Association (Jan. 9, 2013) (“We predict a WiFi traffic jam and we need to fix it . . . WiFi is such an integral part of our broadband ecosystem, that we need to make sure we pay it sufficient attention.”), available at <http://www.wirelessweek.com/news/2013/01/fcc-move-better-wi-fi>; Randall Stephenson, Op-Ed., *Spectrum and the Wireless Revolution*, WALL ST. J., June 10, 2012, at A3 (“If [excess demand] happens, the speed of the mobile revolution will slow down. Prices, download times and consumer frustration will all increase. And at a societal level we risk jeopardizing the future of our nation’s vital mobile Internet infrastructure, which is generating jobs and investment . . .”).

unlicensed devices, including smartphones, tablets, and similar personal wireless devices.⁸ Additionally, President Barack Obama issued a memorandum encouraging agencies that have previously utilized spectrum for federal use to implement policies where they share access with commercial companies.⁹

While the availability of spectrum is a critical and well-recognized component of mobile wireless broadband,¹⁰ the proximity of towers to customers is also essential to the provision of quality service.¹¹ Yet local communities are reluctant to allow more towers in their neighborhoods. Consequently, local and state governments are squeezed to make these critical infrastructure decisions.¹²

Tension is building as demand grows for reliable, fast, and ubiquitous service, and mobile providers are vying to meet this demand before their competitors. Telecommunications companies' key to market competitiveness is provision of coast-to-coast

⁸ Press Release, Federal Commc'n Comm'n, Statement of FCC Chairman Julius Genachowski on Incentive Auction Proposal (Sept. 7, 2012), *available at* http://transition.fcc.gov/Daily_Releases/Daily_Business/2012/db0907/DOC-316148A1.pdf ("In freeing up spectrum for wireless broadband, incentive auctions will drive faster speeds, greater capacity, and ubiquitous mobile coverage. These are essential ingredients for innovation and leadership in the 21st century economy where smartphones and tablets powered by 4G LTE and Wi-Fi networks are proliferating, and the mobile Internet becomes more important every day. Over the last few years, the U.S. has regained global leadership in mobile innovation -- and we must not let up now."); *see also* Press Release, Federal Commc'n Comm'n, Increased Spectrum Available for Unlicensed Devices in the 5 GHz Band (Feb. 20, 2013), *available at* <http://www.fcc.gov/document/increased-spectrum-available-unlicensed-devices-5-ghz-band>.

⁹ *Expanding America's Leadership in Wireless Innovation*, 78 Fed. Reg. 37,431 (June 14, 2013) (advocating for eliminating sharing restrictions between commercial carriers and federal agencies).

¹⁰ National Broadband Plan, Executive Summary, Federal Commc'n Comm'n, *available at* <http://www.broadband.gov/plan/executive-summary/> (last visited Oct. 20, 2013).

¹¹ *Types of Broadband Connections*, Federal Commc'n Comm'n, *available at* http://www.broadband.gov/broadband_types.html#wireless (last visited Oct. 20, 2013).

¹² *See* Gregory Tan, *Wading Through the Rhetoric of the Telecommunications Act of 1996: Uncertainty of Local Zoning Authority over Wireless Telecommunications Tower Siting*, 22 VT. L. REV. 461, 461 (1997).

nationwide coverage, reaching even the most rural regions, at the highest speeds available.¹³ However, telecommunications companies looking to build new towers or devices to create or improve such a nationwide network are governed, and in some cases thwarted, by the regulations stipulated in the Telecommunications Act of 1996 (TCA).¹⁴

The TCA preserves local authority over the location and construction of wireless communication facilities, with certain exceptions. Section 332(c)(7)(B) provides that a state or local government shall not “prohibit or have the effect of prohibiting the provision of personal wireless services” by “regulation of the placement, construction, and modification of personal wireless services.”¹⁵ A circuit split has developed as courts have decided which types of government actions are appropriately labeled “effective prohibition.”¹⁶

First, courts are split over whether the denial of one provider’s application to erect a new tower constitutes effective prohibition under the TCA.¹⁷ The Fourth Circuit Court of Appeals in *AT&T Wireless PCS v. City Council of Virginia Beach* read the statute to mean that only blanket bans or general bans that affect all

¹³ See, e.g., Theresa Howard, ‘Can you hear me now?’ a Hit, USA TODAY (Feb. 23, 2004, 8:14 A.M.), http://usatoday30.usatoday.com/money/advertising/adtrack/2004-02-22-track-verizon_x.htm (explaining that network reliability grew to become a customer priority and that Verizon’s marketing campaign showing Verizon workers in the middle of wheat fields and snowy mountains receiving strong cellular signal helped Verizon increase its net customers by 10% in the first two years of its campaign).

¹⁴ 47 U.S.C. § 332 (2006).

¹⁵ 47 U.S.C. § 332(c)(7)(B).

¹⁶ Compare *AT&T Wireless PCS v. City Council of Virginia Beach*, 155 F.3d 423, 428 (4th Cir. 1998) (holding that only blanket bans or general prohibitions on all providers constitute effective prohibition) with *Second Generation Props., L.P. v. Town of Pelham*, 313 F.3d 620, 627 (1st Cir. 2002) (explaining that if a local government’s decision to restrict one wireless provider’s access to build or modify a wireless communication facility, that in consequence, effectively prohibits wireless services, and then the Supremacy Clause of the Constitution requires that the local government’s authority be preempted by the TCA’s policy goals).

¹⁷ See *T-Mobile Cent., LLC v. Charter Twp. of West Bloomfield*, 691 F.3d 794, 797 (6th Cir. 2012); *Metro PCS v. City & Cnty of San Francisco*, 400 F.3d 715 (9th Cir. 2005); *AT&T Wireless*, 155 F.3d 423.

providers qualify as effective prohibition.¹⁸ On the other hand, the Ninth Circuit Court of Appeals in *Metro PCS v. City & County of San Francisco* and the Sixth Circuit Court of Appeals in *T-Mobile Central, LLC v. Charter Township of West Bloomfield* rejected the Fourth Circuit's narrow reading and held that denial of a single provider's application violates the TCA.¹⁹

Most courts have expanded their analysis of effective prohibition beyond the question of whether there is a ban on all providers, focusing their analyses on individual wireless providers. In doing so, the courts have established a two-pronged test to determine whether the denial of a company's application constitutes an effective prohibition, asking (1) whether there is a significant gap in coverage, and (2) whether filling that gap is necessary and all other options have been thoroughly exhausted.²⁰ Courts have considered whether a state or local government can still violate the TCA in the absence of a general prohibition by preventing a wireless provider from closing a significant gap in coverage. However, courts vary on the interpretation of the term "significant gap," disagreeing on whether it refers to one provider's coverage, or all available coverage.

The Second, Third, and Fourth Circuits have adopted the "one-provider rule," under which there is not a significant gap in a particular area if at least one provider serves that area.²¹ Conversely, the First Circuit, in *Second Generation Props., L.P. v. Town of Pelham*, and the Ninth Circuit, in *MetroPCS*, both rejected the one-provider rule and adopted a multiple-provider rule that evaluates each provider independently to determine whether each has a coverage gap in the area.²² In 2009, the FCC weighed in on

¹⁸ See *AT&T Wireless*, 155 F.3d at 428.

¹⁹ See *T-Mobile*, 691 F.3d at 803; *Metro PCS*, 400 F.3d at 730.

²⁰ See *MetroPCS*, 400 F.3d at 731; see also *T-Mobile*, 691 F.3d at 804; see generally Robert B. Foster, *The Better Part of Valor is Co-Location: Recent Developments in Judicial Review of Land Use Regulation of Cellular Telecommunications Facilities under the Telecommunications Act of 1996*, 42 URB. LAW. 595, 595 (2010).

²¹ See *Sprint Spectrum, L.P. v. Willoth*, 176 F.3d 630, 643 (2d Cir. 1999); *APT Pittsburgh LTD v. Penn Twp. Butler Cnty of Pa.*, 196 F.3d 469, 478 (3d Cir. 1999); *AT&T Wireless*, 155 F.3d at 428.

²² See *Second Generation Props., L.P. v. Town of Pelham*, 313 F.3d 620, 634 (1st Cir. 2002); *MetroPCS*, 400 F.3d at 733.

this issue, adopting the latter approach.²³ In August 2012, the Sixth Circuit, in *T-Mobile Central*, joined the latter camp.²⁴

Once the court determines that there is a significant gap, the second prong of the test requires that providers demonstrate both the need to close the gap and evidence that there is no other feasible location to erect the facility. Again, the circuits have interpreted this provision differently. The Second, Third, Sixth, and Ninth Circuits have adopted a standard that requires the provider to demonstrate that the proposed means for closing the gap—most commonly, a new wireless tower—is the “least intrusive” means; that is, the provider must show that it has considered other locations, system designs, and tower designs.²⁵ The First and Seventh Circuits, on the other hand, require simply that the provider show there are no other viable alternatives.²⁶

As a result of these divisions, telecommunications companies’ market access and ability to expand infrastructure is greater in some circuits than in others. This creates a quandary for wireless providers seeking to meet increasing mobile data demand, which affects not only consumers but even national security.²⁷ As President Obama has argued, high-speed wireless access is essential to developing a technologically advanced twenty-first century society that is connected at all times.²⁸ As we become so

²³ See *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B)*, 24 F.C.C.R. 13994, ¶ 57 (2009).

²⁴ See *T-Mobile*, 691 F.3d at 804.

²⁵ See *id.* at 808; *Metro PCS*, 400 F.3d at 734; *Willloth*, 176 F.3d at 643; *Penn Twp.*, 196 F.3d at 480.

²⁶ See *VoiceStream Minneapolis, Inc. v. St. Croix Cnty*, 342 F.3d 818, 834–5 (7th Cir. 2003); *Second Generation*, 313 F.3d at 635.

²⁷ See generally Steven J. Eagle, *Wireless Telecommunications, Infrastructure Security, and the NIMBY Problem*, 54 CATH. U. L. REV. 445, 446 (2005).

²⁸ President Barack Obama, Opening Remarks at the White House Rural Economic Forum (Aug. 16, 2011), available at <http://www.whitehouse.gov/the-press-office/2011/08/16/opening-remarks-president-white-house-rural-economic-forum> (“[J]ust as the interstate highways knitted the country together 50 years ago, we’ve also got to do some new things to meet the challenges of the 21st century. We need to expand the reach of broadband, high-speed Internet, to 7 million more people and hundreds of thousands of businesses in rural communities . . . It’s helping people sell goods, not just down the street but across the country and around the world.”).

intensely dependent on wireless infrastructure,²⁹ an inconsistent and ambiguous approach does not further the best interests of the United States or its people.

This Article will first outline the applicable TCA provision and its legislative history, as well as FCC orders to discern Congressional intent in drafting the TCA. Next, the Article will analyze the TCA in light of the circuit splits to find the source of the conflicting holdings and the ways in which courts have interpreted the TCA provision. Finally, this Article will explore the stakes of the circuit split and the myriad ways the split is impacting the United States, its citizens, and its telecommunications providers.

I. THE TELECOMMUNICATIONS ACT

A. *The Act*

In 1996, President William J. Clinton signed the TCA,³⁰ celebrating the monumental event as exemplary of his “promise to reform our telecommunications laws in a manner that leads to competition and private investment, promotes universal service and open access to information networks, and provides for flexible government regulation.”³¹

Section 704(c)(7) of the TCA,³² entitled “Preservation of local zoning authority,” added a new provision to section 332 of the

²⁹ *Critical Infrastructure Protection*, 61 Fed. Reg. 37,347 (July 17, 1996) (emphasizing that “[c]ertain national infrastructures are so vital that their incapacity or destruction would have a debilitating impact on the defense or economic security of the United States. These critical infrastructures include telecommunications . . .”).

³⁰ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996), *codified* 47 U.S.C. § 332.

³¹ President’s Statement on Signing the Telecommunications Act of 1996 (February 8, 1996), *reprinted in 3 Federal Telecommunications Law: A Legislative History of the Telecommunications Act of 1996*, doc. 95, at 208 (B.D. Reams, Jr. & W.H. Man zeds., 1997) (“The Telecommunications Act of 1996 will strengthen our economy, our society, our families, and our democracy. It promotes competition as the key to opening new markets and new opportunities. It will protect consumers by regulating the remaining monopolies for a time and by providing a roadmap for deregulation in the future.”).

³² 47 U.S.C. § 332(c)(7).

Communications Act of 1984. It provided that local or state government must not interfere with “the placement, construction, and modification of personal wireless services” and any regulation cannot “prohibit or have the effect of prohibiting” such services.³³ This language maintained local governments’ decision-making authority, except where decisions pertain to “the placement, construction, and modification of personal wireless service facilities.”³⁴ It also created new limitations by placing a substantive restriction on state and local decisions such that they may not effectively prohibit personal wireless services.³⁵ Finally, the amendment provided for judicial review of decisions—any person adversely affected by state or local authorities may bring action in federal or state court.³⁶

As the following sections will explore, the ambiguity of this substantive limitation has produced considerable discord among the courts. While the FCC has presumed authority to resolve one aspect of the issue—how to define effective prohibition—the agency has not clarified the application of the provision in its entirety, giving the courts leeway, but also an obligation, to create and apply their own standards and tests.

B. *The Legislative History*

In enacting the TCA, Congress sought to provide “a pro-competitive, de-regulatory national policy framework designed to rapidly accelerate private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition.”³⁷ Policy objectives underlying the TCA included both reducing regulation to increase competition—incentivizing

³³ *Id.*; see also THE TELECOMMUNICATIONS ACT OF 1996 LAW AND LEGISLATIVE HISTORY 58 (Robert E. Emeritz et al. eds., 1996) (concluding that state and local governments are limited in their authority to regulate because they cannot unreasonably discriminate and cannot, explicitly or implicitly, effectively prohibit wireless services).

³⁴ 47 U.S.C. § 332(c)(7)(A).

³⁵ 47 U.S.C. § 332(c)(7)(B)(i)(II).

³⁶ 47 U.S.C. § 332(c)(7)(B)(v).

³⁷ H.R. Conf. Rep. No. 104-458 (1996) *reprinted in* 1996 U.S. Code Cong. & Admin. News 10, 1124.

lower prices and higher quality services³⁸—and preserving local authority to govern and regulate.³⁹ These two policy goals are in an enduring tension under the current framework, laying the foundation for dissonant interpretations among the courts.⁴⁰

However, the legislative history unambiguously shows that Congress intended the effective prohibition provision to be assessed on a case-by-case basis, not to establish a general, blanket rule.⁴¹ The FCC issued a ruling in 2009 interpreting the plain language of the TCA as following the multiple-provider rule, and determining that any other interpretation would be in violation of the TCA’s pro-competitive purpose.⁴² The agency submitted that its interpretation aligned with the basic goals of the TCA—“to improve service quality and lower prices for consumers.”⁴³ But the difficulty did not end there. Once this issue was resolved, the courts created a two-pronged test to further determine when a provider’s application could be denied. Courts have interpreted this test in varying ways.

³⁸ S. Rep. No. 104-23, Purpose of the Bill (1995), *reprinted in* 1 Federal Telecommunications Law, at 1; H.R. Rep. No. 104-204, Purpose and Summary (1995), *reprinted in* 1 Federal Telecommunications Law, at 47–50.

³⁹ See S.652 CRS Summary H.R. Conf. Rep. No. 104-458 (1996).

⁴⁰ See *ATC Realty v. Town of Kingston*, 303 F.3d 91, 94 (1st Cir. 2002) (explaining that the TCA “works like a scale that, inter alia, attempts to balance two objects of competing weight: on one arm sits the need to accelerate the deployment of telecommunications technology, while on the other arm rests the desire to preserve state and local control over zoning matters.”).

⁴¹ See H.R. Conf. Rep. No. 104-458 (1996), *reprinted in* 1996 U.S. Code Cong. & Admin. News 202, 222 (“Actions taken by State or local governments shall not prohibit or have the effect of prohibiting the placement, construction or modification of personal wireless services. It is the intent of this section that bans or policies that have the effect of banning personal wireless services or facilities not be allowed and that decisions be made on a case-by-case basis.”); see also President’s Statement on Signing the Telecommunications Act of 1996 (February 8, 1996), *reprinted in* 3 *Federal Telecommunications Law: A Legislative History of the Telecommunications Act of 1996*, doc. 95, at 208 (B.D. Reams, Jr. & W.H. Man zeds., 1997) (emphasizing that the TCA was created to promote and protect universal wireless services competition).

⁴² *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B)*, 24 F.C.C.R. 13994, ¶ 58–61 (2009).

⁴³ *Id.*

II. THE CIRCUIT SPLIT

Since 1996, various wireless providers have brought actions challenging local authority to deny their applications for new wireless facilities. In deciding these cases, courts have looked to the TCA's underlying policies.⁴⁴ Essentially, the courts have had to determine how broadly Congress intended to preempt state and local authority.⁴⁵ That is, they have had to determine whether denying a service provider's application to place, construct, or modify a tower violates § 332(c)(7)(B)(i)(II) of the TCA⁴⁶ by effectively prohibiting personal wireless services, and whether Congress intended this provision to be applied on a case-by-case basis or to create a general prohibition. This has taken the form of a two-pronged test to determine whether the denial of a company's application constitutes an effective prohibition: first, there must be a "significant gap" in coverage; and second, the proposed plan to address that gap must be necessary to achieve the desired coverage.⁴⁷

⁴⁴ Robert B. Foster, *The Better Part of Valor is Co-Location: Recent Developments in Judicial Review of Land Use Regulation of Cellular Telecommunications Facilities under the Telecommunications Act of 1996*, 42 URB. LAW. 595, 595 (Summer 2010) ("[C]ourts have worked to harmonize Congress's 'two sometimes contradictory purposes' in enacting the Act: to promote competition and reduce regulation in order to accelerate the deployment of telecommunications technology while also preserving state and local control over land use matters.").

⁴⁵ See *AT&T Wireless PCS, Inc. v. City Council of City of Virginia Beach*, 979 F.Supp. 416, 426 (E.D. Va. 1997) *aff'd in part, rev'd in part sub nom. AT&T Wireless PCS, Inc. v. City Council of City of Virginia Beach*, 155 F.3d 423 (4th Cir. 1998).

⁴⁶ 47 U.S.C. § 332(c)(7)(B)(i)(II).

⁴⁷ See *MetroPCS*, 400 F.3d at 731; see also *T-Mobile Cent., LLC v. Charter Tp. of West Bloomfield*, 691 F.3d 794, 806 (6th Cir. 2012). See generally Robert B. Foster, *The Better Part of Valor is Co-Location: Recent Developments in Judicial Review of Land Use Regulation of Cellular Telecommunications Facilities under the Telecommunications Act of 1996*, 42 URB. LAW. 595, 595 (2010).

A. Showing a “Significant Gap” in Coverage

The first portion of the analysis concerns whether there is a significant gap in coverage in the area. Because the TCA does not define “significant gap,” the courts have wrestled with its meaning.⁴⁸ Two distinct judicial standards have emerged for evaluating coverage gaps in the context of effective prohibition: the “one-provider rule” and the “multiple-provider rule.”

1. The “One-Provider Rule”

Under the one-provider rule, if at least one company provides coverage for an area, there is no significant gap in coverage and a state or local government may preclude other companies from providing coverage in that area.⁴⁹ In *AT&T*, the City Council of Virginia Beach denied AT&T’s application to construct two new towers on a church in a wooded area where signals were weak.⁵⁰ The district court evaluated legislative history and determined that the TCA provision grants local governments the authority to decline applications even if doing so excludes competitors.⁵¹ On appeal, the Fourth Circuit looked to the plain meaning of the

⁴⁸ See, e.g., *Second Generation Props., L.P. v. Town of Pelham*, 313 F.3d 620, 631 (1st Cir. 2002) (distinguishing between a geographic gap that is not served by any carrier and a dead spot that is statutorily permissible because even reliable coverage will have areas of weakness, and acknowledging that parties are using the definition of significant gap to address a “qualitatively different and much more complex set of problems”); see also *360 degrees Communications Co. of Charlottesville v. Bd. of Sup’rs of Albemarle County*, 211 F.3d 79, 87 (4th Cir. 2000) (finding the varying definitions of “significant gap” divined by various circuit courts are unhelpful in determining whether the TCA has been violated).

⁴⁹ See *MetroPCS*, 400 F.3d at 731 (barring other violations, e.g., of zoning laws and of other provisions of the TCA).

⁵⁰ *AT&T Wireless PCS, Inc. v. City Council of City of Virginia Beach*, 979 F.Supp. 416, 420 (E.D. Va. 1997).

⁵¹ *Id.* at 426 (granting the City Council summary judgment because Congress only intended to prohibit general bans and AT&T failed to demonstrate that denial of its application was a general ban) (citing H.R. Conf. Rep. No 104-458, 104th Conf., 2d Sess. 208 (1996), 1996 U.S.C.C.A.N. 10, 124, 222).

phrase “significant gap” and arrived at the same conclusion.⁵² The Fourth Circuit was joined by the Second and Third circuits in adopting the one-provider rule.⁵³ Some courts reasoned that the one-provider rule promotes the regulatory efforts of the TCA to establish nationwide cellular coverage.⁵⁴

2. The “Multiple-Provider Rule”

The First Circuit, in *Second Generation*; the Ninth Circuit, in *MetroPCS*; and the Sixth Circuit, in *T-Mobile Central*, rejected a narrow reading of the TCA and held that a state or local government that denies one provider’s application effectively prohibits personal wireless services generally.⁵⁵

In *Second Generation*, the provider planned to build a tower on

⁵² *AT&T Wireless*, 155 F.3d at 424 (recognizing that even without beginning with a legislative history statutory analysis as the lower court did, the statute clearly reads that blanket bans on all providers constitute effective prohibition and such a reading follows the TCA’s goal of promoting competition).

⁵³ See *Omnipoint Commc’n Enter., L.P. v. Zoning Hearing Bd. of Easttown Twp.*, 331 F.3d 386, 398 (3d Cir. 2003); *Nextel W. Corp. v. Unity Twp.*, 282 F.3d 257, 265 (3d Cir. 2002) (requiring that for a provider to demonstrate a significant gap, the gap must be “from a user’s perspective, rather than a particular provider’s perspective”); *Sprint Spectrum, L.P. v. Willoth*, 176 F.3d 630, 640-1 (2d Cir. 1999) (“[c]onstruing subsection B(i)(II) to apply only to general bans would lead to the conclusion that in the absence of an explicit anti-tower policy, a court would have to wait for a series of denied applications before it could step in and force a local government to end its illegal boycott of personal wireless services”); *APT Pittsburgh LTD v. Penn Twp. Butler Cnty of Pa.*, 196 F.3d 469, 478 (3d Cir. 1999) (“Interpreting the TCA’s ‘effect of prohibiting’ clause to encompass every individual zoning denial simply because it has the effect of precluding a specific provider from providing wireless services, however, would give the TCA preemptive effect well beyond what Congress intended.”).

⁵⁴ See *Omnipoint*, 331 F.3d at 400 (reasoning that when one provider enters an area of service, the provisions of the TCA “work together to promote the expansion of wireless telecommunications networks”) (citing *Unity Township*, 282 F.3d at 264 n.6).

⁵⁵ See *T-Mobile Cent., LLC v. Charter Twp. Of West Bloomfield*, 691 F.3d at 808-09; *MetroPCS*, 400 F.3d at 733; *Second Generation Props., L.P. v. Town of Pelham*, 313 F.3d 620, 634 (1st Cir. 2002) (“The fact that some carrier provides some service to some consumers does not in itself mean that the town has not effectively prohibited services to other consumers.”).

its ninety acres of land situated atop a heavily wooded area along a highway in New Hampshire.⁵⁶ After the township denied the Second Generation's application twice, the company filed suit alleging that the local authorities were violating the TCA by effectively prohibiting personal wireless services.⁵⁷ Similarly, in *MetroPCS*, the San Francisco planning commission denied the provider's application to install six panels above a garage to ameliorate allegedly poor service in the area.⁵⁸ The courts in both cases reasoned that the denial of one application could qualify as effective prohibition when a significant gap in coverage exists and alternative solutions to resolving the gap have been exhausted.⁵⁹

In *MetroPCS*, the Ninth Circuit interpreted the language of the TCA with a more discriminating inquiry.⁶⁰ The court determined that MetroPCS had not sufficiently demonstrated the need for a new tower.⁶¹ Meanwhile, the *T-Mobile* court noted that a party need not show a significant gap in coverage by gathering complaints from customers, but could instead provide the court with technical evidence.⁶²

In *Second Generation*, the First Circuit reasoned that if a local law or regulation prevented a wireless provider from resolving a significant gap in its own service, then it was effectively prohibiting wireless services.⁶³ The court argued that a multiple-provider approach serves both the interests of consumers and the TCA's underlying regulatory goal "to secure lower prices and

⁵⁶ *Second Generation*, 313 F.3d at 624.

⁵⁷ *Id.* at 624–5.

⁵⁸ *MetroPCS*, 400 F.3d at 718–9.

⁵⁹ *Id.* at 731; *Second Generation*, 313 F.3d at 634.

⁶⁰ *See MetroPCS*, 400 F.3d at 731 (considering not only whether the TCA was meant to prohibit general bans, but also whether a locality can violate the TCA's "effective prohibition" provision if it denies a wireless provider with the means for closing a "significant gap" in its *own* coverage).

⁶¹ *Id.* at 733 ("[T]he record is replete with contradictory allegations as to MetroPCS's need for the Geary site.')

⁶² *T-Mobile*, 2012 WL 3570666, at *11 (assessing that "RF propagation maps and drive test data, along with a report by an RF engineer" are suitable for providing evidence of a significant gap).

⁶³ *Second Generation*, 313 F.3d 620, 634 (1st Cir. 2002) (highlighting that Congress used "services" not "service" in its construction of section 332(c)(7)(B), thus insinuating that Congress considered multiple carriers, not one carrier, to serve a particular area).

better service for consumers by opening all telecommunications markets to competition.”⁶⁴

Nonetheless, courts in both the one-provider and multiple-provider camps agree that “significant gap” refers to gaps that are truly significant,⁶⁵ and federal regulations confirm this understanding.⁶⁶ In 2009, the FCC issued a declaratory ruling endorsing the multiple-provider rule and seemingly resolving the significant gap conflict.⁶⁷ However, the split over the second prong of the test, which requires providers to demonstrate the necessity and feasibility of alternative locations, remains unresolved.

B. Showing Necessity

Once a wireless provider successfully demonstrates that a significant gap exists, the provider must establish the necessity of closing the particular gap and the degree of intrusiveness of the

⁶⁴ H.R. Rep. No. 104 204, Purpose and Summary (1995), *reprinted in* 1 Federal Telecommunications Law, at 47–50 (determining the absence of effective prohibition from the mere fact that one service provider is in an area would allow a locality to deny as many providers as it wishes, which fails to serve the consumer’s interest, and establishes the foundation for not only sporadic coverage, but also for promoting a one provider industry contrary to the Act that Congress enacted to promote competition).

⁶⁵ See *MetroPCS*, 400 F.3d at 733–4 (clarifying that the TCA does not guarantee wireless providers with the right to cover every city block within a covered area, making this inquiry fact specific); *Sprint Spectrum, L.P., v. Willoth*, 176 F.3d 630, 643–4 (recognizing that there will inevitably be certain areas within a building, for example, that will not have service, but because this lack of service is de minimis, denying a provider from constructing an additional tower to meet this demand does not constitute effective prohibition).

⁶⁶ See 47 C.F.R. § 22.99 (2001) (defining areas with significant gaps in coverage as “[s]mall areas within a service area where the field strength is lower than the minimum level for reliable service”).

⁶⁷ See *In re Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B)*, 24 F.C.C.R. 13994, ¶ 56–7 (2009) *available at* <http://www.ct.gov/csc/lib/csc/fcc/fcc-09-99a1.pdf> (“We conclude that State or local government that denies an application for personal wireless service facilities citing solely because ‘one or more carriers serve a given geographic market’ has engaged in unlawful regulation . . . any other interpretation of this provision would be inconsistent with the Telecommunications Act’s pro-competitive purpose . . .”).

proposed means.⁶⁸ The Second, Third, Sixth, and Ninth circuits have adopted a standard that requires a showing that the proposal is the “least intrusive” means.⁶⁹ The First and Seventh circuits require instead that the provider show there are no other viable alternatives to the proposed plan.⁷⁰

1. The “Least Intrusive” Standard

In *MetroPCS*, the Ninth Circuit recognized the competing methods that other circuits have utilized to determine the requisite showing.⁷¹ The court reasoned that considering the most acceptable option would be too subjective, while requiring there be no other options was unrealistically stringent.⁷² Thus, the court concluded the “least intrusive” standard was best for both the local ordinances as well as for the providers.⁷³ Similarly, in *T-Mobile*

⁶⁸ See *MetroPCS*, 400 F.3d at 734.

⁶⁹ See *T-Mobile Cent., LLC*, 691 F.3d at 808; *MetroPCS*, 400 F.3d at 734; *Willoth*, 176 F.3d at 643; *APT Pittsburgh LTD v. Penn Twp. Butler Cnty of Pa.*, 196 F.3d 469, 480 (3d Cir. 1999).

⁷⁰ See *Voicestream Minneapolis, Inc. v. St. Croix Cnty*, 342 F.3d 818, 834–5 (7th Cir. 2003); *Second Generation Props., L.P. v. Town of Pelham*, 313 F.3d 620, 635 (1st Cir. 2002)

⁷¹ *MetroPCS*, 400 F.3d at 734 (finding that “the district court attempted to reconcile competing interpretations of the intrusiveness inquiry by creating its own ‘fact-based test that requires the provider to demonstrate that its proposed solution is the most acceptable option for the community in question’” (citing *MetroPCS, Inc. v. City of San Francisco*, 259 F. Supp. 2d 1004 (N.D. Cal. 2003) *aff’d in part, rev’d in part and remanded sub nom. MetroPCS, Inc. v. City & County of San Francisco*, 400 F.3d 715 (9th Cir. 2005))). Compare *Penn Twp.* 196 F.3d at 480 (requiring the provider to show that “the manner in which it proposes to fill the significant gap in service is the least intrusive on the values that the denial sought to serve.”), with *Second Generation*, 313 F.3d at 635 (requiring providers to show there are “no alternative sites which would solve the problem.”).

⁷² *MetroPCS*, 400 F.3d at 734 (comparing that the district court’s “most acceptable option” was counterintuitive because providers would not be able to overcome this subjective standard, especially when a proposal had already been denied for that location, while the “only viable option” standard would ultimately prevent any facility from being built since no one spot would ever be the “only” option available, thus wasting the time and resources of both wireless companies and local governments).

⁷³ *Id.* at 734–5 (positing that the least intrusive standard encourages providers to select the least intrusive site in their first application, “and it

the Sixth Circuit adopted the least intrusive standard for its flexibility, and held that T-Mobile had made the requisite showing of necessity and alternate options because it made good faith attempts at identifying alternative locations.⁷⁴

2. The “No Viable Alternatives” Standard

In *Second Generation*, the First Circuit reasoned the provider failed to meet its burden of showing the significant gap in coverage could not be resolved by other means because Second Generation had not yet determined whether other possible solutions were infeasible.⁷⁵ Similarly, in *VoiceStream Minneapolis, Inc. v. St. Croix County*, the Seventh Circuit held that to meet the second prong of the two-part test, the wireless provider must show “there are no other potential solutions to the purported problem.”⁷⁶ The court did not find that VoiceStream’s efforts met its heavy burden to demonstrate that its proposal was “the only feasible plan for closing the gap” because it did not thoroughly pursue alternative arrangements.⁷⁷

promises to ultimately identify the best solution for the community, not merely the last one remaining after a series of application denials.”).

⁷⁴ *T-Mobile*, 691 F.3d at 808 (explaining that with a “no viable alternatives” standard, wireless providers could “endlessly have to search for different, marginally better alternatives,” whereas the least intrusive standard is “straightforward”) (citing *Omnipoint*, 331 F.3d at 398 (noting the least intrusive standard “will require a showing that good faith effort has been made to identify and evaluate less intrusive alternative system designs, alternative tower designs, placement of antennae on existing structures, etc.”)).

⁷⁵ *Second Generation*, 313 F.3d at 635 (finding Second Generation “failed to show that a taller tower . . . could not be built in the Overlay Zone to remedy the alleged gap. Nor did it show that no other feasible sites existed outside of the Overlay Zone . . . also failed to explore whether existing towers in nearby jurisdictions . . . could provide other carriers with coverage in the purported gap.”).

⁷⁶ *VoiceStream Minneapolis, Inc. v. St. Croix Cnty*, 342 F.3d 818, 834 (citing *Second Generation*, 313 F.3d at 629) (concluding that, “so long as the service provider has not investigated thoroughly the possibility of other viable alternatives, the denial of an individual permit does not ‘prohibit or have the effect of prohibiting the provision of personal wireless services.’”).

⁷⁷ *Id.* at 836 (“Although VoiceStream provided extensive maps, diagrams, environmental assessments and historic assessments for the Somerset site, VoiceStream provided no maps, diagrams, or any type of assessment on

III. THE STAKES

Each standard puts significantly different burdens on wireless providers, which has important implications for both consumers and providers. Wireless companies must provide services nationwide, as the twenty-first-century society is so mobile. A standard that varies by circuit, then, ultimately affects coverage among the circuits' territory.

Because providers have increased revenue in the mobile market by meeting this data-driven demand rather than by expanding traditional voice service, it is paramount that wireless providers keep up with consumer demands for ubiquitous high-speed wireless service.⁷⁸ The current circuit split serves as an impediment to consumer access in certain areas of the country, while also affecting wireless service providers' potential for growth.

More generally, the telecommunications sector is a vital organ of the United States' infrastructure, critical to national security and economic growth.⁷⁹ For example, after the attacks of September 11, 2001, wireless phones were central to national emergency planning.⁸⁰

The Chairman and CEO of AT&T urged the federal government to make wireless services a national priority and create a national model so that providers have a uniform standard to implement wireless infrastructure.⁸¹ President Obama's 2013

multiple-tower configurations as alternative sites . . . conclusory statements by the applicant, without more, are insufficient to establish that the applicant has exhausted thoroughly the possibility of other viable alternatives.”).

⁷⁸ See *Rushton*, *supra* note 78, (defining 4G as the fourth generation of mobile services that provides the fastest Internet speeds to date—speeds that are ten times faster than the previous 3G network).

⁷⁹ See *Eagle*, *supra* note 27, at 446.

⁸⁰ See Laura H. Phillips & Jason E. Friedrich, *Wireless: Can Regulatory “Business as Usual” Continue?*, COMM. LAW., (Fall 2002) at 12 (noting that on September 11, 2001 wireless phones were instrumental in reestablishing communication, consequently emphasizing for the government, companies, and families, the advantages of reliable, ubiquitous wireless coverage).

⁸¹ Stephenson, *supra* note 7, at A3 (“Establish a national model for the local approval process that’s required when wireless carriers need to build new mobile infrastructure. The process needs to balance community concerns with the significant public benefit of adding new antennas and improving wireless

Budget Plan is premised on building an enduring economy atop a twenty-first century infrastructure, and this includes extending next-generation, wireless broadband to all parts of the country.⁸² Just as roads and electricity helped build local economies and businesses decades ago, the ability for communities today to innovate and compete in the global economy is dependent on building the country's wireless infrastructure.⁸³ Because high-speed wireless access is so widely relied upon, decisions to grant or deny proposals to construct or modify wireless towers have the potential for substantial impact.⁸⁴

CONCLUSION

In the developed world, where people increasingly depend on mobile devices to fulfill some of the most mundane tasks, telecommunications companies are faced with a growing challenge to meet this demand. Society has a contradictory request: provide high-speed, ubiquitous coverage at all times, but keep unsightly and potentially dangerous facilities away. As a result, local governments often deny providers' applications to build or modify facilities because of significant pushback from community

coverage in local markets. Building our nation's railroads and interstate highway system was made easier because Congress declared their construction a national priority and provided the policy framework to build them quickly. Our wireless infrastructure is every bit as critical to economic expansion.").

⁸² Office of Mgmt. & Budget, Exec. Office Of The President, *An Economy Built to Last and a 21st Century Infrastructure* (2013), <http://www.whitehouse.gov/omb/factsheet/an-economy-built-to-last-and-a-21st-century-infrastructure> (last visited March 15, 2013) (stating that high speed, wireless broadband is a critical element to a growing, innovative economy).

⁸³ Justin Thiltgen, *Wireless Broadband the Critical Infrastructure of the 21st Century*, *Telegraph Herald*, Aug. 21, 2011, at A15, available at http://www.thonline.com/news/opinion/article_d864cafd-7fde-5383-9d05-19708ad8e459.html?mode=image&photo=0 ("Farming is a competitive industry, just like any other, and farmers and ranchers need to have access to real-time updates to markets, prices and relevant news. They need to remotely monitor conditions and even use video for real-time observation. And because most farmers are out working in the field - not tied to an office - wireless broadband allows them to stay connected and do business from anywhere on their property.").

⁸⁴ *See id.*

members.

Under § 332(c)(7)(B), the TCA allows state or local authorities to deny a provider's application to build, modify, or construct a wireless facility so long as it does not prohibit or have the effect of prohibiting wireless services. Because of the ambiguous nature of the provision, the circuits have split on how to interpret and apply the provision.

The only way to resolve this split is to create a national standard so all national mobile providers have a uniform means for approaching the growing demand and local authorities have a standard to meet when reviewing new applications. Without such a standard, the TCA is being implemented incongruently, affecting both consumers and providers, and ultimately affecting the critical infrastructure that so many Americans rely upon for business, national security, innovation, and daily convenience. Because Congress created a relatively ambiguous provision, the courts have confronted it unevenly on a case-by-case basis. The better solution would be for Congress or the FCC to amend the standard to provide clearer guidance in this crucial sector.