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Small Can Be Inventive: The Patentability of Nanoscale Reproductions of Macroscale Machines

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HOW MUCH IS “SUBSTANTIAL EVIDENCE”
AND HOW BIG IS A “SIGNIFICANT GAP”?:
THE TELECOMMUNICATIONS ATTORNEY
FULL EMPLOYMENT ACT

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ABSTRACT

The late U.S. Supreme Court Justice Antonin Scalia described the Telecommunications Act of 1996 as “a model of ambiguity or indeed even self-contradiction.” Legal wags have also described the Act as the Telecommunications Attorney Full Employment Act. Twenty years after the Act became law, it is still being interpreted by courts all over the country and costing taxpayers millions of dollars as local governments defend their telecom decisions in lawsuits. The Act’s basic notion was to allow local zoning authorities to maintain their control over their territories with a few new limitations that would encourage cell phone service companies to provide access to everyone. This Article focuses on two of the Act’s limitations on local governments when they want to deny a request to construct a cell phone tower. The Act requires such a denial to be supported by substantial evidence, and it prohibits local governments from preventing a telecommunications company from closing a significant gap in cell phone service. The Article concludes that Congress should amend the Act to reflect a changed telecommunications landscape and direct the FCC to issue rules that clarify the contentious issues. All stakeholders should recognize that alternative conflict resolution techniques initiated when a tower project is first considered could eliminate costly litigation and benefit all stakeholders.

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INTRODUCTION

The late U.S. Supreme Court Justice Antonin Scalia described the Telecommunications Act of 1996 (Act)¹ as “a model of ambiguity or indeed even self-contradiction.”² Legal wags have also described the Act as the Telecommunications Attorney Full Employment Act.³ Twenty years after the Act became law, it is still being interpreted by courts all over the country, including the U.S. Supreme Court, and costing taxpayers millions of dollars as local governments defend their telecom decisions in lawsuits.⁴

One might think that after twenty years of litigation, local governments would know which telecommunications facilities have to be approved under federal law and, if they are not going to approve an application to construct a facility, how to do it in a way that is sustainable by a court. But it is understandable that local governments are inadequate to the task.⁵ Generally, they

¹ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56 (1996) (codified as amended in scattered sections of 47 U.S.C.).

² AT&T Corp. v. Iowa Util. Bd., 525 U.S. 366, 397 (1999). Seth P. Waxman, a solicitor general in the Clinton administration, described the Act as “the single most poorly drafted statute ever enacted by Congress There is no plain language in that statute.” Stephen Labaton, *Slew of Supreme Court Cases to Focus on ‘96 Telecom Law*, N.Y. TIMES, Oct. 1, 2001, <http://www.nytimes.com/2001/10/01/technology/01TELE.html?pagewanted=al>.

³ Cybertelecom, *Telecommunications Act of 1996* (2006), <http://www.cybertelecom.org/notes/telecomact.htm> [<https://perma.cc/P69U-H3YC>]; Susan C. Norton, *Defining Social Policy: Should Telecommunications Regulation Be Devolved to the States* 20 n.28 (2009), available from UMI Microform 1461501, ProQuest LLC, Ann Arbor, MI; Adam Thierer, *Will the FCC’s Nat’l Broadband Plan Be “Full Employment for Lawyers”?*, TECHNOLOGY LIBERATION FRONT, Feb. 24, 2010, <https://www.techliberation.com/2010/02/24/will-the-fccs-natl-broadband-plan-be-full-employment-for-lawyers/> [<https://perma.cc/C624-JQRM>] (noting the FCC Chairman’s Chief of Staff’s remark that the “FCC is doing everything it can to provide full employment for telecom lawyers”).

⁴ See Benjamin L. Meersman, Note, *You Can’t Hear Me Now: The Ambiguous Language of the Telecommunications Act of 1996’s Tower Siting Provision*, 39 J. CORP. L. 437 (2014); Dina Neda Rezvani, *Can You Hear Me Now? The Race to Provide America with Universal, High-Speed Wireless Coverage*, 9 WASH. J.L. TECH. & ARTS 115 (2013); Harold Furchtgott-Roth & Arielle Roth, *Answering Four Questions on the Anniversary of the Telecommunications Act of 1996*, 68 FED. COMM. L.J. 83, 83 (2015–16) (noting the Act’s enactment on Feb. 8, 1996 and its “deeply contentious” legacy).

⁵ See, e.g., Nat’l Tower, LLC v. Plainville Zoning Bd., 297 F.3d 14, 20 (1st Cir. 2002); Second Generation Props., LP v. Town of Pelham, 313 F.3d 620, 629 (1st Cir. 2002).

are made up of lay people when it comes to telecommunications issues, with very limited resources,⁶ going against very well-financed, very experienced professionals in the telecommunications industry.⁷ Thus, the best case is being made on one side of disputes and, often, a poor case on the side of local residents and taxpayers.⁸ One could argue that the purpose of the Act is facilitated by this arrangement. The Act describes its purpose as “encourag[ing] the rapid deployment of new telecommunication technologies”⁹ and, therefore, the Act does not allow state or local governments to effectively “prohibit ... the ability of any entity to provide any interstate or intrastate telecommunications service.”¹⁰ On the other hand, at a time when the “little guy” on “Main Street” feels disenfranchised by the power of “Big Business,” this arrangement can seem very unfair (even though the “little guys” want seamless cell phone service).¹¹

⁶ See, e.g., *Nat'l Tower*, 297 F.3d at 20 (noting that “local authorities are frequently lay member boards without many resources”); *Second Generation Props.*, 313 F.3d at 629 (stating “[l]ocal zoning boards are lay citizen boards”).

⁷ See, e.g., *MetroPCS N.Y., LLC v. Vill. of E. Hills*, 764 F. Supp. 2d 441, 445–46 (E.D.N.Y. 2011) (concerning a village zoning board claiming it was not familiar with telecom applications and technical jargon and hiring one unlicensed and uncertified “expert” opposing telecom company’s several experts). See also *New York SMSA Ltd. P’ship v. Vill. of Floral Park*, 812 F. Supp. 2d 143, 150 (E.D.N.Y. 2011) (Verizon presenting testimony of eight expert witnesses and thirteen sworn affidavits, technical reports and exhibits; Vill. of Floral Park presenting no experts, letters from fifteen residents, and testimony of ten residents which included statements of opposition based on, *inter alia*, health concerns (impermissible under the Act)). Local governments may not regulate the siting of cell phone facilities on the basis of environmental effects of radio frequency emissions (including concerns about health) if the facilities are in compliance with FCC regulations. 47 U.S.C. § 332(c)(7)(B)(iv) (1994 & Supp. V 1995).

⁸ See, e.g., *MetroPCS New York*, F. Supp. 2d at 445–46; see also *New York SMSA*, 812 F. Supp. 2d at 150.

⁹ Telecommunications Act of 1996, Pub. L. No. 104-104, 110 Stat. 56.

¹⁰ 47 U.S.C. § 253(a) (2012).

¹¹ See, e.g., Andrew Dys, *Clover Zoning Board Denies Controversial Cell Tower*, THE HERALD (Clover, SC), May 26, 2016, <http://www.heraldonline.com/news/local/news-columns-blogs/andrew-dys/article80216227.html> [<https://perma.cc/ZFJ2-UWQ4>] (interviewing owner of home across street from proposed tower: “The little guy won’ [T]ower companies choose poor neighborhoods for towers ... where people have no voice or money to fight back.”); Katy Macek, *New Cell Site Frustrates Residents, Officials*, CHIPPEWA HERALD (Chippewa Falls, WI), Apr. 28, 2016, 2016 WLNR 12918409 (quoting a concerned neighbor:

This Article focuses on two of the Act’s limitations on local governments when they want to deny a request to construct a cell phone tower. The Act requires such a denial to be “supported by substantial evidence contained in a written record.”¹² On its face it sounds simple, but as a practical matter it must be hard to know what support is required.¹³ The U.S. Supreme Court was still explaining the language in 2015,¹⁴ and other courts continue to explain it to this day.¹⁵ Similarly, although courts have accepted that a denial preventing a telecommunications company from closing a “significant gap” in cell phone service is equivalent to prohibiting the provision of cell phone service,¹⁶ it is still unclear what constitutes a significant gap.¹⁷

This Article starts with a brief background of the Act and then discusses the “substantial evidence” language: methods of providing substantial evidence, and courts’ interpretations of how much evidence and what kind of evidence is substantial. The Article discusses the different ways courts have determined whether significant gaps in cell phone service exist and are the equivalent of prohibiting the provision of cell phone service. The Article concludes that twenty years of experience should be sufficient to stem the tide of resources wasted on litigating the legality of local decisions on cell phone tower siting. Because that is obviously

“cell phone company seems to have a lot of say, maybe even more than a community and its elected officials”); Peter McGuire, *Benton Cell Tower Sparks Outrage from Residents*, MORNING SENTINEL (Waterville, ME), Aug. 12, 2015, 2015 WLNR 23814832 (quoting owner of home adjacent to proposed cell tower: “Somebody has to stand up for the little guy.”).

¹² 47 U.S.C. § 332(c)(7)(B)(iii) (2012).

¹³ *T-Mobile S., LLC v. City of Roswell*, 135 S. Ct. 808 (2015).

¹⁴ *Id.*

¹⁵ *See, e.g.*, *Global Tower Assets, LLC v. Town of Rome*, 810 F.3d 77 (1st Cir. 2016) (cell tower in Maine); *Stout & Co. v. City of Bel Aire*, No. 2:15-cv-09323-JTM, 2016 WL 3759440 (D. Kan. July 14, 2016) (cell tower in Kansas); *Cellular S. Real Estate, Inc. v. City of Mobile*, No. 15-00387-CG-B, 2016 WL 3746661 (S.D. Ala. July 8, 2016) (cell tower in Alabama); *Nextel Commc’ns of the Mid-Atlantic, Inc. v. Zoning Hearing Bd.*, No. 3:14-CV-2409, 2016 WL 1271385 (M.D. Pa. Mar. 31, 2016) (cell tower in Pennsylvania).

¹⁶ *See, e.g.*, *Cellular Tel. Co. v. Zoning Bd.*, 197 F.3d 64, 70 (3d Cir. 1999) (finding “local zoning policies and decisions have the effect of prohibiting wireless communication services if they result in ‘significant gaps’ in the availability of wireless services”).

¹⁷ *Id.*

not the case,¹⁸ Congress should amend the Act to reflect a telecommunications landscape that is very different from the one that existed when Congress originally passed the Act in 1996. Congress should direct the FCC to issue rules that clarify the contentious issues and provide guidelines to local government entities so they know how to make decisions that follow the rules and that courts would support, and to telecommunications companies encouraging them to consult with local residents and make a more concerted effort to install the least intrusive facilities.¹⁹ All stakeholders should recognize that alternative conflict resolution techniques initiated when a tower project is first considered could eliminate costly litigation and benefit all stakeholders.²⁰

I. THE TELECOMMUNICATIONS ACT OF 1996

In 1990, there were fewer than six million mobile cellular subscriptions in the United States.²¹ By 2000, there were well over 100 million, and by 2014 that number had more than tripled.²² By 2016, U.S. consumers were looking at their mobile devices more than eight billion times a day.²³ To service these consumers, there are well over 600 thousand cell phone towers in the United States.²⁴

When President Clinton signed the 1996 Act, it was the first major change in telecommunications law in over sixty

¹⁸ See generally Meersman, *supra* note 4.

¹⁹ See Norton, *supra* note 3, at 20 n.28.

²⁰ Lawrence Susskind & Patrick Field, *Dealing with an Angrier Public*, Q. MAG. ASS'N FOR CONFLICT RESOL., July 2012, <http://www.cbuilding.org/publication/article/2012/dealing-angrier-public> [<https://perma.cc/9LKG-VXVV>].

²¹ *Telecommunications Revenue (% GDP) in the United States*, TRADING ECONOMICS, <http://www.tradingeconomics.com/united-states/telecommunications-revenue-percent-gdp-wb-data.html> [<https://perma.cc/RU8G-YA65>].

²² *Id.*

²³ *Telecommunications Industry Outlook*, DELOITTE, <http://www2.deloitte.com/us/en/pages/technology-media-and-telecommunications/articles/telecommunications-industry-outlook.htm/> [<https://perma.cc/S7NQ-V8EA>] (interviewing Craig Wigginton, Vice Chairman & U.S. Telecommunications Leader, Deloitte Touche Tohmatsu Limited).

²⁴ *Welcome to AntennaSearch.com!*, ANTENNASearch.COM, <http://www.antennasearch.com> [<https://perma.cc/W2G5-V2J2>] (listing 610,671 towers in United States, including 1,540 added in prior week).

years.²⁵ The Act’s specific purpose was to encourage telecommunications providers by creating a less regulated environment and promoting competition among them so that consumers throughout the country would have better, faster, and cheaper access to telecommunications services.²⁶ To effect those goals, the Act puts limitations on the way that states and local governments may regulate telecommunications facilities but attempts not to preempt local regulation entirely. States and local governments may still regulate “the placement, construction, and modification” of telecommunications facilities,²⁷ but they may not “unreasonably discriminate among providers”²⁸ or “prohibit or have the effect of prohibiting the provision of personal wireless services.”²⁹ When they receive a request to construct such facilities, they must respond “within a reasonable period of time”³⁰ and must support any denial with “substantial evidence contained in a written record.”³¹ Any provider may, within thirty days of a denial or failure to respond, commence a legal action, and courts are directed to decide these cases “on an expedited basis.”³²

Within seven months of its enactment, courts in all areas of the country had decided cases about the legality under the Act of local governments’ denying applications or refusing to act on applications for the siting of cell phone towers.³³ Telecom companies, eager to beat the competition for the provision of cell phone service, were on one side of the litigation, while local governments,

²⁵ Cybertelecom, *supra* note 3.

²⁶ Pub. L. No. 104-104, 110 Stat. 56 (1996); 141 CONG. REC. H8269 (daily ed. Aug. 2, 1995) (statement of Rep. Linder).

²⁷ 47 U.S.C. § 332(c)(7)(A) (2012).

²⁸ *Id.* § 332(c)(7)(B)(i)(I).

²⁹ *Id.* § 332(c)(7)(B)(i)(II).

³⁰ Declaratory Ruling to Clarify Provisions of Sec. 332(c)(7)(B), 24 F.C.C. Rcd. 13994, 14012 (2009) (finding 90 days to be reasonable time to process collocation applications and 150 days to be reasonable time to process other applications).

³¹ *Id.* § 332(c)(7)(B)(ii), (iii).

³² *Id.* § 332(c)(7)(B)(v).

³³ *See generally* BellSouth Mobility, Inc. v. Gwinnett Cty., 944 F. Supp. 923 (N.D. Ga. 1996); Sprint Spectrum v. City of Medina, 924 F. Supp. 1036 (W.D. Wash. 1996); Crown Commc’ns v. Zoning Hearing Bd., 679 A.2d 271 (Pa. Commw. Ct. 1996); Westel-Milwaukee Co. v. Walworth Cty., 556 N.W.2d 107 (Wis. Ct. App. 1996).

pressured by constituents to keep cell phone towers away from their properties, were on the other.³⁴ Twenty years after passage of the Act, the confrontational and litigious situation has changed little with all sides sharing blame for that.³⁵ Congress has not amended the Act to clarify the ambiguous terms that are the focus of lawsuits;³⁶ the FCC has not issued sufficient rules that would help local governments make legal decisions about tower sitings;³⁷ telecom companies have not paid enough attention to the concerns of local residents;³⁸ and local governments have not taken some fairly obvious, and not necessarily expensive, actions that would make them more successful in justifying to a court their denial of applications to construct cell phone towers.³⁹ Two of the most frequently adjudicated issues are whether the governing body's decision to deny an application to construct a cell tower was based on substantial evidence,⁴⁰ and whether the telecom company is providing a cure for a significant gap in its cell phone service without which it would effectively be prohibited from supplying cell phone service.⁴¹

II. THE LITIGATION

A. Substantial Evidence

Courts have noted that the substantial evidence requirement “preserves the decision-making authority of local zoning

³⁴ See generally *BellSouth Mobility*, 944 F. Supp. at 923; *Sprint Spectrum*, 924 F. Supp. at 1036; *Crown Commc'ns*, 679 A.2d at 271; *Westel-Milwaukee*, 556 N.W.2d at 107.

³⁵ See, e.g., Meersman, *supra* note 4, at 438.

³⁶ See Norton, *supra* note 3, at 2.

³⁷ In 2009, the FCC issued a Declaratory Ruling that addressed some siting issues, but, given the number of cases that have been litigated between then and now, it was clearly not sufficient. FCC Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, 24 F.C.C. Rcd. 13994 (Nov. 18, 2009).

³⁸ Susskind & Field, *supra* note 20.

³⁹ See *infra* text accompanying note 255; see also Meersman, *supra* note 4, at 438.

⁴⁰ *Indus. Tower & Wireless, LLC v. Haddad*, 109 F. Supp. 3d 284, 296 (D. Mass. 2015) (citing *ATC Realty, LLC v. Town of Kingston*, 303 F.3d 91, 94 (1st Cir. 2002)).

⁴¹ *Green Mountain Realty Corp. v. Leonard*, 750 F.3d 30 (1st Cir. 2014).

boards, ‘while protecting wireless service providers from unsupported decisions that stymie the expansion of telecommunication technology.’”⁴² This is a worthy purpose; however, as a practical matter, the requirement costs a great deal to taxpayers and cell phone users in litigation costs because its meaning is so unclear even after twenty years of adjudication.⁴³ As recently as 2015, the United States Supreme Court discussed the term “substantial evidence” as it was used by Congress in the Act.⁴⁴ The Court said that the phrase is a term of art requiring an administrative agency to disclose clearly the reasons for its decisions so that a reviewing court would be able to judge the decisions.⁴⁵ The Court stressed that the reasons do not have to “be elaborate or even sophisticated,” just “clear enough to enable judicial review.”⁴⁶ Those statements did not answer what kind of evidence is “substantial” and how much evidence is “substantial.” So the opinion was not helpful in resolving an issue that is central to many cases.⁴⁷ Determining whether substantial evidence supports a denial of a permit to construct telecom facilities remains a “fact-intensive inquiry.”⁴⁸

1. *Defining Substantial Evidence*

Six months after the 1996 Act became law, the United States District Court for the Northern District of Georgia decided that the Gwinnett County Board of Commissioners violated the “substantial evidence” requirement in the Act when the Board denied BellSouth’s application to erect a 197-foot monopole to improve the quality of its cell phone service.⁴⁹ The court reasoned that

⁴² *Indus. Tower & Wireless*, 109 F. Supp. 3d at 296 (citing *ATC Realty*, 303 F.3d at 94).

⁴³ See generally Meersman, *supra* note 4.

⁴⁴ *T-Mobile S., LLC v. City of Roswell*, 135 S. Ct. 808, 815 (2015).

⁴⁵ *Id.*

⁴⁶ *Id.* For a discussion of “reason-giving requirements,” see Donald J. Kochan, *Constituencies and Contemporaneity in Reason-Giving: Thoughts and Direction After T-Mobile*, 37 CARDOZO L. REV. 1 (2015).

⁴⁷ *T-Mobile S.*, 135 S. Ct. at 815.

⁴⁸ *T-Mobile N.E. LLC v. City Council of Newport News, Va.*, 674 F.3d 380, 388 (4th Cir. 2012).

⁴⁹ *BellSouth Mobility, Inc. v. Gwinnett Cty.*, 944 F. Supp. 923, 924, 928 (N.D. Ga. 1996); see also *Jud. Prac. Comm. of the Fed. Comm’n’s Bar Ass’n*,

substantial evidence means “more than a mere scintilla. It means such relevant evidence as a reasonable mind might accept as adequate to support a conclusion.”⁵⁰ BellSouth submitted “numerous” documents supporting its application including a report by the Airspace Safety Analysis Corporation (ASAC) indicating that the monopole presented no air space risk;⁵¹ a memorandum from the Gwinnett County Airport Authority agreeing with the ASAC;⁵² and supporting memoranda from the Gwinnett County departments of transportation, public safety, and planning and development.⁵³ Gwinnett County residents of two subdivisions, on the other hand, were represented by one resident who spoke for the allotted five minutes at a County hearing.⁵⁴ The resident raised concerns about children’s safety, potential damage in storms, aesthetic incompatibility with existing structures, and decreased property values.⁵⁵ The court concluded that it could not “conscientiously find that the evidence supporting the board’s decision to deny plaintiffs’ a tall structure permit is substantial.”⁵⁶

This twenty-year-old decision raised two issues. First, nothing in the Act requires a balancing of evidence to determine whose evidence is more substantial, merely that a denial of a request to construct a telecom facility is supported by substantial evidence.⁵⁷ In 2003, the Fourth Circuit concluded that the Act

Communications Law: Annual Review: T-Mobile South, LLC v. City of Roswell, Georgia No. 13-975 (U.S. Jan. 14, 2015), 67 FED. COMM. L.J. 377 (2015) (explaining the court’s decision).

⁵⁰ *BellSouth Mobility*, 944 F. Supp. at 928 (citing *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 477 (1952)). “Substantial evidence” has also been defined as “more than a mere scintilla but less than a preponderance.” *Michael Linet, Inc. v. Vill. of Wellington*, 408 F.3d 757, 762 (11th Cir. 2005).

⁵¹ *BellSouth Mobility*, 944 F. Supp. at 928.

⁵² *Id.*

⁵³ *Id.*

⁵⁴ *Id.* at 926.

⁵⁵ *Id.*

⁵⁶ *Id.* at 928.

⁵⁷ It should be noted that in an entirely different context, the U.S. Supreme Court mentioned that its “phrasing ... readily lent itself to the notion” that evidence supporting an administrative decision could be considered “‘substantial’ when considered by itself,” *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 477–78 (1951), however, the Court concluded that “[t]he substantiality of evidence must take into account whatever in the record fairly

does not require a comparative test, but only that the denial of an application to construct a tower is supported by substantial evidence.⁵⁸ A comparative approach would set a stricter standard than the Act requires.⁵⁹

Secondly, after giving a definition of “substantial evidence,” the *Gwinnett* court assumed, without discussion, that at least four concerns raised by residents were not more than a scintilla of evidence, and no reasonable mind could accept those concerns as relevant evidence supporting the denial of the application to erect a monopole that would be visible from the front windows of at least twenty residents.⁶⁰ The implication is that only reports by experts can be considered substantial evidence and common concerns of residents are weightless.⁶¹ These issues remained for several years, as the *Gwinnett* case became a model that courts all over the country followed.⁶² But not all courts were persuaded that residents’ objections were not substantial.⁶³ Two years later, the Fourth Circuit explained that a substantial evidence standard created for administrative decisions should be different from one meant for legislative decisions.⁶⁴ It is appropriate that “a legislature and its members will consider the views of their constituents to be particularly compelling forms of evidence, in zoning as in all other legislative matters ... often trump[ing] those of bureaucrats or experts.”⁶⁵ In 1999, the United

detracts from its weight.” *Id.* at 488. There is nothing in the Telecommunications Act of 1996 that requires a denial of an application to construct a cell phone tower to be supported by an entire record of evidence, only by “substantial evidence.” The interpretation of those words is problematic. *See, e.g., J.I.B. Constitutional Substantial-Evidence Review? Lessons from the Supreme Court’s Turner Broadcasting Decisions*, 97 COLUM. L. REV. 1162 (1997) (concluding that Court’s approach to constitutional substantial-evidence is “vague and confused”).

⁵⁸ USCOC of Va. RSA #3, Inc. v. Montgomery Cty. Bd. of Supervisors, 343 F.3d 262, 270 (4th Cir. 2003).

⁵⁹ *Id.*

⁶⁰ *BellSouth Mobility*, 944 F. Supp. at 926.

⁶¹ *Id.*

⁶² *See, e.g., Ill. RSA No. 3, Inc. v. Cty. of Peoria*, 963 F. Supp. 732 (C.D. Ill. 1997); *W. PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230 (D. N.M. 1997).

⁶³ *AT&T Wireless PCS, Inc. v. City Council*, 155 F.3d 423, 430 (4th Cir. 1998).

⁶⁴ *Id.*

⁶⁵ *Id.*

States Court of Appeals for the Second Circuit opined that when courts evaluate a tower permit denial under the Act, they must view the record in its entirety, including evidence that does not support the local government's decision.⁶⁶ The court noted that, in New York, aesthetics can be a valid ground for local zoning decisions, but that under the Act, there must be "more tha[n] a mere scintilla" of evidence of the negative visual impact of the tower to be considered substantial evidence that serves as the basis for a permit denial.⁶⁷ The court held that the more-than-a-scintilla standard was not satisfied by a few generalized expressions of concern with aesthetics.⁶⁸ Similarly, the court concluded that residents' generalized expressions of fear of declining property values also did not meet the substantial evidence standard to support a denial of a tower permit.⁶⁹ The court recognized the difficulty in evaluating the substantiality of residents' concerns about aesthetics and property values when they are opposed by expert testimony provided by telecommunications companies; however, in this case, the evaluation was complicated by the residents' emphasis on health concerns, an argument that the Act does not permit as a basis for denying a permit.⁷⁰ Residents and the local Town of Oyster Bay government, being lay people, obviously did not recognize that they were undermining their own position by emphasizing their fears that a cell phone tower poses health risks.⁷¹ Perhaps the court might have been persuaded by

⁶⁶ Cellular Tel. Co. v. Town of Oyster Bay, 166 F.3d 490, 494 (2d Cir. 1999).

⁶⁷ *Id.* at 495.

⁶⁸ *Id.* at 496.

⁶⁹ *Id.*

⁷⁰ *Id.* The Act prohibits the denial of a permit to erect a telecommunications facility on the basis of health or environmental concerns if the facility meets FCC standards. See 47 U.S.C. § 332(c)(7)(B)(iv) (2012).

⁷¹ Twenty years after the Act's passage, laypeople, and often their elected representatives, continue to undermine their legal position in denying applications to construct cell phone towers, by emphasizing that their objections are primarily based on fears of health risks. See, e.g., Deon J. Hampton, *Ronkonkoma T-Mobile Cell Tower to Be Built Despite Concerns*, NEWSDAY (Long Island, NY), Jan. 17, 2016, <http://www.newsday.com/long-island/Suffolk/ronkonkoma-t-mobile-cell-tower-to-be-built-despite-concerns-1.11333828> [<https://perma.cc/YGL7-SDVM>] (reporting that residents near site fear tower will affect health); *WeHo Planning Commission Rejects Verizon Wireless Request to Install Cell Antenna*, ICT MONITOR WORLDWIDE, Dec. 4, 2015, at 2015 WLNR 35955535 (West Hollywood, CA).

arguments about aesthetics and property values had they not seemed secondary to impermissible health arguments.⁷²

In 2002, the Eleventh Circuit agreed that the Act does not define “substantial evidence,” and, therefore, Congress must have meant the phrase to have its usual “scintilla/reasonable minds” definition.⁷³ The court went on to say that aesthetic concerns could be the basis for the denial of a tower permit, but there had to be substantial evidence, and in the case before the court, there was no substantial evidence.⁷⁴ County residents undermined their position by presenting petitions that contained no reasons why petitioners signed, and no evidence of the visual impact of the tower.⁷⁵ This case is another example of residents and local government not understanding how to mount a case under the Act.⁷⁶

On the other hand, the United States Court of Appeals for the Eighth Circuit, deciding a case about an eighty-five-foot tower in Des Moines, Iowa, concluded that the denial of the exception and variance needed for the construction was based on substantial evidence, even though there was no expert testimony.⁷⁷ The substantial evidence consisted of residents’ testimony that ice could form on the tower and damage cars in the parking lot below;⁷⁸ the tower would be seen from the windows on one side of the building, diminishing residents’ enjoyment of their property;⁷⁹ and the proximity of the tower would lower their property values.⁸⁰ The court said that it was common sense that ice would form on cell towers in Des Moines in the winter, that owners’ complaints about not enjoying their property if their views were of the tower were not merely “nebulous aesthetic concerns,” and that the view would reduce property values.⁸¹ The First Circuit also concluded that because local zoning boards are made up of lay citizens,

⁷² Cellular Tel. Co. v. Town of Oyster Bay, 166 F.3d 490, 495–96 (2d Cir. 1999).

⁷³ Preferred Sites, LLC v. Troup Cty., 296 F.3d 1210, 1218 (11th Cir. 2002).

⁷⁴ *Id.* at 1219–20.

⁷⁵ *Id.* at 1219.

⁷⁶ *Id.* at 1222.

⁷⁷ USCOC of Greater Iowa, Inc. v. Zoning Bd., 465 F.3d 817, 823 (8th Cir. 2006).

⁷⁸ *Id.*

⁷⁹ *Id.*

⁸⁰ *Id.*

⁸¹ *Id.*

they do not have to make extensive factual findings to support a decision to deny an application to construct a cell phone tower.⁸² The foregoing opinions suggest that litigation outcomes are currently so fact and court sensitive that it is important to create articulated standards that can be replicated and met in cases across the country.⁸³

By 2011, local residents in some locations had become more sophisticated in presenting their cases against a tower siting.⁸⁴ The United States District Court for the Middle District of Florida affirmed Manatee County's denial of a permit to build a 150-foot tower within a residential golf course community.⁸⁵ The court cited the Eleventh Circuit's opinion that aesthetic concerns could be the basis for a permit denial.⁸⁶ In addition to residents' testimony at a hearing, they presented slide shows, maps, graphs, a photo simulation, and a video presentation.⁸⁷ Residents also presented academic articles about a tower's negative impact on property values, and a financial planner and two realtors testified about that.⁸⁸ The court concluded that this record constituted substantial evidence on which to base a permit denial.⁸⁹

2. Aesthetics

Often, over the years, a court's affirmation of a local government's denial of a permit to construct a cell tower depended on whether the government's decision was based on substantial evidence of specific aesthetic problems that would be created by the tower.⁹⁰ However, even with twenty years of experience, what that means is still unclear.⁹¹ In 2016, the United States

⁸² Second Generation Props., LP v. Town of Pelham, 313 F.3d 620, 629 (1st Cir. 2002).

⁸³ See *id.* at 635.

⁸⁴ See, e.g., Vertex Dev., LLC v. Manatee Cty., 761 F. Supp. 2d 1348 (M.D. Fla. 2011).

⁸⁵ *Id.* at 1371.

⁸⁶ *Id.* at 1362.

⁸⁷ *Id.* at 1361.

⁸⁸ *Id.* at 1366–67.

⁸⁹ *Id.* at 1370–71.

⁹⁰ Cellular S. Real Estate, Inc. v. City of Mobile, No. 15-00387-CG-B, 2016 WL 3746661, at *7 (S.D. Ala. July 8, 2016).

⁹¹ *Id.*

District Court for the Southern District of Alabama undertook a review of all district court cases within the Eleventh Circuit about towers and aesthetics and concluded that there is very little consistency and “no bright line rule to determine whether a given amount of aesthetic evidence is enough to support a finding of substantial evidence.”⁹² Nevertheless, two Eleventh Circuit tower siting cases, decided in 2002 within two weeks of each other, suggest the kinds of facts that will predispose a court to decide in favor of either the telecom company or the local government denying the tower permit.⁹³

In *Preferred Sites, LLC v. Troup County*,⁹⁴ the telecom company applied to construct a 250-foot tower.⁹⁵ At a hearing on the application, the county zoning administrator submitted an affidavit stating that several local residents told him they opposed the tower presumably because it was visually obtrusive, but there were no specific objections.⁹⁶ Five petitions opposing the tower were submitted, but some of them were missing information and none contained any specific objections.⁹⁷ Immediately after the hearing, the county board voted to deny the construction application.⁹⁸ The Eleventh Circuit acknowledged that aesthetic values were a legitimate local concern,⁹⁹ but affirmed the district court’s order to the county to approve the tower application¹⁰⁰ because “citizens’ generalized concerns about aesthetics are insufficient to constitute substantial evidence upon which the [b]oard could rely.”¹⁰¹

Just two weeks earlier in *American Tower Ltd. Partnership v. City of Huntsville*,¹⁰² the Eleventh Circuit reversed the district

⁹² *Id.*

⁹³ *Preferred Sites, LLC v. Troup Cty.*, 296 F.3d 1210, 1219–20 (11th Cir. 2002); *Am. Tower LP v. City of Huntsville*, 295 F.3d 1203, 1208–09 (11th Cir. 2002).

⁹⁴ *Preferred Sites*, 296 F.3d at 1212.

⁹⁵ *Id.* at 1213.

⁹⁶ *Id.*

⁹⁷ *Id.*

⁹⁸ *Id.* at 1214.

⁹⁹ *Id.*

¹⁰⁰ *Id.* at 1222.

¹⁰¹ *Id.* at 1219.

¹⁰² *Am. Tower LP v. City of Huntsville*, 295 F.3d 1203, 1204 (11th Cir. 2002).

court and decided in favor of the local zoning board, holding that the board's decision to deny the application to construct a cell tower was supported by substantial evidence.¹⁰³ In this case, the board heard testimony from a local realtor who said that once people in the neighborhood knew about the proposed tower, it became harder to sell neighborhood houses, devaluing homes and harming the area.¹⁰⁴ She testified that she lost potential buyers for her own property because of the tower.¹⁰⁵ The board also heard testimony from other residents about the tower's negative aesthetic impact and its unusual proximity to schools and soccer fields.¹⁰⁶ The facts of these two cases are not dramatically different, but the cases indicate the importance of evidence that particularizes the negative aesthetic impact of a cell tower in order to be considered substantial and, therefore, sufficient to support a denial of permission to construct a tower.¹⁰⁷

In *T-Mobile USA Inc. v. City of Anacortes*,¹⁰⁸ T-Mobile applied to the City of Anacortes for a special permit to erect a 116-foot monopole for cell phone service.¹⁰⁹ Some residents claimed that because the monopole would not be fully screened, it would have a negative effect on the neighborhood and their views.¹¹⁰ The city denied the application on that basis.¹¹¹ The Ninth Circuit concluded that the denial was based on "more than a scintilla of evidence" and, therefore, constituted substantial evidence sufficient to support the denial under the Act.¹¹² A significant factor was that the Anacortes Municipal Code provided that the problems mentioned by the residents were issues that could be considered in decisions about special use permits.¹¹³

¹⁰³ *Id.* at 1209.

¹⁰⁴ *Id.* at 1208.

¹⁰⁵ *Id.*

¹⁰⁶ *Id.* at 1208–09.

¹⁰⁷ *Preferred Sites, LLC v. Troup Cty.*, 296 F.3d 1210, 1219 (11th Cir. 2002); *Am. Tower*, 295 F.3d at 1208.

¹⁰⁸ *T-Mobile USA Inc. v. City of Anacortes*, 572 F.3d 987 (9th Cir. 2009).

¹⁰⁹ *Id.* at 988.

¹¹⁰ *Id.* at 994–95.

¹¹¹ *Id.* at 989–90.

¹¹² *Id.* at 995.

¹¹³ *Id.* at 994.

3. *Relevance of Local Zoning Codes*

One of the more important criteria that has developed for determining whether the substantial evidence standard has been met when a local government denies a tower siting permit, is the local government’s consideration of the requirements of local zoning ordinances.¹¹⁴ The First, Second, Third, Fourth, Sixth, Seventh, and Ninth Circuits¹¹⁵ have acknowledged that the Act “itself does not provide the legal basis to deny an application to construct a personal wireless facility. That authority must be found in state or local law.”¹¹⁶ The Fourth Circuit consistently held that the failure to comply with local zoning regulations is a significant factor justifying the denial of an application for a cell phone tower,¹¹⁷ and under some circumstances may even be sufficient by itself.¹¹⁸

The Eighth Circuit has said that the Act has not displaced local zoning law when it comes to cell towers because the Act does not contain any substantive law about granting or denying permits for cell towers.¹¹⁹ Thus, substantial evidence of aesthetic harmony¹²⁰ or the views in a public park,¹²¹ as well as goals contained in local

¹¹⁴ *PI Telecom Infrastructure, LLC v. City of Jacksonville*, 104 F. Supp. 3d 1321, 1342 (M.D. Fla. 2015) (citing federal district court decisions from 2009 and 2010); *Vertex Dev., LLC v. Manatee Cty.*, 761 F. Supp. 2d 1348, 1364 (M.D. Fla. 2011) (noting the Act permits local government to apply standards in local zoning codes).

¹¹⁵ *Sprint Spectrum, LP v. Zoning Bd. of Adjustment of the Borough of Paramus N.J.*, 606 F. Appx. 669, 672 (3d Cir. 2015); *T-Mobile Cent. LLC v. Charter Twp. of W. Bloomfield*, 691 F.3d 794, 798–99 (6th Cir. 2012); *T-Mobile N.E. LLC v. City Council of Newport News*, 674 F.3d 380, 387 (4th Cir. 2012); *MetroPCS, Inc. v. City & Cty. of San Francisco*, 400 F.3d 715, 723–24 (9th Cir. 2005); *Voicestream Minneapolis, Inc. v. St. Croix Cty.*, 342 F.3d 818, 830 (7th Cir. 2003); *S.W. Bell Mobile Sys. v. Todd*, 244 F.3d 51, 57 (1st Cir. 2001); *Sprint Spectrum LP v. Willoth*, 176 F.3d 630, 644 (2d Cir. 1999).

¹¹⁶ *Willoth*, 176 F.3d at 644.

¹¹⁷ *USCOC of Va. RSA #3, Inc. v. Montgomery Cty. Bd. of Supervisors*, 343 F.3d 262, 271 (4th Cir. 2003); *360 degrees Commc’ns Co. v. Bd. of Supervisors*, 211 F.3d 79, 84 (4th Cir. 2000).

¹¹⁸ *USCOC of Va. RSA #3*, 343 F.3d at 271.

¹¹⁹ *USCOC of Greater Iowa, Inc. v. Zoning Bd. of Adjustment*, 465 F.3d 817, 822 (8th Cir. 2006).

¹²⁰ *Vertex Dev., LLC v. Manatee Cty.*, 761 F. Supp. 2d 1348, 1365 (M.D. Fla. 2011).

¹²¹ *PI Telecom Infrastructure, LLC v. City of Jacksonville*, 104 F. Supp. 3d 1321, 1344 (M.D. Fla. 2015).

zoning codes, can be grounds for denying a variance for a cell tower.¹²² In cases in which those two issues were grounds for the denial of variances to erect cell phone towers, the United States District Court for the Middle District of Florida accepted as substantial evidence combinations of academic articles, photographs, and testimony by real estate professionals.¹²³

The San Francisco Planning Code says that the city may take into consideration “community need” in deciding whether or not to approve applications for conditional uses which include cell phone facilities.¹²⁴ When a telecom company applied for a permit to erect six antennas fifty-three feet above the sidewalk in the Richmond neighborhood, the City Zoning Board denied the application on the grounds that the Richmond neighborhood did not need additional telecom facilities.¹²⁵ The Ninth Circuit concluded the Board’s denial was supported by substantial evidence because even the applicant’s representatives testified that five other telecom providers had antennas in the same neighborhood providing excellent coverage.¹²⁶ In addition, local residents provided testimony, petitions, and site maps, all indicating excellent wireless coverage.¹²⁷

The Sixth Circuit also looked at the local zoning code in Saginaw, Michigan, to determine whether the Saginaw Zoning Board supported with substantial evidence its denial of a variance for a telecom company to construct a 150-foot cell tower.¹²⁸ The court dismissed all three reasons for the denial: the aesthetics concern was based on merely a few mentions and no discussion at meetings;¹²⁹ the health concern was not permitted by the Act;¹³⁰ and offering an alternative construction site was not based on any criteria in the Zoning Code for granting a variance.¹³¹ The court concluded that a denial of a variance cannot be based

¹²² *Id.* at 1326.

¹²³ *Id.* at 1350; *Vertex*, 761 F. Supp. 2d at 1366.

¹²⁴ *MetroPCS, Inc. v. City & Cty. of San Francisco*, 400 F.3d 715, 725 (9th Cir. 2005).

¹²⁵ *Id.* at 718, 725.

¹²⁶ *Id.* at 726.

¹²⁷ *Id.*

¹²⁸ *New Par v. City of Saginaw*, 301 F.3d 390, 392, 396 (6th Cir. 2002).

¹²⁹ *Id.* at 398.

¹³⁰ *Id.*

¹³¹ *Id.*

on substantial evidence if the grounds for the denial are not related to criteria in the zoning code.¹³²

About twenty years after the Act became law, cases about denials of variances for towers still exist but local governments and local residents have become more sophisticated in presenting evidence that courts may consider substantial, particularly by connecting their objections to local zoning codes.¹³³ For example, in 2015, the Quorum Court of Washington County, Arkansas, denied an application for construction of a 300-foot cell phone tower on property zoned agricultural.¹³⁴ Residents in surrounding neighborhoods, using pictures and simulations, objected to the tower on the bases of safety issues in the event of tornadoes and other weather incidents and the impact on residents’ views and property values, relating their objections to a specific section in the Washington County Zoning Code.¹³⁵ The Eighth Circuit agreed that the application denial was supported by substantial evidence.¹³⁶

In 2016, the United States District Court for the District of Kansas held that the Bel Aire City Council’s denial of a permit to construct a 170-foot cell tower was supported by substantial evidence.¹³⁷ The court noted that the Council’s reasons for the denial were “clearly proper considerations” based on the city code and several city zoning regulations.¹³⁸ The court also noted that the proposed “galvanized tower” would be five times the height of the homes in the residential neighborhood in which it would be located,¹³⁹ and that the Act does not require a city council “to cast aside its common sense.”¹⁴⁰

¹³² *See id.*

¹³³ *See infra* text accompanying notes 134–40.

¹³⁴ *Smith Commc’ns, LLC v. Washington Cty.*, 785 F.3d 1253, 1256, 1259 (8th Cir. 2015).

¹³⁵ *Id.* at 1255–56, 1259. The Eighth Circuit noted in its opinion that a member of the Quorum Court stated he “would not buy property in the area with the 300-foot tower so close.” *Id.* at 1259.

¹³⁶ *Id.* at 1259–60.

¹³⁷ *See Stout & Co. v. City of Bel Aire*, No. 2:15-CV-09323-JTM, 2016 WL 3759440, at *1 (D. Kan. July 14, 2016).

¹³⁸ *See id.* at *9.

¹³⁹ *See id.*

¹⁴⁰ *Id.*

4. *Substantial Evidence in New Jersey*

The New Jersey Superior Court Appellate Division has noted that the “substantial evidence” requirement is similar in both the Act and New Jersey’s Municipal Land Use Law (MLUL).¹⁴¹ The court had a case in 2016 involving an application to erect a cell tower designed as a 120-foot flagpole.¹⁴² The application required the granting of a variance, and under New Jersey law, the applicant must provide proof of positive criteria, that is, “special reasons” for the variance, and negative criteria, that is, “the variance ‘can be granted without substantial detriment to the public good and that it will not substantially impair the intent and the purpose of the zone plan and zoning ordinance.’”¹⁴³ The court then applied the “*Sica* balancing test” which the New Jersey Supreme Court fashioned for a variance case it decided before the Act became law and which had nothing to do with telecom facilities.¹⁴⁴ Although New Jersey law did not explicitly require a balancing test, the *Sica* court noted that

[J]ust because an institution [or facility] is thought to be a good thing for the community is no reason to exempt it completely from restrictions designed to alleviate any baneful physical impact it may nonetheless exert in the interest of another aspect of the public good equally worthy of protection.¹⁴⁵

The *Sica* court then provided a general guide for balancing positive and negative criteria when deciding whether to grant a variance.¹⁴⁶

First, the local agency should identify the public interest and decide how compelling the proposed use is in satisfying the public interest.¹⁴⁷ Second, the local agency should identify the detrimental

¹⁴¹ See *T-Mobile N.E., LLC v. Borough of Mendham Zoning Bd.*, No. L-2719-10, 2015 WL 10091529, at *1 (N.J. Super. Ct. App. Div. Feb. 16, 2016).

¹⁴² *Id.*

¹⁴³ *Id.* at *2 (citing *Sica v. Bd. of Adjustment*, 603 A.2d 30 (N.J. 1992)).

¹⁴⁴ See *id.* at *2–3, *7–10. The *Sica* case concerned the denial of a variance application for the construction of a residential facility for rehabilitation of head trauma victims in a residential zone. *Sica*, 603 A.2d at 32–33.

¹⁴⁵ *Sica*, 603 A.2d at 35 (quoting the concurring opinion in *Roman Catholic Diocese v. Borough of Ho-Ho-Kus*, 220 A.2d 97, 102–03 (N.J. 1966)).

¹⁴⁶ *Id.* at 37.

¹⁴⁷ *Id.*

effect of granting the variance, recognizing that a minimal detrimental effect may not outweigh a beneficial use.¹⁴⁸ Third, the local agency may reduce the impact of the detrimental effect by requiring conditions be met before the variance is granted.¹⁴⁹ And fourth, the local agency should balance the positive and negative criteria and decide whether granting the variance would be substantially detrimental to the public good.¹⁵⁰

The 2016 New Jersey appellate court stated that when doing a *Sica* balancing test, the positive criteria are satisfied if an FCC-licensed carrier provides credible testimony that there is a gap in cell phone coverage.¹⁵¹ Then the court addressed the negative criteria: first, the local agency has to decide whether granting the variance would “cause such damage to the character of the neighborhood as to constitute ‘substantial detriment to the public good;’”¹⁵² and second, the local agency must have proof that the proposed use would not “substantially impair the intent and purpose of the zone plan and zoning ordinance.”¹⁵³

After setting up these very specific criteria, the court analyzed the local zoning board’s denial of T-Mobile Northeast’s application to erect a 120-foot monopole in a shopping center.¹⁵⁴ The court noted the similarity between New Jersey’s municipal law and the federal Act in requiring zoning boards to base their decisions on “substantiated proofs rather than unsupported allegations.”¹⁵⁵ The New Jersey appellate court concluded that T-Mobile satisfied the positive criteria, and, because there were no findings on the impact of the monopole on adjacent properties or the impairment of the zone plan or ordinance, and T-Mobile also satisfied the negative criteria, the application for a variance should be granted.¹⁵⁶

¹⁴⁸ *Id.*

¹⁴⁹ *Id.*

¹⁵⁰ *Id.*

¹⁵¹ See *T-Mobile N.E., LLC v. Borough of Mendham Zoning Bd.*, No. L-2719-10, 2015 WL 10091529, at *3 (N.J. Super. Ct. App. Div. Feb. 16, 2016).

¹⁵² *Id.*

¹⁵³ *Id.* at *4 (quoting N.J. STAT. ANN. § 40:55D–70(d)).

¹⁵⁴ *Id.* at *8–11.

¹⁵⁵ *Id.* at *8 (quoting *Cell S. of N.J., Inc. v. Zoning Bd. Of Adjustment of W. Windsor Twp.*, 796 A.2d 247, 255 (N.J. 2002)).

¹⁵⁶ *Id.* at *11.

The New Jersey court's detailed approach with specific steps for deciding whether to grant a variance for a telecom facility appears much more standardized than basing a decision on whether it was supported by substantial evidence.¹⁵⁷ The ultimate conclusion, however, relies on the same assessment about the amount and quality of the evidence presented on each side of the controversy.¹⁵⁸ The New Jersey court, while talking about positive and negative criteria, ultimately noted that a local agency cannot base a denial of a variance on only unsupported resident testimony when there is no qualified expert testimony.¹⁵⁹

5. *Substantial Evidence in New York*

Because New York law provides that telecom providers are public utilities for the purpose of zoning applications, applications to erect telecom facilities are reviewed under an easier "public necessity" standard.¹⁶⁰ For telecom providers, that standard means that the applicant for a zoning permit must show that there are gaps in cell phone service, the proposed facility will eliminate the gaps, and the proposed facility will intrude only minimally on the community.¹⁶¹ Because of the advantage given to public utilities, the assumption is that no substantial evidence exists to support a denial of the permit if the telecom provider demonstrates those three factors.¹⁶² If the absence of just one of those factors is supported by substantial evidence, then a court will not overrule a permit denial by the local government.¹⁶³

Negatively affecting the aesthetics of an area can be grounds for denying a zoning application in New York.¹⁶⁴ Generalized or speculative negative effects will not constitute substantial evidence supporting a denial; instead, there must be objective evidence

¹⁵⁷ *See id.* at *2–4.

¹⁵⁸ *See id.* at *11.

¹⁵⁹ *Id.*

¹⁶⁰ *T-Mobile N.E., LLC v. Town of Islip*, 893 F. Supp. 2d 338, 355 (E.D.N.Y. 2012).

¹⁶¹ *Id.*

¹⁶² *Id.*

¹⁶³ *Id.*

¹⁶⁴ *Id.* at 356 (citing *Cellular Tel. Co. v. Town of Oyster Bay*, 166 F.3d 490, 495 (2d Cir. 1999); *Suffolk Outdoor Advert. v. Hulse*, 373 N.E.2d 263, 265 (N.Y. 1977)).

in the form of photographs, site plans, surveys, or something similar to indicate that residents will be able to see the proposed facility and that “there will be an actual ‘negative visual impact on the community.’”¹⁶⁵ It is also important that the local Zoning Code indicates the locality’s commitment to protecting residential districts when making decisions about the location of telecom facilities.¹⁶⁶ The Second Circuit, in deciding a case about siting telecom towers in New York, noted the importance of the Act’s not requiring local governments to approve all telecom permit applications: denials are incentives for providers to create new technology that improves reception and minimizes towers, satisfying the Act’s goal of encouraging innovation.¹⁶⁷

B. Significant Gap

Even if a local government’s denial of an application to erect a telecom facility is supported by substantial evidence, the denial will violate the Act if it prevents closure of significant gaps in cell phone service.¹⁶⁸ Preventing closure of gaps is violative of the Act’s requirement that local governments “not prohibit or have the effect of prohibiting the provision of personal wireless services.”¹⁶⁹ The problem with this formulation is there is no general rule about what constitutes a significant gap or what is an effective prohibition.¹⁷⁰ Each litigated dispute is accordingly resolved based on its specific facts and circumstances.¹⁷¹

¹⁶⁵ *T-Mobile N.E.*, 893 F. Supp. 2d at 358 (quoting Cellular Telephone Co. v. Town of Oyster Bay, 166 F.3d 490, 495 (2d Cir. 1999)).

¹⁶⁶ *See id.* at 362.

¹⁶⁷ *Sprint Spectrum, LP v. Willoth*, 176 F.3d 630, 640 (2d Cir. 1999).

¹⁶⁸ *Green Mountain Realty Corp. v. Leonard*, 750 F.3d 30, 38 (1st Cir. 2014).

¹⁶⁹ *Id.* (quoting *Nat’l Tower, LLC v. Plainville Zoning Bd.*, 297 F.3d 14, 19 (1st Cir. 2002)) (quoting 47 U.S.C. § 332(c)(7)(B)(i)(II)). For a discussion of the Act’s effective prohibition rule, see, e.g., Andrew Erber, Note, *The Effective Prohibition Preemption in Modern Wireless Tower Siting*, 66 FED. COMM. L.J. 357 (2014); Lucas R. White, Note, *Untangling the Circuit Splits Regarding Cell Tower Siting Policy and 47 U.S.C. § 332(c)(7): When Is a Denial of One Effectively a Prohibition on All?*, 70 WASH. & LEE L. REV. 1981 (2013).

¹⁷⁰ *Green Mountain*, 750 F.3d at 40.

¹⁷¹ *Id.* (citing *Second Generation Props., LP v. Town of Pelham*, 313 F.3d 620, 630 (1st Cir. 2002)). For a discussion of the early foundational cases on “significant gap,” see generally Stephanie E. Niehaus, Note, *Bridging the*

The Third Circuit created a two-prong test for deciding whether an effective prohibition exists.¹⁷² The telecom provider must demonstrate that, first, remote users have a significant gap in cell phone service and are not served by another provider; and, second, the gap will be filled in the least intrusive manner.¹⁷³ Clearly, this test does not explain what specific facts will constitute a significant gap. The Second Circuit attempted more specificity: if the cell phone service gaps are very limited, such as inside buildings in a low population rural area or limited to few houses, then the “lack of coverage likely will be de minimis” and not be a significant gap that is the equivalent of prohibiting service.¹⁷⁴ The Tenth Circuit, in evaluating facts presented to show a significant gap, determined that a lack of reliable in-building or in-vehicle service and a gap in service along major highways would constitute significant gaps whereas “isolated ‘dead spots’” in “a small residential cul-de-sac,” or in-building service “in a sparsely populated rural area,” would not.¹⁷⁵ Other courts deciding whether there was a significant gap have wanted to know whether cell phone service was “sufficiently poor” and whether the number of affected users was sufficiently large.¹⁷⁶ One city has argued that denial of a permit for facilities to improve in-building cell phone service in an area that already has service is not equivalent to prohibiting wireless service, but the court was not persuaded because the area of weak or no service extended over several blocks.¹⁷⁷ The First Circuit had, perhaps, the longest

(Significant) Gap: To What Extent Does the Telecommunications Act of 1996 Contemplate Seamless Service?, 77 NOTRE DAME L. REV. 641 (2002).

¹⁷² *APT Pittsburgh Ltd. P’ship v. Penn Twp.*, 196 F.3d 469, 480 (3d Cir. 1999); *see also* *Nextel W. Corp. v. Unity Twp.*, 282 F.3d 257, 265 (3d Cir. 2002) (then-Circuit Judge Alito confirming two-prong test).

¹⁷³ *APT Pittsburgh*, 196 F.3d at 480.

¹⁷⁴ *Sprint Spectrum, LP v. Willoth*, 176 F.3d 630, 643–44 (2d Cir. 1999).

¹⁷⁵ *AT&T Mobility Serv., LLC v. Vill. of Corrales*, No. 15-2069, 2016 WL 873398, at *3 (10th Cir. Mar. 8, 2016) (quoting *Willoth*, 176 F.3d at 643; *Cellular Tel. Co. v. Zoning Bd.*, 197 F.3d 64, 70 n.2 (3d Cir.1999)).

¹⁷⁶ *Liberty Towers, LLC v. Zoning Hearing Bd.*, No. 10-1666, 2011 WL 3496044, at *13 (E.D. Pa. Aug. 9, 2011) (quoting *New Cingular Wireless PCS, LLC v. Zoning Hearing Bd.*, No. 06-2932, 2009 WL 3127756, at *7 (E.D. Pa. Sept. 29, 2009)); *New Cingular Wireless PCS*, 2009 WL 3127756, at *7 (quoting *Am. Cellular Network Co. v. Upper Dublin Twp.*, 203 F. Supp. 2d 383, 389 (E.D. Pa. 2002)).

¹⁷⁷ *PI Telecom Infrastructure, LLC v. City of Jacksonville*, 104 F. Supp. 3d 1321, 1347–48 (M.D. Fla. 2015).

list of factors to consider in deciding whether a gap was significant: the physical size of the gap, the kind of area in which the gap was located, the number of users affected, whether all the provider’s users in the gap area were affected, and the percent of calls that were not connected or were dropped.¹⁷⁸ Nevertheless, it is left to local governments and courts to determine the size of the gap, the number of users affected, or the percent of unsuccessful calls that constitutes a significant gap.¹⁷⁹

The question of whose perspective should a significant gap be considered is a more specific issue. Telecom providers have argued that the proper inquiry is whether a particular provider has significant gaps in its cell phone service, whereas local governments have argued that no significant gap exists if residents have adequate access through other providers.¹⁸⁰ Through the first ten years after the Act’s passage, different courts took different positions on this issue.¹⁸¹ In 2009, the FCC answered the question by issuing a declaratory ruling that the Act’s prohibits-or-has-the-effect-of-prohibiting-the-provision-of-personal-wireless-services regulation is violated when a local government denies an application to construct telecom facilities on the grounds that other providers

¹⁷⁸ See *Omnipoint Holdings, Inc. v. City of Cranston*, 586 F.3d 38, 49–50 (1st Cir. 2009).

¹⁷⁹ See, e.g., *Liberty Towers, LLC v. Zoning Hearing Bd.*, No. 10-7149, 2011 WL 6091081, at *8 (E.D. Pa. Dec. 6, 2011) (stating that “[t]here are no magic numbers or percentages that constitute a significant gap. Neither the TCA, the FCC, nor the courts have established the ‘significant gap’ threshold. Hence, each case must be viewed on its own”).

¹⁸⁰ See, e.g., *Liberty Towers, LLC v. Zoning Hearing Bd.*, No. 10-1666, 2011 WL 3496044, at *8–9 (E.D. Pa. Aug. 9, 2011).

¹⁸¹ See, e.g., *Sprint Spectrum, LP v. Willoth*, 176 F.3d 630, 643 (2d Cir. 1999) (finding that “once an area is sufficiently serviced by a wireless service provider, the right to deny applications becomes broader”); *APT Pittsburgh Ltd. P’ship v. Penn Twp.*, 196 F.3d 469, 480 (3d Cir. 1999) (holding that denial of a cell tower permit is effective prohibition only if there is no cell phone service from any provider); *AT&T Wireless PCS, Inc. v. City Council of Va. Beach*, 155 F.3d 423, 428–29 (4th Cir. 1998) (finding that only a blanket ban on telecom facilities is effective prohibition); *Second Generation Prop., LP v. Town of Pelham*, 313 F.3d 620, 633–34 (1st Cir. 2002) (identifying as a significant gap in service if provider in question is prevented from filling significant gap in its own service network); *MetroPCS, Inc. v. City & Cty. of S.F.*, 400 F.3d 715, 732 (9th Cir. 2005) (rejecting one-provider approach and adopting the reasoning in *Second Generation Props.*, 313 F.3d at 633).

are already providing service in the same area.¹⁸² Since then, some courts have concluded that because a goal of the Act is to promote competition, a gap must be evaluated from the provider's position.¹⁸³ The United States District Court for the Southern District of New York, citing the First Circuit, concluded that an any-service-equals-no-effective-prohibition rule would not make sense because it would not help the user of AT&T Wireless, for example, who does not have service if a gap is filled by Verizon or Sprint.¹⁸⁴ The Sixth Circuit, in a case of first impression, considered the FCC ruling and the varied approaches of five other circuit courts and adopted the standards of the FCC and the First and Ninth Circuits, namely that the significant gap refers to a gap in the individual telecom applicant's service.¹⁸⁵ The United States District Court for the Eastern District of Michigan declared the FCC ruling to be determinative on the issue of a significant gap's being assessed based on an individual provider's coverage without consideration of whether other carriers provide service in the gap.¹⁸⁶

Nevertheless, three years after the FCC ruling, the Fourth Circuit was still interpreting the Act's "effective prohibition" language as meaning one of only three actions: "a 'blanket ban' on wireless service," "a general policy that essentially guarantees rejection of all wireless facility applications," or "the denial of an application for one particular site is 'tantamount' to a general prohibition of service."¹⁸⁷ This definition of the Act's

¹⁸² *In re* Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(B) to Ensure Timely Siting Review and to Preempt under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, 24 F.C.C. Rcd. 13994, 14015–16 (Nov. 18, 2009).

¹⁸³ *See, e.g.*, *Omnipoint Holdings, Inc. v. City of Cranston*, 586 F.3d 38, 49, 51 (1st Cir. 2009) (concluding that significant gap means within individual carrier's system because the Act's goal is to encourage competition); *MetroPCS N.Y., LLC v. Vill. of E. Hills*, 764 F. Supp. 2d 441, 455 (E.D.N.Y. 2011) (without citing the 2009 FCC Ruling).

¹⁸⁴ *T-Mobile N.E., LLC v. Town of Ramapo*, 701 F. Supp. 2d 446, 458 (S.D.N.Y. 2009) (citing *Second Generation Props.*, 313 F.3d at 633).

¹⁸⁵ *T-Mobile Cent., LLC v. Charter Twp.*, 691 F.3d 794, 807 (6th Cir. 2012).

¹⁸⁶ *T-Mobile Cent., LLC v. City of Fraser*, 675 F. Supp. 2d 721, 729 (E.D. Mich. 2009).

¹⁸⁷ *T-Mobile N.E., LLC v. Fairfax Cty. Bd. Of Supervisors*, 672 F.3d 259, 266 (4th Cir. 2012). The Fourth Circuit has been consistent in taking a "user"

prohibition is clearly looking at the prohibition from the position of the user rather than the provider.¹⁸⁸

In 1999, the Third Circuit adopted a user rule, considering a gap significant only if an area is not served by any cell phone provider.¹⁸⁹ The court confirmed its adoption of the user rule in 2002.¹⁹⁰ After the 2009 FCC ruling, district courts in the Third Circuit were left with a predicament as to whether they should be following the Third Circuit’s user rule or the FCC provider rule. The United States District Court for the Middle District of Pennsylvania has noted an issue of whether deference should be given to the FCC ruling, but found it unnecessary to discuss the issue because of the facts of its case.¹⁹¹ On the other hand, the United States District Court for the Eastern District of Pennsylvania acknowledged the split between the Third Circuit and the FCC and decided that “under well-established principles of administrative law, the FCC’s Declaratory Ruling is entitled to deference from the federal courts.”¹⁹² Similarly, the United States District Court for the District of New Jersey acknowledged the Third Circuit’s user rule, recognized that other circuits rejected the user rule, and concluded that it had to follow the FCC’s provider rule interpretation of the Act.¹⁹³

approach. In 1998, it held that in order to preserve local authority, the Act should be interpreted as prohibiting only a blanket ban on cell phone facilities. *AT&T Wireless PCS, Inc. v. City Council*, 155 F.3d 423, 428–29 (4th Cir. 1998). In 2003, the court recognized that without a blanket ban, the denial of a permit could theoretically be an effective prohibition of service if the location in the application was the only one that would provide the required coverage. *USCOC of Va. RSA #3, Inc. v. Montgomery Cty. Bd. of Supervisors*, 343 F.3d 262, 268 (4th Cir. 2003) (citing *360 degrees Commc’ns Co. v. Bd. of Supervisors*, 211 F.3d 79, 86 (4th Cir. 2000)). But the court thought that “scenario ‘seems unlikely in the real world.’” *Id.* (quoting *360 degrees Commc’ns*, 211 F.3d at 86).

¹⁸⁸ See *supra* note 187 and accompanying text.

¹⁸⁹ *APT Pittsburgh Ltd. P’ship v. Penn Twp.*, 196 F.3d 469, 480 (3d Cir. 1999).

¹⁹⁰ See *Nextel W. Corp. v. Unity Twp.*, 282 F.3d 257, 265 (3d Cir. 2002).

¹⁹¹ *Nextel Commc’ns of the Mid-Atlantic, Inc. v. Zoning Hearing Bd.*, No. 3:14-CV-2409, 2016 WL 1271385, at *4 (M.D. Pa. Mar. 31, 2016).

¹⁹² *Liberty Towers, LLC v. Zoning Hearing Bd.*, 748 F. Supp. 2d 437, 444 (E.D. Pa. 2010).

¹⁹³ *Sprint Spectrum LP v. Zoning Bd.*, No. 09-4940 (JLL), 2010 WL 4868218, at *9 (D.N.J. 2010).

Unfortunately, with more than twenty years of experience under the Act, some courts are still concluding that “[s]ignificant gap determinations are extremely fact-specific inquiries that defy any bright-line legal rule.”¹⁹⁴ Given that problem, courts are sometimes aided by scientific tools that can clarify factual questions. Two tools that the telecom industry uses to demonstrate the inadequacy of existing signals are radio frequency propagation maps and drive tests.¹⁹⁵ Propagation maps are computer models that predict signal strength within a geographic area covered by the proposed cell tower.¹⁹⁶ Drive tests are empirical studies conducted by driving a vehicle outfitted with sensitive radio frequency scanning and global positioning equipment that records actual signal strength in an area.¹⁹⁷ These tools, which are widely used by the industry, help telecom companies make the case there is a significant gap in cell phone service. Recently, even a local zoning hearing board in Pennsylvania used a propagation study to support its denial of a tower siting permit when there were alternate sites more to the residents’ liking.¹⁹⁸ Furthermore, the board successfully argued that the telecom company’s propagation study was inconsistent with its drive test results and, therefore, it was unreliable, thus creating the substantial evidence the board needed to support its permit denial.¹⁹⁹

C. Recent Cases

With over twenty years of litigation deciding “substantial evidence” and “significant gap” questions, one might think that courts or Congress or the FCC would have supplied the answers so local governments could avoid lawsuits when they deny a permit for a cell phone tower, but that is obviously not the case.²⁰⁰

¹⁹⁴ *Stout & Co. v. City of Bel Aire*, No. 2:15-CV-09323-JTM, 2016 WL 3759440, at *11 (D. Kan. July 14, 2016) (quoting *T-Mobile Cent., LLC v. Unified Gov’t*, 528 F. Supp. 2d 1128, 1165 (D. Kan. 2007); see *AT&T Mobility Serv., LLC v. Vill. of Corrales*, No. 15-2069, 2016 WL 873398, at *2 (10th Cir. Mar. 8, 2016).

¹⁹⁵ *Vill. of Corrales*, 2016 WL 873398, at *5 n.3.

¹⁹⁶ *Id.*

¹⁹⁷ *Id.*

¹⁹⁸ See, e.g., *Nextel Commc’ns of the Mid-Atlantic, Inc. v. Zoning Hearing Bd.*, No. 3:14-CV-2409, 2016 WL 1271385, at *2 (M.D. Pa. Mar. 31, 2016).

¹⁹⁹ *Id.* at *6.

²⁰⁰ See *supra* Sections II.A–B.

In the twentieth year and going forward after the Act’s passage, the litigation continues.²⁰¹ In many of the cases, the outcome seems predictable and litigation avoidable.

The majority of recent cases have been decided in favor of the telecom companies.²⁰² For example, in *Orange County—County of Poughkeepsie Ltd. Partnership v. Town of East Fishkill*,²⁰³ the Second Circuit held that the town’s denial of Verizon’s application to construct a 150-foot monopole²⁰⁴ was an effective prohibition of wireless services in violation of the Act.²⁰⁵ Verizon claimed it needed the monopole to close a significant gap in cell phone service.²⁰⁶ The court said deciding whether a gap is significant “is a ‘fact-bound’ question that requires a case-by-case determination.”²⁰⁷ The court concluded that evidence showed that the gap affected about 35,000 people every day—a significant gap.²⁰⁸ Verizon investigated alternate sites and concluded that none would remedy the existing gap.²⁰⁹ It took four years from the time Verizon submitted its application for the permit²¹⁰ until the Second Circuit rendered its verdict.²¹¹ It would seem that if Verizon had spent time and resources in good faith, before even applying for a permit, to explain the legal and technical facts to the town and its residents, litigation might have been avoided, serving the interests of all parties.

In *Vantage Tower Group, LLC v. Chatham County—Savannah Metropolitan Planning Commission*,²¹² Vantage submitted an application for a variance to build a 127-foot cell tower

²⁰¹ See *supra* Sections II.A–B.

²⁰² Hanlong Fu, *The Impact of the Telecommunications Act of 1996 in the Broadband Age*, 9 ADVANCES COMM. & MEDIA RESEARCH 117, 132 (2015) (discussing the dampening effect the Act had on competition amongst telecom companies).

²⁰³ *Orange Cty.—Cty. of Poughkeepsie Ltd. P’ship v. Town of E. Fishkill*, 632 Fed. Appx. *1 (2d Cir. 2015).

²⁰⁴ *Orange Cty.—Cty. of Poughkeepsie Ltd. P’ship v. Town of E. Fishkill*, 84 F. Supp. 3d 274, 279 (S.D.N.Y. 2015).

²⁰⁵ *Orange Cty.*, 632 Fed. Appx. at *4.

²⁰⁶ *Id.* at *2.

²⁰⁷ *Id.* (citing *Omnipoint Holdings*, 586 F.3d at 48).

²⁰⁸ *Id.* at *3.

²⁰⁹ *Id.*

²¹⁰ *Orange Cty.*, 84 F. Supp. 3d at 279 (application submitted on Nov. 28, 2011).

²¹¹ *Orange Cty.*, 632 Fed. Appx. at *1.

²¹² *Vantage Tower Group, LLC v. Chatham Cty.—Savannah Metro. Planning Comm’n*, No. 4:13-CV-258, 2015 WL 300257 (S.D. Ga. Jan. 20, 2015).

where the City of Savannah prohibits towers taller than eighty-five feet.²¹³ The city council denied the request for the variance in a letter that did not give any reasons for the decision.²¹⁴ The United States District Court for the Southern District of Georgia held that the city violated the Act by not providing any reasons for its decision.²¹⁵ The Act does not provide a remedy when its provisions have been violated, but in most similar cases, courts have ordered the government to approve the permit.²¹⁶ This court decided that the city acted in good faith and so remanded Vantage's request back to the city "hop[ing]" that this time the city would give "a list of detailed reasons" for its decision.²¹⁷ This situation is a great waste of resources for the telecom company, the city, the court, and ultimately ratepayers and taxpayers. Delay is a strategy but, in the case of cell towers, it does not serve the public interest. The city should have done it correctly the first time.

*NE Colorado Cellular, Inc. v. City of North Platte*²¹⁸ is another case that makes one wonder about the legal advice the city was getting or if its officials were just acting to win favor among their residents who are their voters. Viaero Wireless applied for a permit to erect a 100-foot cell tower.²¹⁹ The city denied the permit on the grounds that the tower would not be in compliance with the city code because it "was not 'in harmony with the character of the area.'"²²⁰ The court concluded that the denial was not based on substantial evidence and ordered the city to grant the permit "without undue delay or obstacle ... not later than ten days."²²¹ Generally, the "not in harmony" reasoning is successful when the proposed tower is in a residential area and is viewable from many homes or blocks residents' view of a scenic landscape.²²² In this case the proposed site was the parking

²¹³ *Id.* at *1.

²¹⁴ *Id.* at *3.

²¹⁵ *Id.* at *4.

²¹⁶ *Id.*

²¹⁷ *Id.* at *5.

²¹⁸ *NE Colo. Cellular, Inc. v. City of N. Platte*, No. 4:14-CV-3088, 2015 WL 3513963 (D. Neb. June 4, 2015).

²¹⁹ *Id.* at *2.

²²⁰ *Id.* at *3.

²²¹ *Id.* at *4, *8.

²²² *But see Preferred Sites, LLC v. Troup Cty.*, 296 F.3d 1210, 1213 n.1 (11th Cir. 2002).

lot for a bar and tobacco shop.²²³ The surrounding property was zoned light industrial or highway commercial and included an auto repair shop, a lot storing Army Reserve vehicles, and warehouses.²²⁴ Although there were a few residences in the area, one complaining resident admitted that her house was an “oasis” in a commercial area.²²⁵

The United States District Court for the Southern District of Alabama in July 2016 heard a case with similar facts and arrived at the same result: no substantial evidence to support the city’s reasons for denying a permit for a cell tower in an area zoned for community business districts.²²⁶ The city cited safety concerns including dangers from hazardous materials and storms, but provided no evidence that the concerns were realistic.²²⁷ Residents also had aesthetic concerns, but protests about the impact on views were not supported with photographs or any other substantial evidence; their complaints were “generalized,” not specifically about the tower and area at issue.²²⁸

Telecom companies have lost only a few tower-siting cases in the last two years, one seemingly caused by the company’s sloppy work, another because the Board of Supervisors of Fairfax County, Virginia did its job well. In the former, *Nextel Communications of the Mid-Atlantic, Inc. v. Zoning Hearing Board*,²²⁹ Nextel did not comply with the local zoning ordinance because it did not make a good faith effort for its proposed tower to provide cell phone service by the least intrusive means.²³⁰ Nextel did not contact the FCC or other companies to get any information about

²²³ *NE Colo. Cellular*, 2015 WL 3513963, at *4.

²²⁴ *Id.*

²²⁵ *Id.* at *6.

²²⁶ *Cellular S. Real Estate, Inc. v. City of Mobile*, No. 15-00387-CG-B, 2016 WL 3746661, at *9 (S.D. Ala. July 8, 2016).

²²⁷ *Id.* at *6.

²²⁸ *Id.* at *8; *see also* *Cellular S. Real Estate, Inc. v. City of Germantown*, No. 2:12-cv-02888-JPM-tmp, 2015 WL 3852781, at *5 (W.D. Tenn. June 22, 2015) (finding no objective evidence of aesthetic impact of tower on neighborhood other than “isolated rendering” of tower); *Verizon Wireless of the E. Ltd. P’ship v. Columbia Cty.*, No. CV 114-211, 2015 WL 1877452, at *11 (S.D. Ga. Apr. 23, 2015) (identifying no substantial evidence that tower posed safety risk in face of unrefuted expert reports).

²²⁹ *Nextel Commc’ns of the Mid-Atlantic, Inc. v. Zoning Hearing Bd.*, No. 3:14-CV-2409, 2016 WL 1271385, at *1 (M.D. Pa. Mar. 31, 2016).

²³⁰ *Id.* at *4–5.

co-location, which would have been preferable to the community.²³¹ In order to show that its proposed tower would eliminate a significant gap, Nextel provided a propagation study and a drive test report, but the results of the two were inconsistent so the zoning board found the information unreliable, substantial evidence on which to base its denial of a permit.²³²

In *Cellco Partnership v. Board of Supervisors*,²³³ Verizon applied to the Fairfax County Board of Supervisors to construct a 140-foot cell tower to remedy a service gap.²³⁴ The board's main objection was to the adverse visual impact on the local residential community and historical sites.²³⁵ The county's comprehensive plan requires new facilities to be designed so their visual presence is "consistent with the character of the surrounding area."²³⁶ The board concluded that Verizon's proposed tower would not be harmonious with its neighborhood and offered substantial evidence for its conclusion: pictures and photo simulations based on a balloon fly test demonstrating that the tower would be visible from twenty-two local residences; pictures demonstrating that the tower would be at least four times the height of local homes and at least twice the height of nearby trees; testimony that proposed plantings would take ten years to grow to less than a quarter of the tower's height; testimony from a local realtor that the tower would lower home prices; and specific evidence from numerous residents.²³⁷ The court acknowledged the testimony of Verizon's experts about the need for the tower, but noted that "the views of the community 'will often trump those of ... experts in the minds of reasonable legislators.'"²³⁸ The court concluded that the board had a large amount of evidence indicating that the proposed tower was inconsistent with the county's comprehensive plan, and those inconsistencies provided substantial evidence supporting the board's decision to deny Verizon's application.²³⁹ Supporting the

²³¹ *Id.* at *5.

²³² *Id.* at *6–7.

²³³ *Cellco P'ship v. Bd. of Supervisors*, 140 F. Supp. 3d 548 (E.D. Va. 2015).

²³⁴ *Id.* at 554–55.

²³⁵ *Id.* at 557.

²³⁶ *Id.* at 565.

²³⁷ *Id.* at 568–70.

²³⁸ *Id.* at 576 (quoting *AT&T Wireless PCS, Inc. v. City Council of City of Va. Beach*, 155 F.3d 423, 430–31 (4th Cir. 1998)).

²³⁹ *Id.* at 571.

board’s position was the fact that it had approved 550 applications for wireless facilities, eighty-seven of them for Verizon, so there was no reason for the court to find that the board was opposed to every facility.²⁴⁰

SOLUTIONS

Early on, the Second Circuit said it did not “read the [Act] to allow the goals of increased competition and rapid deployment of new technology to trump all other important considerations, including the preservation of the autonomy of states and municipalities.”²⁴¹ The Act’s basic notion was to allow local zoning authorities to maintain their control over their territories with a few new limitations that would encourage cell phone service companies to provide access to everyone.²⁴² In hindsight, this arrangement still seems like a good idea. Some commentators have approved the Act as a cooperative model balancing the interests of local governments with federal objectives.²⁴³ The problems are the strong competing interests involved and the lack of specific definitions for the limitations.²⁴⁴ It would have been difficult to anticipate the specific differences of opinion that have arisen, but once they did, members of Congress should have amended the statute to deal with the problems that exist and the changes in technology over the last twenty years. With twenty years of experience, the Act should no longer be a “make-work-for-attorneys” act. However, with so much litigation from which to learn, all interested parties should be able to better avoid it.

Residents of the Town of Ramapo in New York should have been incensed that twelve years after the Act’s passage, its planning board gave health risks as a significant reason for denying T-Mobile’s application to construct a cell phone tower

²⁴⁰ *Id.* at 586.

²⁴¹ *Sprint Spectrum, LP v. Willoth*, 176 F.3d 630, 639 (2d Cir. 1999).

²⁴² *See, e.g.*, Henry Goldberg, *FCC’s Net Neutrality Decision Corrects Telecom Act Mistakes*, THE HILL (Mar. 18, 2015), <http://thehill.com/blogs/congress-blog/technology/235985-fccs-net-neutrality-decision-corrects-telecom-act-mistakes> [<https://perma.cc/XLL4-FFYN>].

²⁴³ *See, e.g.*, Adam J. MacLeod, *Identifying Values in Land Use Regulations*, 101 KY. L.J. 55, 84–85, 111–12 (2012–13); Ashira Pelman Ostrow, *Process Preemption in Federal Siting Regimes*, 48 HARV. J. LEGIS. 289, 319 (2011).

²⁴⁴ *See supra* Sections II.A.1, II.B.

within the town, even though the board knew that health concerns are an illegitimate ground for a denial.²⁴⁵ The cases indicate that local governments must read the statute and understand its limitations;²⁴⁶ must have local zoning laws listing all the factors that will be considered in deciding whether to approve an application to erect a cell tower and those factors may not be an absolute or a de facto ban on cell towers;²⁴⁷ must cite the local zoning laws when denying an application to erect a cell tower;²⁴⁸ and must support denials with specific evidence, not generalized complaints, that may include testimony by local real estate salespersons or appraisers;²⁴⁹ testimony by local residents that names specific negative effects of the specific tower at issue;²⁵⁰ academic articles;²⁵¹ and testimony by experts about radio frequency tests or drive-by tests or balloon demonstrations.²⁵²

For their part, residents who oppose a cell tower must also do their homework to understand the statute and the kinds of evidence that will support their claims. In particular, they have to understand to avoid making claims about health concerns and generalized claims about cell towers. Their opposition must be based on specific complaints about their situation vis-a-vis the proposed tower. Their complaints must be supported by evidence that may include photographs of the existing residential area, photographs of balloon tests, local realtor testimony about lost sales and lower prices because of the threat of the proposed tower, and maps of local commercial areas better suited to accommodating a cell tower.²⁵³

²⁴⁵ T-Mobile N.E. LLC v. Town of Ramapo, 701 F. Supp. 2d 446, 461 (S.D.N.Y. 2009).

²⁴⁶ See *id.*; Cellular Tel. Co. v. Town of Oyster Bay, 166 F.3d 490, 495 (2d Cir. 2002).

²⁴⁷ See Omnipoint Holdings, Inc. v. City of Cranston, 586 F.3d 38, 49–50 (1st Cir. 2009); Vertex Dev., LLC v. Manatee Cty., 761 F. Supp. 2d 1348, 1364 (M.D. Fla. 2011).

²⁴⁸ See *New Par v. City of Saginaw*, 301 F.3d 390, 398 (6th Cir. 2002).

²⁴⁹ See *Vertex Dev.*, 761 F. Supp. 2d at 1366.

²⁵⁰ *BellSouth Mobility, Inc. v. Gwinnett Cty.*, 944 F. Supp. 923, 928 (N.D. Ga. 1996).

²⁵¹ See *Vertex Dev.*, 761 F. Supp. 2d at 1366.

²⁵² See *AT&T Mobility Serv., LLC v. Vill. of Corrales*, No. 15-2069, 2016 WL 873398, at *5 n.3 (10th Cir. Mar. 8, 2016).

²⁵³ *Vertex Dev.*, 761 F. Supp. 2d at 1361.

Although telecom companies are well prepared with strategies and teams of legal and technical experts, they would save time and money if they did not need to litigate after a permit denial. It would be in their interest to help educate town boards and residents about the Act and to hold meetings about potential sites before submitting permit applications. Commentators in the field of conflict resolution have developed “The Mutual Gains Framework” for “dealing with an angry public.”²⁵⁴ The framework has six principles:

1. acknowledge the concerns of the other side;
2. encourage joint fact[-]finding;
3. offer contingent commitments to minimize impacts if they do occur; promise to compensate unintended effects;
4. accept responsibility, admit mistakes, and share power;
5. act in a trustworthy fashion at all times; and
6. focus on building long-term relationships.²⁵⁵

The framework seems particularly well-suited to the conflict between telecom companies and local residents when the issue is a cell tower. Residents want seamless cell phone service, and federal law will not allow them to keep cell phone facilities out of their towns. So they have an interest in working with a telecom company so long as they believe they are being consulted, their input is taken seriously, and a few will not have to bear the burden alone so everyone may have adequate cell phone service. The creators of the framework have said they have seen positive results in many cases in which the principles were used along with other conflict resolution tools and techniques, but they admit that they have not seen substantial changes in government or corporate behavior.²⁵⁶ If telecom companies gave this method a chance, they might find they could save considerable time and money.²⁵⁷

²⁵⁴ Susskind & Field, *supra* note 20.

²⁵⁵ *Id.*

²⁵⁶ *Id.*

²⁵⁷ See Merrick Hoben et al., *Downed Lines: Best Practice for Improving Wireless Telecommunications Disputes*, RIGHT OF WAY, Nov./Dec. 2006, <http://www.cbuiding.org/sites/default/files/TelecomDisputes.pdf> [<https://perma.cc/Q64A-9TH8>].