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NOTES

WIRELESS FACILITIES ARE A TOWERING PROBLEM: HOW CAN LOCAL ZONING BOARDS MAKE THE CALL WITHOUT VIOLATING SECTION 704 OF THE TELECOMMUNICATIONS ACT OF 1996?

While driving to work, a middle-aged executive conducts an important business discussion on his cellular phone. Suddenly, his conversation fades out as he approaches a "black hole" in the phone's cellular network.¹ Frustrated, the commuter wonders when the cellular phone company will fix the problem of poor reception in his area. Later that night, the executive learns about a neighborhood meeting to discuss opposition to a local cellular phone company's plan to build a 200-foot monopole in the neighborhood.² Worried that the unsightly view of the tower from his front lawn will have a dramatic downward effect on his property value and that radiation emitted by the facility could be hazardous to his family's health, the citizen vows to prevent the antenna from being placed in *his* neighborhood.

Wireless facilities, such as a cellular antenna tower or Personal Communication Systems (PCS) monopole, face the classic LULU

1. A "black hole" is the term used to describe an area where the wireless communications towers are spread too far apart to convey a user's signal reliably. See Orly Konig-Lopez, *Mobile Communication by Satellite . . . Total Coverage for Any Situation*, SATELLITE COMM., Oct. 1, 1995, at 38.

2. The wireless industry uses the term "Above Ground Level" (AGL) to define the height of a wireless facility. AGL refers to the distance from the ground to the "radiation center" or mid-point of a panel antenna, and differs from the true height, which is measured from the top of the antenna to the ground. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *SETTING CRITERIA FOR PERSONAL WIRELESS SERVICE FACILITIES* 4 (1997).

consumer conundrum:³ consumers want their cellular, PCS, or Specialized Mobile Radio (SMR) service on demand, and at an affordable price,⁴ but few consumers want to allow the service's physical infrastructure to infiltrate their neighborhood.⁵ Localities and wireless providers have battled over the placement, height, appearance, and potential negative effects of wireless facilities in the community ever since wireless services first arrived on the market.⁶ The Federal Communications Commission (FCC), as the authority responsible for granting wireless licenses, approving the initially proposed facilities, and monitoring the growth of the industry, also has been an integral player in the debate over siting these facilities.⁷ Congress intended section 704 of the Telecommunications Act of 1996 ("Act") to speed the approval and construction of wireless facilities by limiting the means by which local zoning boards⁸ could oppose these facili-

3. The term LULU refers to Locally Undesirable Land Uses. See A. Dan Tarlock, *Benjamin Davy's Essential Injustice: A Comparative and Philosophical Analysis of the LULU Siting Mess*, 22 HARV. ENVTL. L. REV. 607, 607 (1998) (book review). LULUs offer some social benefit to the surrounding community but few citizens want a LULU located near their residence or place of business. See *id.* Although every locality probably has its unique view of what constitutes a LULU, common examples include garbage dumps, power plants, fast food restaurants, and service stations.

4. Cellular phones are mobile services operating in the 824-849 and 869-894 megahertz (MHz) spectrum. See WIRELESS TELECOMMUNICATIONS BUREAU, FCC, FACT SHEET: NEW NATIONAL WIRELESS TOWER SITING POLICIES 6 (1996) (visited Jan. 17, 1999) <<http://www.fcc.gov/wtb/siting/fact1.pdf>> [hereinafter FCC FACT SHEET]. PCS is an advanced form of radiotelephone services that operates in the 1850-1900 MHz range and can send or receive voice, data, text and video messages. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 8. SMR service is employed by dispatch and data users that operates in the 806-821/851 MHz (800 MHz) and 896-901/935-940 MHz (900 MHz) frequency ranges. See *id.* at 9; FCC FACT SHEET, *supra*, at 6. These three services essentially are "functionally equivalent services" and therefore must receive equal treatment from the government. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(i)(I) (Supp. II 1996).

5. See Susan Lorde Martin, *Communities and Telecommunications Corporations: Rethinking the Rules for Zoning Variances*, 33 AM. BUS. L.J. 235, 245 (1995) (arguing that despite the popularity of cellular service, consumers do not want the towers and antennas located near their homes).

6. The term "wireless facility," as used in this Note, applies to the antennas, mounts, and monopoles used by wireless providers to create networks for cellular phones, PCS, and SMR.

7. See 47 U.S.C. § 332(a); see also *id.* § 151 (describing the history and functions of the FCC).

8. This Note uses the term "zoning board" according to its generic meaning and

ties.⁹ Unfortunately, section 704 apparently slowed that process as localities imposed zoning moratoriums and other administrative delays to prevent placement. Furthermore, localities failed to implement the Act's procedural requirements that zoning decisions meet certain evidentiary standards and be made within a reasonable period of time. The ignorance and delaying tactics of zoning boards have prompted communications companies ("wireless providers") to exercise their right to litigate these disputes in federal district court.¹⁰

Wireless providers have been successful in winning judicial approval of their projects for three main reasons.¹¹ First, despite language in the Act requiring a zoning board to act within a "reasonable period of time,"¹² some localities deliberately and illegally use moratoriums and other procedural delays to avoid making decisions on tower applications.¹³ Second, some zoning boards fail to justify denial of applications for wireless facilities with "substantial evidence" as required by the Act.¹⁴ Third, zoning

uses this designation to cover any number of names a locality gives to the agency or commission that decides zoning issues.

9. See 47 U.S.C. § 332(c)(7).

10. Section 704 of the Act allows for the following judicial relief:

Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis.

Id. § 332(c)(7)(B)(v).

11. The first case decided after the Act's passage remains the local zoning authorities' biggest judicial victory to date. In *Sprint Spectrum, L.P. v. City of Medina*, 924 F. Supp. 1036 (W.D. Wash. 1996), a federal district court upheld a six-month moratorium on applications and approvals of special use permits for wireless facilities. See *id.* at 1040. Since *Medina*, wireless providers have enjoyed almost universal success in court when using the Act to challenge localities' zoning decisions. See, e.g., *Sprint Spectrum, L.P. v. Jefferson County*, 968 F. Supp. 1457 (N.D. Ala. 1997); *Western PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230 (D.N.M. 1997).

12. The Act directs localities to "act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request." 47 U.S.C. § 332(c)(7)(B)(ii).

13. See David W. Hughes, *When NIMBYs Attack: The Heights to Which Communities Will Climb to Prevent the Siting of Wireless Favors*, 23 J. CORP. L. 469, 471 (1998).

14. See, e.g., *Cellco Partnership v. Town Plan & Zoning Comm'n*, 3 F. Supp.

boards improperly use health and aesthetic concerns as a rationale for denying wireless providers' applications.¹⁵

This Note sheds light on the effects of section 704, specifically addressing how zoning boards and courts have interpreted some of section 704's terms. The first section provides background information on three related issues: (1) the explosive growth of wireless communications; (2) the basic components of the local zoning process; and (3) the background and substance of the provisions in the Act that directly affect wireless facility locations. The second section explores the courts' interpretation of a "reasonable period of time" as it applies to a locality's time frame for making a zoning decision on an application for a wireless facility. The second section of this Note also discusses the legality of moratoriums and other procedural delays communities use to slow the approval process. The third section examines the circumstances under which a denial violates the Act by discriminating between providers offering established services and those offering new, enhanced services. The fourth section analyzes existing judicial decisions, pointing out patterns and suggesting guidelines for defining the Act's requirement that a locality use "substantial evidence" to justify its denial of a wireless facility application.¹⁶ The fifth section addresses how and when the zoning

2d 178, 184 (D. Conn. 1998). The Act requires that "[a]ny decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record." 47 U.S.C. § 332(c)(7)(B)(iii).

15. *See, e.g.*, *AT&T Wireless PCS, Inc. v. City Council*, 155 F.3d 423, 431 n.6 (4th Cir. 1998). The Act does not allow localities to "regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions." 47 U.S.C. § 332(c)(7)(B)(iv). Finally, the Act allows the FCC to preempt a state or local statute in cases in which local laws conflict with the Act. *See id.* § 253(d).

16. Wireless providers generally have used a "kitchen sink" strategy in pursuing these claims in court, alleging that the local zoning board has violated several parts of the Act by denying their zoning application. *See, e.g.*, *Virginia Metronet, Inc. v. Board of Supervisors*, 984 F. Supp. 966, 970 (E.D. Va. 1998) (claiming violation of three parts of the Act). As a result, some courts ultimately have denied the wireless providers' petitions in part and approved them in part. *See id.* at 977. The end result is that one case might be useful for several different reasons in understanding how zoning boards must proceed under the Act in order to avoid legal challenges by wireless providers.

board legitimately can use health, safety, and aesthetic concerns in its decisionmaking process. The sixth section suggests a set of criteria that localities and wireless providers can use in the application and approval process to remain in compliance with the Act's zoning requirements.¹⁷

Some commentators believe that lawyers and judges drive the wireless communication industry's development just as much as corporate executives, local zoning boards, and engineers.¹⁸ This Note argues that the judicial system should place these development decisions back in the hands of the localities and the providers.

AN OVERVIEW OF THE WIRELESS COMMUNICATIONS INDUSTRY, THE TELECOMMUNICATIONS ACT OF 1996, AND APPLICABLE ZONING LAW

The wireless communications industry in America has consistently grown at a rate that has outpaced the wildest predictions of economists and industry leaders. The FCC granted its first licenses for cellular service in 1983 with little idea of what potential existed for the industry.¹⁹ One research group once predicted a mere 900,000 wireless users by the year 2000.²⁰ In fact, as of 1996 there were an estimated 40 million wireless users and an estimated 22,000 wireless facilities in the United States.²¹ Some analysts predict that, by the year 2001, twenty

17. Zoning is a local process that can vary widely from jurisdiction to jurisdiction. Therefore, this Note takes a broad approach to many issues, rather than focusing on the laws of a single state.

18. See John W. Berresford, *The Impact of Law and Regulation on Technology: The Case History of Cellular Radio*, 44 BUS. LAW. 721, 721-22 (1989).

19. See Martin, *supra* note 5, at 236.

20. See *Competition in the Cellular Telephone Service Industry: Hearing Before the Subcomm. on Oversight and Investigations of the House Comm. on Commerce*, 104th Cong. 60 (1995) [hereinafter *Hearing*] (statement of Thomas E. Wheeler, President and CEO, Cellular Telecommunications Industry Association (CTIA)).

21. See WIRELESS TELECOMMUNICATIONS BUREAU, FCC, FACT SHEET #2 NATIONAL WIRELESS FACILITY SITING POLICIES 6 (1996) (visited Jan. 17, 1999) <<http://www.fcc.gov/wtb/siting/fact2.pdf>> [hereinafter FCC FACT SHEET #2]. This Note uses statistics that were available to Congress when the 1996 Act was passed, rather than current data regarding the status of the cellular industry, because it is important to know the information and projections with which Congress had to work when it

percent of all phone calls in America will be made or received by wireless users.²²

A sharp downturn in cost has driven the interest in wireless communications.²³ From 1985 until 1994, the price of wireless communications fell an astounding thirty-six percent while the wireless market share skyrocketed.²⁴ Wireless communications paired advanced technology with competition to create a high-quality, low-price product that continues to spark high levels of consumer demand. The economic structure and success of wireless communications is a model for all emerging technologies, as its success proves market solutions are superior to government regulation for emerging technologies.²⁵

The explosive growth of wireless communications means the system's infrastructure must keep pace with consumer demand.²⁶ The success of the wireless industry depends on the construction of new facilities and enhanced intra-market competition.²⁷ Multiple competitors in a market keep prices low without the heavy monitoring and regulatory costs associated with state or federal supervision.²⁸

passed the Act. As for current statistics, the explosion of cellular users has continued. In 1998, the number of cellular subscribers increased nearly 25%, from 49 million to 60 million. See Tammy Wark, *Milestones That Marked Our Year: What Will 1998 Be Remembered For?*, USA TODAY, Dec. 30, 1998, at 3B, available in 1998 WL 575984.

22. See Jaymes D. Littlejohn, *The Impact of Land Use Regulation on Cellular Communications: Is Federal Preemption Warranted?*, 45 FED. COMM. L.J. 247, 249 (1993) (quoting *Siting Cellular Transmitters*, ZONING NEWS, Jan. 1991, at 1).

23. See *id.*

24. See *Hearing*, *supra* note 20, at 50 (statement of Thomas E. Wheeler).

25. See *id.*

26. The economic structure of wireless services differs sharply from traditional wired phone service. See *id.* at 61 (statement of Thomas E. Wheeler). Wireless companies can operate only within their small allotted piece of spectrum. See *id.* As their business grows, therefore, they continually must devise ways to subdivide and reuse that area of the spectrum. See *id.* Although a traditional phone company often can accommodate new customers with little more than running a few additional lines, wireless companies require engineering solutions and massive amounts of new facilities in order to expand service. See *id.*

27. See *id.*

28. See *id.* at 44 (statement of Jerry A. Hausman, McDonald Professor of Economics, Massachusetts Institute of Technology).

The costs of attracting and retaining new customers to wireless technology remains high and severely impacts short-range profits for wireless providers.²⁹ In 1995, the average cellular company estimated that it spent seven hundred dollars in facilities investment and six hundred twenty dollars in marketing to attract each new customer, who will, on average, generate a mere fifty-nine dollars a month in revenue.³⁰ When wireless providers seek judicial relief to remedy illegal denials of their zoning applications, transactions costs continue to rise. The consumer eventually bears the burden of all these transactions costs by paying taxes to support the zoning board³¹ and the judiciary, and then paying again to enjoy the benefits of wireless service. Minimizing the transaction costs involved in approving these facilities therefore should minimize the additional costs imposed on consumers.

Objections to Wireless Facilities

Citizens who oppose the location of wireless facilities near their homes generally have several common objections. First, they are concerned about the environmental and health impacts such facilities might have on local citizens.³² Second, citizens worry that these facilities will ruin the aesthetic value of their neighborhoods and reduce the property values of local homes and businesses.³³ Third, many citizens fail to see the difference

29. See *id.* at 62 (statement of Thomas E. Wheeler).

30. See *id.*

31. See, e.g., Craig A. Dudczak, *Tell Your Neighbors: End Mischief*, POST-STANDARD (Syracuse), July 20, 1995, at 11, available in 1995 WL 3738628 (noting a citizen's anger at having to pay taxes to support two zoning boards).

32. See Dean J. Donatelli, Note, *Locating Cellular Telephone Facilities: How Should Communities Answer When Cellular Telephone Companies Call?*, 27 RUTGERS L.J. 447, 448 (1996). One such concern involves the potential health effects of exposure to electromagnetic fields (EMFs). See Martin, *supra* note 5, at 241. Studies have indicated a correlation between exposure to EMFs and cancer. See *id.* at 241-42. Wireless facilities produce EMFs and create potential exposure risks. See *id.* at 244 (citing Raymond Hernandez, *Phone Antennas Resisted Out of Fear and Esthetics*, N.Y. TIMES, July 16, 1994, at A1); see also Donatelli, *supra*, at 469-71, 478 (discussing potential remedies citizens may seek for injuries caused by the granting of zoning variances).

33. See Donatelli, *supra* note 32, at 448. Some citizens even predict that the public fear of EMFs will have the effect of decreasing property values near sources of

between basic cellular service and advanced digital services such as PCS.³⁴ The lack of familiarity with cellular service technology leads citizens to oppose the buildout of networks for advanced services when cellular service already exists in their area.³⁵ These factors combine to mobilize citizens to speak out against wireless facilities proposed in their communities.³⁶

Cellular Allocation

In 1995, the wireless industry estimated that it would need 115,000 wireless facilities by the year 2000 to accommodate subscriber demands for service.³⁷ More customers require more facilities to handle the greater volume of calls, therefore wireless providers must become less selective about the placement of their facilities, thus accelerating the pace of confrontation with localities.³⁸ Once the FCC grants the original licenses for wireless providers in a market, local zoning boards and wireless providers make most of the relevant placement decisions together.³⁹

EMFs. *See id.* at 486.

34. *See* Jeff Bounds, *PCS Phone Providers Ready to Battle for Cellular Clients*, DALLAS BUS. J., Mar. 21, 1997, available in 1997 WL 7888163.

35. A PCS network requires as many as four times more tower sites than a cellular network to offer comparable quality and coverage. *See* Hughes, *supra* note 13, at 481 & n.101.

36. *See id.* at 448.

37. *See* Yvonne Chiu & Mike Mills, *High Tech Means Trouble: The Cellular Industry Wants U.S. Protection as Communities Say No to Towering Eyesore*, WASH. POST, July 31, 1995, at F5; *see also* 141 CONG. REC. H8274 (daily ed. Aug. 2, 1995) (statement of Rep. Goss) (estimating the existence of at least 100,000 new wireless facilities by the turn of the century).

38. As Thomas Wheeler, President of the CTIA, has noted, wireless communications facilities "are being driven to smaller and smaller cells So we have much less choice as to where to site them." *See* Chiu & Mills, *supra* note 37, at F5.

39. For example, the FCC designated 306 Metropolitan Statistical Areas and 428 Rural Services Areas where it would issue cellular licenses. *See* FCC FACT SHEET, *supra* note 4, at 8-9. The government allocated two cellular system licenses for each market. *See id.* In each of these markets, the FCC requires only that service providers with tower locations on the perimeter of the outer service area register with the FCC. *See id.* The FCC must approve the actual wireless facility in advance if the facility will have a major environmental impact. *See id.* Additionally, in 1996, the FCC enacted stricter rules for approving antennas to help reduce the number of applications it processed and approved. *See id.*

Initially, the FCC licensed wireless providers on a first-come, first-served basis;⁴⁰ therefore, it is possible that the first entrants into a market usurped a majority of the ideal sites for wireless facilities. Collocation, therefore, makes a great deal of sense. Collocation involves using the same physical location for multiple wireless facilities by placing the antennas of several different wireless providers on one building, using one location for an antenna farm with antennas owned by several different wireless providers, or placing small transmitters on the same monopole or antenna tower.⁴¹ As a policy decision, collocation helps new entrants compete on an equal basis. Every local zoning authority confronts the collocation issue in approving wireless facility applications, and some localities require collocation wherever possible.⁴²

Wireless providers and zoning boards face an inherent dilemma in building out their facilities. As they start their system, they need only a few large towers with sufficient height and power to cover the entire service area.⁴³ As the system grows, it requires more facilities that are shorter and less powerful than the original facilities.⁴⁴ For best results, wireless facilities should be nearest to the consumers who use them; facilities commonly are found adjacent to major freeways and highways because a number of consumers use the service primarily while in transit.⁴⁵ No study has ever determined the demographics of citizens who protest the proposed construction of wireless facilities in their neighborhoods, but it seems likely that upper- and middle-class homeowners would be the group most concerned about the effects these facilities have on their property values.⁴⁶

40. See CONGRESSIONAL BUDGET OFFICE, WHERE DO WE GO FROM HERE? THE FCC AUCTIONS AND THE FUTURE OF RADIO SPECTRUM MANAGEMENT 4 (1997). Currently, the FCC auctions off licenses to use the radio spectrum. See *id.* at 5.

41. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 5.

42. See *id.* at 18.

43. See *id.* at 14.

44. See *id.*

45. See *id.* at 23.

46. Residents of suburban communities, particularly affluent communities, often put their own personal interests above those of the community at large. See Martin, *supra* note 5, at 235.

The 1996 Act and Its Impact on Wireless Facility Placement

The Telecommunications Act of 1996 was a long-overdue reworking of American communications policy. Over sixty years had passed since the enactment of the last major communications act in 1934,⁴⁷ which occurred before the advent of widely distributed commercial television.⁴⁸ One of the Act's primary goals was to encourage "competition that will produce innovative technologies for every American household and provide benefits to the American consumer in the form of lower prices and enhanced services."⁴⁹ Localities and wireless providers have grappled with the zoning of wireless facilities since the early 1980s,⁵⁰ and the Act attempted to answer some of the most pressing problems encountered in zoning confrontations. In attempting to solve these problems, however, Congress used imprecise language and tried to serve conflicting masters, thereby generating new problems.

Congress hoped to accomplish two conflicting goals through the wireless facility provisions of the Act. First, it wanted to prevent local authorities from denying applications for wireless facilities arbitrarily. Second, it tried to guarantee that localities would retain ultimate control of the location of the facilities.⁵¹ In

47. See Communications Act of 1934, 47 U.S.C. § 151 (1994) (creating the FCC and expressing the first major elements of American communications policy).

48. 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, 463 & n.15 (1997).

49. 141 CONG. REC. H8270 (daily ed. Aug. 2, 1995) (statement of Rep. Linder).

50. Cellular technology first reached the public in 1983. See Berresford, *supra* note 18, at 721; see also Martin, *supra* note 5, at 236 (stating that zoning battles between public utilities and local communities have occurred for years and that new cellular telephone companies have escalated the battle with local communities even further).

51. Congressman Bliley chaired the House Commerce Committee that oversaw passage of the Act. His naïve viewpoint epitomizes Congress's mistaken belief that it could maintain simultaneous control over the federal and local wireless facility placement issue:

Nothing is in this bill that prevents a locality . . . from determining where a cellular pole should be located, but we do want to make sure that this technology is available across the country, that we do not allow a community to say we are not going to have any cellular pole in our locality. That is wrong. Nor are we going to say they can delay these

attempting to impose these seemingly mutually exclusive propositions, Congress ignored at least one commentator who advocated giving the FCC the ability to preempt localities' zoning decisions regarding the placement of wireless facilities.⁵²

Congress intended section 704 of the Act to preserve local zoning authority in deciding the placement of wireless facilities, noting that the federal government cannot "limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities."⁵³ Congress used section 704 to impose several specific restrictions on local zoning boards considering applications for wireless facility placements.

First, the local zoning board cannot "unreasonably discriminate among providers of functionally equivalent services."⁵⁴ Second, local zoning boards cannot "prohibit or have the effect of prohibiting the provision of personal wireless services" that the FCC has licensed to operate in that area.⁵⁵ Third, in considering an application for a wireless facility, a zoning board must approve or decline the application "within a reasonable period of time . . . taking into account the nature and scope of such request."⁵⁶ Fourth, if the zoning board declines the application for a wireless facility, that decision must be "in writing and supported by substantial evidence contained in a written record."⁵⁷

people forever. But the location will be determined by the local governing body.

141 CONG. REC. H8274 (daily ed. Aug. 2, 1995) (statement of Rep. Bliley).

52. See generally Littlejohn, *supra* note 22 (advocating that the Constitution's Supremacy Clause and the preeminence of the federal interest in cellular communications justifies federal regulation of zoning for cellular facilities).

53. Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(A) (Supp. II 1996).

54. *Id.* § 332(c)(7)(B)(i)(I). PCS, SMR, paging services, and cellular phones are all considered functionally equivalent services. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 7.

55. 47 U.S.C. § 332(c)(7)(B)(i)(II).

56. *Id.* § 332(c)(7)(B)(ii).

57. *Id.* § 332(c)(7)(B)(iii). The Act also prohibits localities from denying a wireless facility application because of "the environmental effects of radio frequency emission," so long as the proposed facility meets FCC standards. *Id.* § 332(c)(7)(B)(iv). Although health concerns often are cited as one of the reasons citizens oppose wireless facili-

If a locality's actions violate the Act, a wireless provider can seek accelerated judicial relief by filing suit in the applicable federal district court within thirty days of the locality's adverse action.⁵⁸ By providing the authority for federal district courts to review these decisions, the Act seeks to minimize the number of confusing legal standards that state courts could produce from similar reviews.⁵⁹

Zoning Background

Localities create zoning boards to manage growth effectively by predetermining what uses could take place on given parcels of land.⁶⁰ Today, zoning is a complex administrative and political process, as localities use detailed master plans and processes to segment land uses in their communities into multiple categories. Each category then encompasses multiple subcategories with discrete benefits and restrictions.⁶¹

If a landowner wants to use his land in a way that the zoning law does not permit, he seeks special permission for the use by asking for a variance.⁶² The zoning authority usually bases its

ties, this Note will not discuss the issue at great length. See *supra* note 15 and accompanying text.

58. See 47 U.S.C. § 332(c)(7)(B)(v).

59. As long as federal district courts interpret the zoning ordinances of the locality in which the dispute takes place, however, the possibility of differing standards for the placement of wireless facilities virtually is guaranteed. See Littlejohn, *supra* note 22, at 250-56 (stating that the FCC should be allowed to make uniform zoning decisions throughout the country).

60. See Martin, *supra* note 5, at 238.

61. Zoning ordinances are constitutional if they have "some tendency reasonably to serve the public health, safety, morals, or general welfare." 1 ROBERT M. ANDERSON, *AMERICAN LAW OF ZONING* § 7.03, at 737 (4th ed. 1996). For example, zoning ordinances have been used to control competition, minimize traffic congestion, limit community growth, and regulate housing structures. See *id.* § 7.01, at 730-33.

62. A variance is similar to a special use permit. See 3 *id.* § 20.03, at 414-15. Both are forms of administrative relief from the strict application of zoning laws. See *id.* §§ 20.02-20.03, at 410-18. A special use permit is sometimes called a conditional use permit. See PETER W. SALSICH, JR. & TIMOTHY J. TRYNIECKI, *LAND USE REGULATION: A LEGAL ANALYSIS & PRACTICAL APPLICATION OF LAND USE LAW* 207 (1998). The appropriate terminology varies from locality to locality and the term "variance," as used in this Note, covers the variety of terms used by localities to designate the approval of a permit to develop land for a use that is otherwise disallowed.

decision for granting a variance on a standard of review or procedure outlined in the governing ordinance or state statute.⁶³ Wireless providers now attract the kind of public zoning scrutiny once reserved for the power company.⁶⁴ Unlike permitted uses such as power lines or phone lines, wireless communications are relatively new; consequently, their facilities often are not specifically addressed in zoning laws.⁶⁵ Wireless providers who want to use property to install a wireless facility therefore usually must apply for a variance.

The local zoning process typically involves at least three levels of review.⁶⁶ First, most localities have a planning staff that reviews zoning applications and provides professional assistance to the applicants.⁶⁷ Some of these staffs make formal recommendations for approval or denial of an application.⁶⁸ Usually, the second level of review involves a planning commission that advises the ultimate approving body, typically a legislative body such as a city council or board of supervisors.⁶⁹ Generally, this advisory group will hold at least one public hearing on the application and will consider the professional staff's recommendations before making a preliminary decision.⁷⁰ The locality's zoning entity typically conducts the third and final level of review.⁷¹ Again, it is common for this entity to hold at least one public hearing on an

63. See Donatelli, *supra* note 32, at 454.

64. See Martin, *supra* note 5, at 236.

65. See Donatelli, *supra* note 32, at 449.

66. Regardless of where the service provider submits its zoning application, the zoning board, comprised of a variety of people with differing agendas, reviews, verifies, and amends the application numerous times before it ultimately approves or rejects it. The process described is modeled loosely on the procedures used in James City County, Virginia. See *Virginia Metronet, Inc. v. Board of Supervisors*, 984 F. Supp. 966, 969-70 (E.D. Va. 1998).

67. See, e.g., JAMES CITY COUNTY, SPECIAL USE PERMIT PROCEDURE.

68. See, e.g., *id.* (stating that the Planning Division for James City County will review the application and make a recommendation to the Planning Commission).

69. See SALSICH & TRYNIECKI, *supra* note 62, at 202.

70. See *id.* at 203-04; see also JAMES CITY COUNTY, *supra* note 67 (stating that the Planning Commission of James City County will hold a public hearing and recommend that the Commission approve or deny the application).

71. See, e.g., JAMES CITY COUNTY, *supra* note 67 (explaining that after the Planning Commission makes a recommendation, the Planning Division will submit the application to the Board of Supervisors).

application, and consider the recommendations of the staff and the advisory group, as well as review any changes to the application.⁷² The final step of the zoning process usually entails a vote by this committee.⁷³

The Players in the Debate

There are four main parties to the decision-making process in these zoning fights: consumers, the FCC, the wireless industry, and local governments.⁷⁴ Ideally, consumers want immediate access to all wireless products, but they are reluctant or even hostile to living near the system's infrastructure.⁷⁵ The FCC wants to accommodate a rapid development of networks while still allowing localities to make individual placement decisions.⁷⁶ The wireless providers want rapid system development and taller, more powerful facilities during the initial build-up of their system to insure maximum coverage.⁷⁷ Further, communications industry leaders believe that local government should be more cooperative in placing these facilities because of the complex and sensitive nature of the facilities.⁷⁸ The wireless providers favor "uniform, nondiscriminatory, reasonable and timely" zoning processes that will help them establish "ubiquitous networks" of wireless facilities.⁷⁹

Localities, on the other hand, want to choose the precise placement of wireless facilities and make these facilities as unobtrusive as possible.⁸⁰ Localities typically do not want to allow tall towers in areas where surrounding buildings are low in height.⁸¹ Wireless companies, however, prefer to build large towers

72. See, e.g., *id.* (explaining that the Board of Supervisors will hold a public hearing and determine whether to grant or deny the application).

73. See, e.g., *id.* (stating that the Board of Supervisors will hold a hearing and then decide whether to grant the permit).

74. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 2.

75. See *supra* note 5 and accompanying text.

76. See FCC FACT-SHEET, *supra* note 4, at 9, 11.

77. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 14.

78. See *Hearing*, *supra* note 20, at 65 (statement of Thomas E. Wheeler).

79. *Id.*

80. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 2-3, 23.

81. See *id.* at 39-40.

first so that construction costs are spread over the life of the system.⁸² From the very beginning of the zoning process, two ongoing battles exist regarding the number of facilities to build and the height of each facility.⁸³

Since the Act's passage, state and federal trial courts in Alabama,⁸⁴ Connecticut,⁸⁵ Florida,⁸⁶ Georgia,⁸⁷ Illinois,⁸⁸ New Jersey,⁸⁹ New Mexico,⁹⁰ New York,⁹¹ Virginia,⁹² Washington,⁹³ and Wisconsin⁹⁴ all have reviewed the wireless facility zoning issue. Nearly

82. *See id.* at 2.

83. *See id.* at 14.

84. *See Sprint Spectrum L.P. v. Jefferson County*, 968 F. Supp. 1457, 1467-68 (N.D. Ala. 1997) (finding that a county commission's denial violated the Act's prohibitions on unreasonable discrimination and exceeded the Act's reasonable time requirements).

85. *See Sprint Spectrum L.P. v. Town of Farmington*, No. 3:97 CV 863, 1997 WL 631104, at *4, *6 (D. Conn. Oct. 6, 1997) (finding that a zoning board's denial violated the Act's substantial evidence, unreasonable discrimination, and reasonable time requirements).

86. *See AT&T Wireless Servs. of Fla., Inc. v. Orange County*, 982 F. Supp. 856, 859-60 (M.D. Fla. 1997) (finding that the local zoning board's denial of a wireless provider's application violated the Act's writing requirement and failed the substantial evidence test).

87. *See BellSouth Mobility Inc. v. Gwinnett County*, 944 F. Supp. 923, 928 (N.D. Ga. 1996) (finding that a zoning board's denial of a zoning application failed the Act's substantial evidence requirement).

88. *See Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 743-45 (C.D. Ill. 1997) (holding that the zoning denial violated the Act's substantial evidence requirement).

89. *See Smart SMR of New York, Inc. v. Borough of Fair Lawn Bd. of Adjustment*, 704 A.2d 1271, 1278-79 (N.J. 1998) (discussing an applicant's compliance with New Jersey's deferential criteria for the zoning variances of public utilities).

90. *See Western PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230, 1236-38 (D.N.M. 1997) (overruling a zoning board's decision because it violated the Act's substantial evidence requirement, and it had the effect of unreasonably discriminating between functionally equivalent services).

91. *See Sprint Spectrum, L.P. v. Zoning Bd. of Appeals*, 662 N.Y.S.2d 717, 719 (Sup. Ct. 1997) (finding a 10-month time frame to review and deny a zoning application exceeded the Act's reasonable time requirement).

92. *See Virginia Metronet, Inc. v. Board of Supervisors*, 984 F. Supp. 966, 972-73 (E.D. Va. 1998) (reversing a zoning board's decision to deny a wireless provider's special use permit).

93. *See Sprint Spectrum, L.P. v. City of Medina*, 924 F. Supp. 1036, 1040 (W.D. Wash. 1996) (allowing a locality to enforce a zoning moratorium while the zoning board prepared and implemented a process for reviewing all wireless zoning applications).

94. *See Westel-Milwaukee Co. v. Walworth County*, 556 N.W.2d 107, 109 (Wis. Ct.

all of the courts hearing these cases have overruled the decisions of the local zoning authorities and approved the development of the wireless facilities in question.⁹⁵ While the wireless communications industry may be winning the court battles, zoning boards actually are winning the war by delaying each individual facility for as long as possible.

INTERPRETING THE ACT'S REASONABLE TIME REQUIREMENT

The Act intended to speed the approval process of wireless facility zoning applications;⁹⁶ therefore, any roadblocks that impede that process are difficult to justify. Localities have used procedural delays as one way to slow the process, often stalling on the pretext of finalizing a structured application and siting plan for such facilities in their locality.⁹⁷ The practical effect of these delays circumvents the clear intent of the Act. Many localities have imposed outright moratoriums on new applications or approvals until they devise a plan for approving wireless facilities.⁹⁸ Towns in California, Minnesota, Wisconsin, New York, and North Carolina, among others, all have moratoria in place that last from six to twelve months.⁹⁹

In 1996, the wireless industry, led by the Cellular Telecommunications Industry Association (CTIA), asked the FCC to in-

App. 1996) (concurring with much of the rationale in *Medina*, but also stating that the Act does not require localities to give preferential treatment to wireless providers' zoning applications).

95. See generally *Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 743-45 (C.D. Ill. 1997) (overruling the locality's zoning denials because such actions were in violation of the Act); *Western PCS II*, 957 F. Supp. at 1236-38 (same); *BellSouth Mobility Inc. v. Gwinnett County*, 944 F. Supp. 923, 928 (N.D. Ga. 1996) (same). But see *Medina*, 924 F. Supp. at 1040 (upholding the validity of a town's moratorium on approving wireless facilities and declaring that the moratorium did not violate the Act's "reasonable period of time" for approving such facilities).

96. See H.R. CONF. REP. NO. 104-458, at 208 (1996), reprinted in 1996 U.S.C.C.A.N. 124, 222-23.

97. See *Sprint Spectrum L.P. v. Jefferson County*, 968 F. Supp. 1457, 1458 (N.D. Ala. 1997).

98. See *Medina*, 924 F. Supp. at 1039.

99. See *Petition for Declaratory Ruling of the Cellular Telecommunications Industry Association, In the Matter of Federal Preemption of Moratoria Regulation Imposed by State and Local Governments on Siting of Telecommunications Facilities* (visited Jan. 17, 1999) <<http://www.fcc.gov/wtb/siting/ctiapet.html>>.

validate all moratoria of ninety days or more on the basis that they are impermissible market barriers.¹⁰⁰ The FCC made some tentative rulings on the CTIA petition,¹⁰¹ including a statement that short moratoria might not be illegal if localities use them to develop an application process.¹⁰² The FCC refused to define the outer limits of an acceptable moratorium's timeframe, but did invite comments on the issue.¹⁰³ Finally, the FCC recently brokered a compromise in this long-standing dispute.¹⁰⁴ The agreement allows moratoria in situations where localities need "time to review and possibly amend its land use regulations to adequately address issues . . . in a manner that addresses local concerns, provides the public with access to wireless services for its safety, convenience and productivity, and complies with the Telecommunications Act of 1996."¹⁰⁵

When a locality adopts a zoning moratorium, it now agrees to work with affected providers to address the issues needed to lift the moratorium.¹⁰⁶ If a provider believes the moratorium affects the zoning process adversely, it may resort to an informal dispute resolution option within the FCC that involves representatives of the local government and the wireless industry.¹⁰⁷ Neither party is bound to accept the dispute resolution or its brokered outcome,¹⁰⁸ allowing legal action by the provider to remain a viable option. The FCC's compromise settlement makes it unclear which moratoriums will still be enforced and which will be struck down.

100. *See id.*

101. *See FCC Seeks Additional Comment on Petition for Declaratory Ruling Filed by CTIA Concerning Local Moratoria on the Siting of Telecommunications Facilities* No. WT 97-30 (July 28, 1997) (visited Jan. 7, 1998) <http://www.fcc.gov/Bureaus/Wireless/News_Releases/1997/nrwl/7034.txt>.

102. *See id.*

103. *See id.*

104. *See Joint Agreement Regarding Facilities Siting* (visited Jan. 17, 1999) <<http://www.fcc.gov/statelocal/agreement.html>>.

105. *Id.*

106. *See id.*

107. *See id.*

108. *See id.*

Court Decisions Interpreting "Reasonable Period of Time"

The definition of "reasonable period of time," as the phrase applies to the zoning application approval process, has a real impact on whether courts will uphold a locality's zoning decision.¹⁰⁹ A zoning board may take more time approving one provider's facility application as compared to another provider's application.¹¹⁰ In *Illinois RSA No. 3, Inc. v. County of Peoria*,¹¹¹ a federal district court found a six-month approval process reasonable, even though the locality approved similar applications in as little as three months.¹¹² For providers, this case represented a huge loss because they prefer that all applications tend to be treated uniformly.¹¹³ At least one other court has found that the length of time required to reach a zoning decision exceeded the "reasonable period of time" requirement while still failing to state a specific maximum allowable review time.¹¹⁴

Unreasonable Discrimination in Reviewing PCS Applications

Section 704 of the Act prohibits a locality from denying a wireless facility application if that denial will effectively end local competition or favor one provider over another.¹¹⁵ Many

109. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(ii) (Supp. II 1996) (requiring the locality to act on "any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request").

110. See *Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 746 (C.D. Ill. 1997).

111. 963 F. Supp. 732 (C.D. Ill. 1997).

112. See *id.* at 746 ("The Court cannot say that taking six months, compared to three months, is per se unreasonable, and nothing in the record suggests that the County simply ignored or refused to process Plaintiff's request.").

113. See *id.* The wireless provider must carefully balance its aggressive desire for quick approval with its need to give zoning boards the necessary time and information to make a positive decision. It is quite possible, however, that savvy zoning boards may use the wireless provider's flexibility against it by delaying applications repeatedly without running afoul of the Act's reasonable time requirement.

114. See *Sprint Spectrum, L.P. v. Zoning Bd. of Appeals*, 662 N.Y.S.2d 717, 719 (Sup. Ct. 1997) (holding a 10-month approval process excessive under the Act's reasonable time requirements).

115. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(i)(I) (Supp. II 1996).

localities insist on treating PCS and cellular providers differently, usually by preventing the construction of PCS facilities.¹¹⁶ Courts have been quick to curtail this specific type of discrimination.

In *Western PCS II Corp. v. Extraterritorial Zoning Authority*,¹¹⁷ a federal district court in New Mexico found that the zoning authority violated the Act by unreasonably discriminating against functionally equivalent services.¹¹⁸ In this instance, two providers already provided analog cellular service and the denied applicant sought to offer digital service.¹¹⁹ Other courts extended this ruling to prevent localities from using the existence of a single provider as a rationale for excluding new services.¹²⁰

In *Sprint Spectrum L.P. v. Town of Easton*,¹²¹ a local zoning board denied a PCS application because it believed adding a new service such as PCS was not in the public interest.¹²² The *Easton* court overruled the zoning board because the decision violated the Act's unreasonable discrimination clause.¹²³ Moreover, the court noted that Congress intended for facilities to be treated differently only if the facility "create[s] different visual, aesthetic

116. See *AT&T Wireless PCS, Inc. v. City Council*, 979 F. Supp. 416, 424-26 (E.D. Va. 1997), *rev'd*, 155 F.3d 423 (4th Cir. 1998). This case was the first zoning dispute under the 1996 Act to receive appellate review. The zoning board won a stunning victory in the Fourth Circuit. The trial court had found that the zoning board's denial of AT&T's zoning request violated the Act's requirement that digital providers receive the same access as cellular providers and that the zoning decision was made without substantial evidence. See *id.* at 430. The Fourth Circuit reversed, holding that the board supported the zoning decision with substantial evidence and that the Act's prohibition on discriminating against digital providers applied only to blanket prohibitions on access for digital providers, not to individual zoning decisions about the placement of digital facilities. See *AT&T Wireless PCS, Inc. v. City Council*, 155 F.3d 423, 427-31 (4th Cir. 1998). Zoning boards should take close note of the fact that the Fourth Circuit found that "substantial evidence" could be as simple as placing the decision in the board's minutes and sending a letter of denial without any findings of fact or explanation of the decision. See *id.*

117. 957 F. Supp. 1230 (D.N.M. 1997).

118. See *id.* at 1237.

119. See *id.*

120. See, e.g., *Sprint Spectrum L.P. v. Town of Easton*, 982 F. Supp. 47, 51-52 (D. Mass. 1997).

121. 982 F. Supp. 47 (D. Mass. 1997).

122. See *id.* at 51.

123. See *id.*

or safety concerns . . . to the extent permitted under generally applicable zoning requirements."¹²⁴ The court noted that the zoning board might not have understood that PCS offered more than plain cellular service and that the board's protective actions burdened "new entrants offering potentially superior technology."¹²⁵ The district court's strongly worded decision in *Easton* should compel zoning authorities to treat all wireless providers equally, even if *Illinois RSA No. 3* allows them to treat each application along a separate and distinct timeline.

In several other recent cases, federal district courts have found that zoning board denials are the functional equivalent of unreasonable discrimination against an equivalent provider. In *Sprint Spectrum L.P. v. Jefferson County*,¹²⁶ a federal district court in Alabama held that a moratorium resolution by a local zoning board acted as a substantive prohibition against new entries into the marketplace and actually had the effect of prohibiting the development of personal wireless services altogether.¹²⁷ In *Illinois RSA No. 3*, the district court found that a zoning board had acted unreasonably when it used the language of its zoning ordinance as a justification for denying the petitioner's application, even though it previously had granted similar requests for variances in the same area.¹²⁸ In localities that already have accommodated one provider's facilities, any denial of an application for a newer service could violate the Act by impeding the development of functionally equivalent services.

124. *Id.* (quoting H.R. CONF. REP. NO. 104-458, at 208 (1996), *reprinted in* 1996 U.S.C.C.A.N. 124, 222.).

125. *Id.* at 51-52.

126. 968 F. Supp. 1457 (N.D. Ala. 1997).

127. *See id.* at 1467-68.

128. *See Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 744 (C.D. Ill. 1997) ("The County offers no reason why it would permit someone to construct a cellular tower in the R2 district and not the R1 district. And without any reason, discrimination is unreasonable and violates the Telecom Act."). The district court's ruling hurts localities because it evinces a judicial intolerance to differences in zoning in R1 and R2 areas. In reality, localities probably spend a great deal of time defining what is acceptable for each of these areas.

INTERPRETING THE ACT'S "SUBSTANTIAL EVIDENCE"
REQUIREMENT

Once localities actually start processing wireless facility applications, zoning application denials or the imposition of moratoria inevitably follow.¹²⁹ The public's perception of such facilities as ugly monolithic towers hovering over their neighborhoods is the basis for many such denials.¹³⁰ Wireless providers use the federal courts to enforce their rights,¹³¹ and they succeed primarily because zoning authorities fail to show that they based their denial of the wireless providers' application on "substantial evidence" as required under the Act.¹³² The term "substantial evidence" must be identified in a way that stands as a middle ground between the industry's view that no denial is valid and the locality's view that any justification for denial is sufficient.

Section 704 of the Act states that "[a]ny decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record."¹³³ The federal definition of "substantial evidence" is well-established in administrative law and ap-

129. "Th[e] continued expansion of cellular communications systems, in both capacity and geographical coverage, has resulted in the inevitable conflict with local land-use planning and zoning laws." Nancy M. Palermo, Comment, *Progress Before Pleasure: Balancing the Competing Interests of Telecommunications Companies and Landowners in Cell Site Construction*, 16 TEMP. ENVTL. L. & TECH. J. 245, 246 (1998). Zoning boards have responded to these conflicts by either imposing moratoria or denying the applications altogether. See *id.* at 247.

130. See Hughes, *supra* note 13, at 497 (stating that citizens "detest" the visual impact that towers have on their neighborhoods and referring to the towers as "eyesores").

131. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(v) (Supp. II 1996) (stating that expedited review is available in the federal courts); see also *Sprint Spectrum L.P. v. Town of Easton*, 982 F. Supp. 47, 49 (D. Mass. 1997) (citing cases in which service providers have used federal courts to enforce their rights and challenge zoning board decisions); *Western PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230, 1233-34 (D.N.M. 1997) (same).

132. See, e.g., *Sprint Spectrum*, 982 F. Supp. at 52 (ordering a town to grant a special permit where the zoning board did not base its denial of the permit on "substantial evidence"); *Illinois RSA No. 3*, 963 F. Supp. at 743 (reversing a zoning board's denial of a special use request because the decision was not supported by "substantial evidence" in the written record).

133. 47 U.S.C. § 332(c)(7)(B)(iii).

plies to these cases.¹³⁴ "When deciding whether a decision rests on substantial evidence, the Court must consider all of the evidence in the record, the evidence in favor of the decision under review as well as the evidence opposed to the decision."¹³⁵ The Supreme Court also has stated that "[t]he decisions of intermediate administrative tribunals are considered part of the evidence."¹³⁶ The Act shifts the burden of proof to the locality to present "substantial evidence" to justify its decision to deny an application; the provider, as plaintiff, will never have to present "substantial evidence" to prove that the zoning board should have approved the project.¹³⁷

Since the Act's passage, federal district courts have taken the first steps towards defining "substantial evidence" in the context of the Act. In *Illinois RSA No. 3*, a federal district court defined "substantial evidence" as "such relevant evidence as a reasonable mind might accept as adequate to support a conclusion."¹³⁸ The court called it "more than a scintilla of evidence, but less than a preponderance."¹³⁹ These two definitions leave localities and wireless providers unclear as to which rationales for denying facility applications will survive judicial scrutiny.

Most court cases have focused on three central issues in defining "substantial evidence." First, whether the zoning authority's process helped meet the burden of proving "substantial evidence" for denial.¹⁴⁰ Second, whether the zoning authority gave undue weight to citizen concerns over the health ramifications of

134. See *infra* notes 135-39 and accompanying text.

135. *Universal Camera Corp. v. NLRB*, 340 U.S. 474, 488 (1951), quoted in *Illinois RSA No. 3*, 963 F. Supp. at 744.

136. *Id.* at 496, quoted in *Illinois RSA No. 3*, 963 F. Supp. at 744.

137. See *Sprint Spectrum*, 982 F. Supp. at 49. "[T]he TCA [Telecommunications Act of 1996] shifts the burden of proof to the government agency that denied the applicant's siting request" instead of requiring the applicant to submit substantial evidence to sustain the application. *Id.* (citation omitted). But see S. 1350, 105th Cong. (1997) (proposing that Congress alter the Act by shifting the burden in these cases to the provider).

138. *Illinois RSA No. 3*, 963 F. Supp. at 743 (quoting *Drilling Mechanic Contractors, Inc. v. NLRB*, 107 F.3d 521, 524 (7th Cir. 1997)).

139. *Id.* (quoting *Geske & Sons, Inc. v. NLRB*, 103 F.3d 1366, 1374 (7th Cir. 1997)).

140. See *infra* text accompanying notes 143-60.

direct exposure to emissions from the facility.¹⁴¹ Third, whether the zoning authority gave the proper weight to expert testimony in rendering a decision.¹⁴²

Procedural Issues

A zoning board cannot choose to offer a justification for its decision only when the denied party exercises its right of judicial review.¹⁴³ Rather, the evidence for the denial must be on hand before the board makes the decision.¹⁴⁴ In *Western PCS II*, a federal district court in New Mexico ruled that a zoning board failed the "substantial evidence" standard when its sole justification for denial was a post-appeal transcript of the proceedings.¹⁴⁵ In *Illinois RSA No. 3*, a federal district court in Illinois found that a zoning board violated the "substantial evidence" standard when it failed to list any reason for the denial in its letter to the applicant and did not refer to any evidence in the record that justified the denial.¹⁴⁶ The court made it clear that it wanted "written findings and conclusions so that reviewing bodies may efficiently judge those findings and conclusions against the evidence and the record."¹⁴⁷ For zoning boards, the message is clear: document concerns about proposed facilities early, often, and in detail or risk reversal in court.

A federal district court in Virginia examined one of the most egregious procedural mistakes made by a locality in *Virginia*

141. See *infra* text accompanying notes 161-82.

142. See *infra* text accompanying notes 183-89.

143. See, e.g., *Virginia Metronet, Inc. v. Board of Supervisors*, 984 F. Supp. 966, 972-73 (E.D. Va. 1998) (reversing a zoning board's denial of a special use permit to a wireless provider when the board sent the required denial letter six days after the provider filed suit, on the basis that the letter's rationale appeared to be a mere pretext for the denial).

144. See *id.*

145. See *Western PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230, 1236 (D.N.M. 1997) ("The requirement for a written denial was obviously included to permit a reviewing court to ascertain the rationale behind a denial so that it can determine if that denial comports with the requirements of the statute.").

146. See *Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 743 (C.D. Ill. 1997). The court concurred with *Western PCS II*, noting that "a post-appeal transcript of proceedings before a local zoning authority is not sufficient to meet the requirements of § 332(c)(7)(B)(iii)." *Id.* (citing *Western PCS II*, 957 F. Supp. at 1236).

147. *Id.*

Metronet, Inc. v. Board of Supervisors.¹⁴⁸ The city council failed to send the required denial letter until thirty-four days after it made its decision,¹⁴⁹ while the Act requires such a denial to be issued within thirty days of the decision.¹⁵⁰ The court in *Metronet* noted that the board had written the letter six days *after* the provider filed suit in court, thus giving the board's stated rationale in the letter the appearance of mere pretext.¹⁵¹ The board's failure to notify the provider promptly virtually required the court to rule against the zoning board, regardless of any reasoning the board might have had for its decision.

A zoning board or locality must proceed carefully where it uses a multi-step review and approval process that encourages the development of records that would justify or refute denial of the application. In *Western PCS II*, a locality's preliminary reviewing body unanimously recommended that the zoning authority approve the wireless provider's application.¹⁵² After that recommendation, however, the zoning board voted to deny the application, and the court subsequently determined that the zoning board's decision failed the "substantial evidence" test.¹⁵³ *Western PCS II* therefore implies that if a zoning board delegates authority to a planning committee or other subcommittee, it must be able to justify a rejection of that subcommittee's recommendation to approve the zoning application. At least in the context of wireless facility applications, *Western PCS II* stands as a barrier to zoning boards that might otherwise summarily dismiss an advisory board's recommendations.

Courts seem to take a dim view of zoning board records that only reflect the opinion of one member of a zoning authority. In *Western PCS II*, the district court ruled that a denial did not meet the "substantial evidence" test when the transcripts reflected

148. 984 F. Supp. 966 (E.D. Va. 1998).

149. See *id.* at 970.

150. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(v) (Supp. II 1996).

151. See *Virginia Metronet*, 984 F. Supp. at 973.

152. See *Western PCS II Corp. v. Extraterritorial Zoning Auth.*, 957 F. Supp. 1230, 1234 (D.N.M. 1997).

153. See *id.* at 1235-36.

the rationale of just a single member of the board.¹⁵⁴ If individual members of a zoning board are not willing to voice their concerns about why they voted to deny the application for a wireless facility, they are aiding the provider's chances of successfully appealing the decision in federal district court.¹⁵⁵ The message here is simple and easy to enact: a zoning board must require that each member state the rationale for his or her vote as the board makes its decision on a wireless facility application.

Localities that are in the process of altering their zoning ordinances or processes to address the wireless facility problem should not allow those changes to affect pending applications adversely. In *Sprint Spectrum L.P. v. Jefferson County*, a federal district court in Alabama held that when a zoning authority imposes a moratorium, pending applications must be processed using existing ordinances, not future rules.¹⁵⁶ The import of this holding is clear: a locality may not receive applications from providers and then suddenly change the rules to prevent these applications from being approved. Refusing to process applications under the pretense of waiting for new regulations to take effect will never survive the Act's "substantial evidence" requirement.¹⁵⁷

In addition to novel definitions, courts are not likely to accept novel justifications for denying applications. In *Smart SMR v. Borough of Fair Lawn Board of Adjustment*,¹⁵⁸ a zoning board denied a new wireless antenna site partially because the additional wireless services might be used to conduct illegal business transactions.¹⁵⁹ The New Jersey Supreme Court quickly dismissed that rationale,¹⁶⁰ and the very fact that the zoning authority even offered it probably undermined any credibility the zoning authority might have had before the court.

154. *See id.*

155. *See id.* (holding that Congress intended the written denial requirement to permit a reviewing court to ascertain the rationale behind a denial in order to determine if the denial comports with the statute).

156. *See Sprint Spectrum L.P. v. Jefferson County*, 968 F. Supp. 1457, 1466-67, 1469 (N.D. Ala. 1997).

157. *See id.* at 1468-69.

158. 704 A.2d 1271 (N.J. 1998).

159. *See id.* at 1280-81.

160. *See id.* (finding that while a monopole was not an inherently beneficial use, it met the criteria for a variance and that the zoning board's reasons for denial were insufficient)

Substantive Concerns: Aesthetics, Provider Concessions Values, and Citizen Complaints

In construing the "substantial evidence" standard, courts have shown little regard for the substantive viewpoints of the citizens who must live with these facilities.¹⁶¹ The crusade of a lone citizen, challenging the interests of a wireless provider, is not likely to meet the "substantial evidence" standard required to justify a denial of the application. In *BellSouth Mobility, Inc. v. Gwinnett County*,¹⁶² one citizen spoke at a public hearing on behalf of other residents who opposed the granting of a variance for a wireless provider.¹⁶³ The residents' concerns in *BellSouth*, that the radio frequency emissions posed a safety risk to area residents and that the facility would cause a significant loss in property value for nearby property owners, mirrored those heard at zoning board meetings across the country.¹⁶⁴ In reversing the decision of the zoning board, the court in *BellSouth* stated that a "[lone citizen's] generalized concerns do not constitute substantial evidence supporting the board's decision."¹⁶⁵

A federal district court in Illinois showed even greater disregard for citizens' complaints, apparently muting the voices of citizens aligned in opposition to these projects.¹⁶⁶ The citizens who spoke at the zoning board hearing in *Illinois RSA No. 3* presented a survey showing the extent of citizen opposition to the proposed wireless facility.¹⁶⁷ The zoning board considered the survey before denying the variance requested by the wireless provider for the project.¹⁶⁸ In reversing the zoning board's decision, the court ruled that the zoning authority inappropriately

161. See, e.g., *Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 745 (C.D. Ill. 1997) (reversing a denial of a special use permit, thereby disregarding a survey presented by local residents describing public opposition to the proposed facility); *BellSouth Mobility Inc. v. Gwinnett County*, 944 F. Supp. 923, 926, 928 (N.D. Ga. 1996) (reversing an application denial despite opposition voiced by a concerned citizen).

162. 944 F. Supp. 923 (N.D. Ga. 1996).

163. See *id.* at 928.

164. See *id.* at 926.

165. *Id.* at 928.

166. See *Illinois RSA No. 3*, 963 F. Supp. at 745.

167. See *id.* at 738-39, 745.

168. See *id.*

considered the survey as "substantial evidence" that could justify a denial of the variance because it "amount[ed] to [nothing] more than evidence of generalized and unfounded opposition to the proposed cell site."¹⁶⁹

Wireless providers often have made significant concessions in regard to the details of their proposed facilities in exchange for the ability to build these facilities.¹⁷⁰ There is, however, a limit to the concessions providers are willing to make. When negotiations fail, and a zoning board subsequently denies the application, the provider can use the concession negotiations as proof that the board's denial fails to meet the Act's "substantial evidence" requirement. For instance, the court in *BellSouth* ruled that the zoning board's denial of an application lacked "substantial evidence" after the provider compromised and made four major concessions.¹⁷¹ This case suggests that it is in the provider's best interest to offer concessions, because such a good faith effort shows the reviewing court that facility placement was possible and that the zoning authority's denial may have been unreasonable.

Courts also have shown that citizen concerns about aesthetic beauty or the wireless facility's impact on surrounding property values are not persuasive. While most zoning boards follow the maxim "all politics is local,"¹⁷² and probably view aesthetic concerns and drops in property value as major issues when making zoning decisions, courts find these rationales to be insufficient when compared to the national interest of establishing wireless networks.¹⁷³ For example, in *Evans v. Shore Communications*,

169. *Id.* at 745 (citing *BellSouth*, 944 F. Supp. at 928).

170. *See, e.g., BellSouth*, 944 F. Supp. at 925 (describing a wireless provider's agreement to prohibit the use of microwave equipment, to paint the monopole a color selected by neighbors, and to keep the monopole unlit).

171. *See id.*

172. Mark Cheshire, *Revving It Up!*, DAILY REC. (Baltimore), Apr. 19, 1997, at 1A, available in 1997 WL 8897302 (noting that with zoning, permitting, and environmental issues, "all politics is local").

173. For example, Virginia does not allow aesthetics to serve as a rationale for denying property owners the right to use their land as they see fit. A zoning authority "cannot limit or restrict the use which a person may make of his property under the guise of its police power where the exercise of such power would be justified solely on aesthetic considerations." *Board of Supervisors v. Rowe*, 216 S.E.2d 199, 213 (Va.

Inc.,¹⁷⁴ the Maryland Court of Special Appeals ruled that a local zoning board wrongly denied an application for a new tower when the major concern discussed at the hearing was the tower's potential to undermine the rural character of a neighborhood.¹⁷⁵ The proposed tower location seemed ideal: its location on high ground allowed for reduced antenna height, nearby foliage presented a natural visual buffer, and the surrounding properties were adjacent to a major highway so that nearby property values would not be adversely affected.¹⁷⁶ The fact that the zoning board overlooked all of these factors in denying the application makes one wonder if the problem may not be that zoning boards turn down applications without "substantial evidence," but rather that zoning boards fail to approve applications because they do not know "substantial evidence" when they see it.

In *Nynex Mobile Communications Co. v. Hazlet Township Zoning Board of Adjustment*,¹⁷⁷ the New Jersey Superior Court, Appellate Division, overruled a zoning board's denial of a wireless provider's application when the board had based its decision on the aesthetic damage that would result to a neighborhood if a wireless provider were to attach a ten-foot antenna to an already existing water tower.¹⁷⁸ Again, the denial defied logic because the provider intended to make only a small modification to an existing structure to accommodate the disputed antenna. It also seems strange that a zoning board might argue legitimately that a water tower, rarely considered an architectural crown jewel, might be made less aesthetically pleasing by the addition of a ten-foot antenna.¹⁷⁹

1975) (quoting *Kenyon Peck v. Kennedy*, 168 S.E.2d 117, 120-21 (Va. 1969)).

174. 685 A.2d 454 (Md. Ct. Spec. App. 1996).

175. See *id.* at 464.

176. See *id.* at 456-57.

177. 648 A.2d 724 (N.J. Super. Ct. App. Div. 1994).

178. See *id.* at 732.

179. *Nynex Mobile* might be one of the first situations in which a wireless provider went to court to defend a decision to collocate its equipment with an already existing visually displeasing facility. Perhaps this was a case in which the locality preferred to spread out its aesthetically displeasing structures throughout the community. In contrast, most communities probably would consider it more logical to place all of its aesthetically displeasing structures together.

While it makes sense from a judicial perspective to rule that a parade of irate and unhappy citizens complaining about aesthetic effects and lower property values do not meet the "substantial evidence" burden, such a rule significantly undercuts the democratic process.¹⁸⁰ Zoning boards usually are composed of elected officials, or people appointed by elected officials, and therefore are responsible for and accountable to the people in their community.¹⁸¹ Even though zoning boards often make a good faith attempt to take the concerns of affected citizens into account in making a zoning decision, the federal courts have interpreted the Act in such a way as to subvert legitimate citizen opposition fundamentally.¹⁸² The courts have not yet explored one particular question regarding citizen opposition: Does substantial, organized, and orchestrated opposition to a variance application meet the Act's definition of "substantial evidence"? It is unclear whether, given enough time and money, a well-organized group of citizens could clear an evidentiary burden that no single citizen has yet met.

The Use of Experts to Provide "Substantial Evidence"

Zoning battles typically involve the use of experts who assess the proposed project.¹⁸³ While courts have given short shrift to experts' warnings about the decline in property values in areas in the shadow of wireless facilities,¹⁸⁴ they have shown some deference to industry experts used by providers to support their applications.¹⁸⁵ Expert testimony therefore may be insufficient to

180. See *AT&T Wireless PCS, Inc. v. City Council*, 155 F.3d 423, 429 (4th Cir. 1998).

181. See 3 ANDERSON, *supra* note 61, §§ 19.15-19.16, at 384-87.

182. Zoning boards may in fact benefit from this in that they may be able to use the federal courts as an excuse to dismiss citizen complaints in these cases and move quickly to approve an application for a wireless facility, all the while blaming the courts for tying their hands and preventing them from carrying out the citizen's wishes.

183. See, e.g., *Illinois RSA No. 3, Inc. v. County of Peoria*, 963 F. Supp. 732, 738, 744 (C.D. Ill. 1997); *BellSouth Mobility Inc. v. Gwinnett County*, 944 F. Supp. 923, 925-26, 928 (N.D. Ga. 1996); *Pierce Estates Corp., Inc. v. Bridgewater Township Zoning Bd. of Adjustment*, 697 A.2d 195, 196-98 (N.J. Super. Ct. App. Div. 1997).

184. See, e.g., *Criscuola v. Power Auth.*, 621 N.E.2d 1195, 1197 (N.Y. 1993) (dismissing the usefulness of expert opinion on property values).

185. See, e.g., *Illinois RSA No. 3*, 963 F. Supp. at 744; *Sprint Spectrum L.P. v.*

oppose the application, but sufficient to provide proof that "substantial evidence" existed to approve the wireless provider's application.

In *Nynex Mobile*, a New Jersey court found that a real estate expert's testimony that property values would not decline rebutted the zoning board's claim that it based its denial on "substantial evidence."¹⁸⁶ The court noted that "[o]ne senses in reading this transcript that no matter how many experts this applicant could have produced, the Board was not prepared to accept the reality of the telecommunications world of 1992 and 1993 and beyond. There is clearly in this record an identifiable public interest."¹⁸⁷ Similarly, in *Sprint Spectrum L.P. v. Town of Farmington*,¹⁸⁸ a federal district court ruled that the opinions of members of a zoning board, who lacked expertise in the subject of property values themselves, were not sufficient to rebut the testimony of an expert who concluded that a wireless facility would not damage neighboring property values.¹⁸⁹

SUGGESTED CRITERIA FOR LOCALITIES TO UTILIZE IN THE APPLICATION PROCESS

This Note has considered many different facets of the zoning application process as it pertains to wireless facilities. While the cases have been widely dispersed throughout federal and state courts, a few emerging patterns suggest criteria for a uniform facility approval process. Zoning boards tend to deny wireless provider applications in large numbers,¹⁹⁰ while courts generally prefer to allow such applications to proceed because of the national impact of denial.¹⁹¹ These patterns suggest that wireless

Town of Farmington, No. 3:97 CV 863, 1997 WL 631104, at *4 (D. Conn. Oct. 6, 1997); *Nynex Mobile Communications Co. v. Hazlet Township Zoning Bd. of Adjustment*, 648 A.2d 724, 725-27, 732 (N.J. Super. Ct. App. Div. 1994).

186. See *Nynex Mobile*, 648 A.2d at 728-29 (quoting trial judge).

187. *Id.* (quoting trial judge).

188. No. 3:97 CV 863, 1997 WL 631104, at *4 (D. Conn. Oct. 6, 1997).

189. See *id.* at *4; see also *Evans v. Shore Communications, Inc.*, 685 A.2d 454, 464 (Md. Ct. Spec. App. 1996) (finding that the provider's expert witnesses proved that the proposed facility was viable and safe).

190. See *supra* note 95 and accompanying text.

191. See *id.*; see also *Nynex Mobile*, 648 A.2d at 730-31 (stressing the importance

providers are not being treated like other zoning applicants. The criteria and planning process this Note will now suggest therefore relies on the important assumption that wireless providers are entitled to a zoning process especially tailored to their unique characteristics and the requirements of the Act. If a zoning board uses these suggested criteria correctly, it will reduce significantly the chances that its decisions will be challenged in court, while also increasing the chances that it will approve each individual application.

Step 1: Getting Started

There are some general criteria and planning steps that all localities should take before they finalize a plan for considering wireless facilities applications. First, the locality should examine its ordinances and state laws, and determine how wireless providers and wireless facilities fit into those statutes and ordinances. Localities should adjust local ordinances to reflect which zoning areas may have wireless facilities without a variance and which areas require a variance. Many communities have already contemplated and implemented this first step.¹⁹²

Second, a locality should map its jurisdiction to consider where it has already placed wireless facilities and where the best remaining locations are from an engineering standpoint. Mapping the jurisdiction in this way will help the zoning board to be proactive in identifying which properties might be most attractive to wireless providers. Mapping also provides zoning boards with a list of alternative sites for proposed facilities.¹⁹³ Localities also could decide that certain preexisting facilities in their area, such as water towers, antennas and some buildings, are preferred collocation sites. One proposed Model Bylaw for

of improved telecommunications for the entire community).

192. See, e.g., CAPE COD COMMISSION & KREINES & KREINES, INC., MODEL BYLAW FOR PERSONAL WIRELESS FACILITIES 7 (1997) (describing the use of "Wireless Facility Overlay Districts" designated on town zoning maps to allow taller structures).

193. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 47. For instance, wireless providers will want to locate their facilities near highways to accommodate the high use of wireless phones, therefore a locality should identify locations near major roads that are suitable for such facilities.

localities recommends permitting wireless facilities by right on existing towers and having the locality identify areas where larger structures would be approved, approved with camouflage, or prohibited entirely.¹⁹⁴

Step 2: Defining a Locality's Placement Philosophy

As part of mapping the locality and determining potential sites for wireless facilities, localities need to make an important and conscious decision about the manner in which they want to approve these facilities. The eventual buildout of a mature wireless system features dozens of smaller facilities using low power to maximize spectrum use inside a service area.¹⁹⁵ Even so, first-stage buildout of a system usually prompts a provider to build larger towers with more power to get the system up and running in an area.¹⁹⁶ Localities should make conscious efforts to admit that new providers eventually will have a mature system in their area, which inevitably will result in a number of small towers with low power. If that is the case, localities could approach zoning from that perspective at the outset. Localities must be willing to choose between a small number of very large towers and a large number of relatively small towers. That choice is better made before the process of placing the new systems begins, as it is a decision that will permeate all future zoning decisions for that locality.¹⁹⁷

In addressing these placement issues, localities would benefit from supporting a philosophy of more facilities with less power. First, many of the major citizen disputes stem from plans to build huge antenna towers,¹⁹⁸ so the smaller the facility, the less likely citizens will be to complain. Second, smaller facilities reduce health concerns about radio frequency emissions because

194. See CAPE COD COMMISSION & KREINES & KREINES, INC., *supra* note 192, at 7.

195. See *id.* at 14.

196. See *id.*

197. See *id.*

198. See, e.g., Illinois RSA No. 3, Inc. v. County of Peoria, 963 F. Supp. 732, 736-40 (C.D. Ill. 1997); BellSouth Mobility Inc. v. Gwinnett County, 944 F. Supp. 923, 924-26 (N.D. Ga. 1996); Pierce Estate Corp. v. Bridgewater Township Zoning Bd. of Adjustment, 697 A.2d 195, 196-98 (N.J. Super. Ct. App. Div. 1997).

smaller facilities use less power in order to divide and reuse the spectrum inside the service area.¹⁹⁹ Third, approving a plan that calls for multiple facilities instead of a few facilities avoids a "Russian Roulette" dilemma for zoning boards.²⁰⁰ If a locality plans to allow only a few large facilities inside an area, citizen groups will seek to pass those facilities off to other neighborhoods or locations that do not affect them.²⁰¹ If the number of facilities is much larger, however, zoning boards can discount much of the citizen opposition, as every neighborhood will need to be home to some facilities in order for the system to work effectively. Localities with a detailed facility plan also will be more likely to withstand court challenges when they deny applications that do not comply with their master plans.²⁰² Unfortunately, some smaller localities will not be able to adopt these types of plans because they will have no leverage with providers who want to build only one or two facilities in their area.²⁰³

Step Three: Meeting the "Substantial Evidence" Standard

After a zoning board has mapped a locality, adopted its ordinances, and made a conscious decision about how it prefers facil-

199. See John Wildermuth, *Communities Battle Cellular Towers, Antennas / A "Not in My Back Yard" Phone Fight*, S.F. CHRON., Mar. 2, 1995, at A1, available in 1995 WL 5267697.

200. See J. Linn Allen, *Determining What Goes Where; One City's Adventure in the Twilight Land of Zoning*, CHI. TRIB., Sept. 27, 1989, at 10, available in 1989 WL 4627641 (noting that the zoning process can be a game of "Russian Roulette").

201. See Palermo, *supra* note 129, at 256 (stating that citizens frequently argue "that there are plenty of alternative locations for these offensive towers, such as commercial zones outside of their neighborhoods").

202. Even local residents can see the virtue of pre-planned zoning schemes. One citizen suggested that his city "[m]ap out where [the towers] will be beforehand . . . Don't approve on a site-by-site basis." Charles Boothe, *Pagers, Cell Phones Put More and More Towers on Horizon*, RICHMOND TIMES-DISPATCH, Aug. 10, 1997, at B1.

203. Geographically small towns with no existing wireless service do not have the same advantages as larger areas:

Where there is presently no service provided to an area, and construction of a facility on the requested site could fill the service gap, denial of said construction would prevent the provision of service. Under such a regime, local governments would be faced with an overwhelming burden to support their denial of a permit.

Tan, *supra* note 48, at 488 (citation omitted).

ities to be arrayed inside its jurisdiction, it needs to decide what form of supporting evidence a wireless provider should offer when applying for approval of a wireless facility. A wireless provider should supply as much advance information as possible with its application and also should be responsive to any requests a zoning board makes of them. A locality should also recognize that wireless providers value advance knowledge of the zoning process so they can adequately prepare to defend their zoning applications.²⁰⁴

A zoning board should ask for at least six pieces of evidence in an application process. First, the zoning board needs proof that the location in question has sufficient power for the proposed wireless facility.²⁰⁵ Second, the property physically must be able to hold the necessary equipment for the facility.²⁰⁶ This consideration is especially important in those cases in which the facility will be added onto an existing structure, such as when antennas are placed on rooftops or water towers. Third, the zoning board should supply proof that the property's historical and architectural pedigree does not prevent or discourage placement of the facility.²⁰⁷ While some historical buildings are among the best engineering locations for wireless facilities, these locations should be protected and zoning authorities should generally forbid wireless facilities absent a showing that no better location exists. Fourth, the wireless provider should prove that the property is easily accessible so the provider can inspect and maintain the facility.²⁰⁸ Fifth, zoning boards should ask the provider to demonstrate how the facility will fit into the provider's long-term service plans and how the facility fits into the town's philosophy of placing these facilities.²⁰⁹ Sixth, the zoning board should demand documents showing compliance with all federal regulations regarding the radio emissions from the proposed

204. See FCC FACT SHEET #2, *supra* note 21, at 7-8.

205. See Chuck Jones, *Set Your Sites for Better Wireless Management*, TELEPHONY, Jan. 9, 1995, at 24.

206. See *id.*

207. See CAPE COD COMMISSION & KREINES & KREINES, INC., *supra* note 192, at 12-13.

208. See Jones, *supra* note 205, at 24.

209. See FCC FACT SHEET #2, *supra* note 21, at 7.

facility.²¹⁰ Most localities, if not all, doubtlessly will add many more required documents to this list, but these six items provide a basic framework for zoning boards to consider these applications rationally.

Step Four: The Collocation Requirement

It appears that wireless providers and localities are not litigating disputes about collocation of wireless facilities. Perhaps this issue is being negotiated at the zoning level and is not a factor in the decision-making process, but if a locality adopts the steps outlined above to map its jurisdiction, it will also be able to identify whether collocation is a viable option for wireless providers. Once a locality allows wireless providers to build more facilities, the need for collocation will grow, and the number of locations that will be eligible to host these smaller facilities also will expand. It is therefore prudent for a locality to make a finding that some locations like water towers are per se acceptable for collocation. As mentioned in one case, it stretches the absurd to claim that the aesthetic value of a water tower suffers by the addition of a ten-foot antenna.²¹¹ It seems wiser to make an ugly location uglier than to create a new aesthetically displeasing location. For the wireless industry, collocation makes sense because providers save on construction and approval costs and because the existing structure usually occupies the most technologically superior location for the proposed facility.

Zoning boards need to be sensitive to the notion that some engineering factors limit the ability to collocate, so collocation is not a panacea for the placement problem. A factor that could affect the collocation option in a negative way is the existing structure's ability to support the new facility's weight load.²¹² The adverse radio frequency interference that could occur from placing those facilities together also potentially limits collocation

210. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 35-36 (noting the ability of localities to enforce the FCC's radio frequency (RFR) emissions standards and the implications of this enforcement).

211. See *Nynex Mobile Communications Co. v. Hazlet Township Zoning Bd. of Adjustment*, 648 A.2d 724, 725 (N.J. Super. Ct. App. Div. 1994).

212. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 17.

of multiple wireless facilities in a single location, in an antenna farm for instance.²¹³ The wireless industry argues that collocation requires larger, more powerful facilities to offset possible interference problems.²¹⁴

The industry also argues that collocation implicates an anti-trust issue that localities have not contemplated, as it requires competitors to share proprietary technical information that could reduce competitive edges.²¹⁵ However, collocation actually could preserve competition inside a market because collocation would allow a zoning board to offer an ideal facility location to more than one provider.²¹⁶ By forcing the providers to share the best locations, the zoning board will be able to prevent one of the providers from leveraging any enhanced transmission abilities in the area into a competitive advantage that could drive out competition and drive up prices for consumers.²¹⁷ Collocation offers a partial solution for the need to identify multiple locations for these facilities.²¹⁸ In fact, many localities already require collocation where possible.²¹⁹ Collocation would work best if localities used it as both a carrot and a stick for wireless providers. Localities could entice wireless providers by using their local master plans to identify collocation sites and make the collocation zoning approval process easier. At the same time, localities could require providers to show that they have made a good faith effort to find a suitable collocation site for the facility before starting the review process for a new site.²²⁰

213. *See id.* at 18.

214. *See id.* The FCC encourages collocation to the extent possible, but collocation should "not be viewed as a complete solution to all land use concerns associated with the deployment of personal wireless services." FCC FACT SHEET #2, *supra* note 21, at 8.

215. *See* KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 18.

216. Technical or engineering requirements do not limit the potential for collocation. For instance, one antenna tower builder claims it can build monopoles that accommodate seven or eight positions. *See id.* at 20 (noting the claim made by UniSite, Inc., a master tower builder).

217. *See generally id.* at 18 (recognizing that carriers may avoid collocation "for competitive reasons").

218. *See id.*

219. *See id.*

220. At least one Model Bylaw for localities endorses a requirement for the provider to undertake a good faith effort to find a collocation site before seeking approval

Step Five: Defining Setbacks and Fall Zones

Wireless facilities usually require an antenna of some sort,²²¹ therefore there always are concerns that those facilities might collapse.²²² Most localities do not have standards for fall zones and the wireless industry believes they are unnecessary because the chance of tower failure is so small.²²³ While one commentator recommends a fall zone equal to the height of the tower in determining setback requirements,²²⁴ implementing such a standard seems excessive. A locality should adopt reasonable fall zone or setback requirements that still allow for construction of the antennas and towers so as to avoid challenges by providers that the requirements are impermissible market barriers. Any requirements regarding fall zones or setbacks should thus be minimal in their effect on the ability of wireless providers to erect facilities. Furthermore, fall zone requirements should never be the sole justification for denying an application for a wireless facility. The locality has a duty to work with the provider to make safety regulations work for both parties.²²⁵

Step Six: Making Decisions That Supply "Substantial Evidence"

Providers have continually gone to court over the meaning of the phrase "substantial evidence," and for the most part, they have won these battles against localities that have denied their applications.²²⁶ While no proposed guideline could offer a complete list of steps that zoning boards should take to inoculate

for a solo facility. See CAPE COD COMMISSION & KREINES & KREINES, INC., *supra* note 192, at 21.

221. See Hughes, *supra* note 13, at 470 (stating that wireless providers must rely on an established "infrastructure" in order to remain competitive in the market and describing this "infrastructure" as "antennas mounted high above the ground on either existing structures or on towers erected specifically for this purpose").

222. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 15.

223. A fall zone refers to the area where there is a potential hazard from collapse or falling debris. See *id.* at 15-16. A recent study found that only one similar free-standing tower in the United States has collapsed in 40 years. See *id.* at 16.

224. See *id.* at 15.

225. See generally Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B) (Supp. II 1996) (placing limitations on zoning board actions and generally requiring a locality to accommodate wireless service facilities).

226. See *supra* notes 129-60 and accompanying text.

themselves from challenges to a decision to deny zoning applications, previous court challenges suggest several fundamental steps.

First, legal counsel for a local zoning board should educate its members as to legally permissible rationales for denying an application. As described earlier in this Note, health concerns or the complaints of a few citizens are not "substantial evidence" to support a denial and providers will succeed in challenging these rationales.²²⁷ Second, a zoning board's denial of an application should state each member's rationale for voting for or against the project on the record prior to the vote. Without evidence as to the board members' reasons for denial, a court likely would reverse the locality's denial because it lacks the required "substantial evidence."²²⁸ Third, the rationale for any denial must be included in an official record and in the letter sent to the provider informing it of the denial. Further, the denial must be issued within thirty days of the decision in order to comply with the Act.²²⁹ Fourth, a zoning board must realize that aesthetic concerns alone are not sufficient to justify denying an application,²³⁰ but they do warrant negotiations with the provider to modify the facility to alleviate such concerns. Fifth, zoning boards must recognize that their members are not considered experts for the purpose of refuting the testimony of a provider's expert witnesses, unless they have specific and professional knowledge.²³¹ Sixth, the zoning board must realize that any decision to decline an application places the burden of proof on the board to show there was "substantial evidence" to justify its decision.²³² Seventh, in making its decision to decline an application, a zoning board must ensure that it points to specific evidence in the record, especially when it chooses to overrule the positive recom-

227. See *supra* notes 161-82 and accompanying text; see also Brian J. Sullivan, *The Effect of the Telecommunications Act on Zoning and Planning*, 16 COMM. LAW. 3, 5 (1998) (noting that "generalized concerns" and "unfounded fears" do not constitute "substantial evidence" and will not support a decision to deny an application).

228. See *supra* notes 143-60 and accompanying text.

229. See 47 U.S.C. § 332(c)(7)(B)(v).

230. See *supra* text accompanying notes 172-82.

231. See *supra* note 189 and accompanying text.

232. See *supra* note 137 and accompanying text.

mendations of a subcommittee or staff.²³³ Eighth, the zoning board may not apply rule changes to the zoning process to applications that are on file or pending before the board.²³⁴ Ninth, the zoning board must not create novel justifications for its denials (e.g., prohibiting new cellular towers because they encourage drug trafficking by cellular phone).²³⁵ By incorporating these nine items into zoning board procedures, localities will be less likely to repeat the specific mistakes others have already made in denying zoning applications to wireless providers.

Putting Citizen Complaints in Perspective

As unpopular as it sounds, in order to comply with the Act, zoning boards need to minimize the impact of citizen concerns on the placement of wireless facilities. There are several measures localities can employ to allay the outrage of its residents. First, the locality should create a master plan of possible facility sites in the locality to help residents understand how their neighborhood fits into a larger scheme of potential or proposed wireless facilities. In order to reduce opposition, the locality should show its citizens that everyone will be inconvenienced equally in the placement process. Second, by reworking town ordinances to include or specifically exclude wireless facilities, the zoning board can use the law as a shield against criticisms from citizens. Third, legal counsel for zoning boards should educate the members of the board that citizen concerns alone are unlikely to be sufficient evidence to deny a wireless provider's application for a wireless facility. Zoning boards should also be aware that wireless providers likely will appeal and win any denial based on citizen complaints.²³⁶ While the courts have considered the citizen opposition issue at length, it is still unclear

233. See *supra* notes 143-47 and accompanying text.

234. See, e.g., *Sprint Spectrum L.P. v. Jefferson County*, 968 F. Supp. 1457, 1469 (N.D. Ala. 1997) (stating that application must be decided on the basis of guidelines in effect on the date of filing).

235. See *supra* notes 158-60 and accompanying text.

236. See Sullivan, *supra* note 227, at 5 ("Indeed, the mere existence of opposition [by citizens], even numerous and outspoken, does not constitute substantial evidence and, by itself, does not suffice to support a decision to deny an application . . .").

as to whether serious, organized, and well-funded citizen opposition to an application could ever meet the "substantial evidence" burden.

Implementing Health Concerns

Local zoning boards still are free to contest the emissions standards of proposed wireless facilities, but they must do so in an organized, prudent manner that is also in accordance with the Act. The Act forbids a locality from denying applications based on health concerns if the application meets the FCC's emissions standards.²³⁷ The Act did not address specifically the role zoning boards should play in ensuring compliance with health standards.

There are at least three steps every zoning board can take to make sure that wireless facilities comply with health standards. First, the zoning board should require wireless providers to prove that the proposed facility will fall within the FCC's emissions guidelines. Second, the zoning board should require that all wireless facilities be inspected regularly to insure that they continue to operate inside the FCC's emission standards. Third, the locality also should demand a copy of any environmental assessment that the provider files with the federal government,²³⁸ which could be submitted with the application for the facility's zoning permit. While a locality cannot require higher standards for radio frequency emissions than the FCC requires, it can mandate that providers prove that a proposed facility meets the FCC requirements as part of the application process.²³⁹ If a zoning board takes these proactive steps, it might prove to citizens that it has required the provider to comply with rigorous health standards. The locality might then be able to quell some citizen complaints.

237. See Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(B)(iv) (Supp. II 1996).

238. See KREINES & KREINES, INC. & CAPE COD COMMISSION, *supra* note 2, at 32-33.

239. See *id.* at 33 ("[T]here are no proscriptions on local governments monitoring NEPA [National Environmental Policy Act] rules, including the FCC Guidelines at the local level and towns are encouraged to follow the NEPA process closely.").

Minimizing Aesthetic Concerns about Wireless Facilities

The cases examined in this Note show that concerns about aesthetics or a decline in property value due to the placement of wireless facilities are never sufficient to support denial of a wireless facility application.²⁴⁰ These concerns, however, do justify the imposition of camouflage requirements.²⁴¹ Zoning boards should encourage or require camouflage in residential and historical areas where concerns about aesthetics are most prominent. Localities might then allow larger towers in business and industrial zoning areas where there is less concern about aesthetics and the property values are unlikely to fall at the same rate as they might in an affected residential neighborhood.

Step Seven: Processing the Application Within a Reasonable Period of Time

Zoning boards have faced significant legal problems by violating the Act's "reasonable time" requirement.²⁴² The FCC's recent compromise decision on moratoriums²⁴³ could put either the reasonable time issue to rest or spawn new litigation. Regardless, zoning boards will need to put two measures in place in order to comply with the "reasonable period of time" standard. First, they need to make changes to local ordinances and master plans for zoning²⁴⁴ in a relatively short period of time because a long moratorium may draw a court fight from a provider. The zoning changes suggested by this Note could take place within ninety days and should not prevent localities from acting on pending applications. Those localities that already have made such

240. See Hughes, *supra* note 13, at 497 & n.225 (stating that localities have begun to recognize that aesthetic arguments will not justify their decisions to deny an application).

241. See *supra* notes 172-82 and accompanying text.

242. See Sullivan, *supra* note 227, at 5 (summarizing the progression of zoning boards' tactics aimed at delaying the approval of applications); see also *Sprint Spectrum L.P. v. Jefferson County*, 968 F. Supp. 1457, 1468 (N.D. Ala. 1997) (finding that the zoning board's denial violated the Act's reasonable time requirements by delaying the processing of an application for over 70 days).

243. See *supra* notes 100-05 and accompanying text.

244. See Claire B. Levy, *Zoning for Cellular Towers Under Current Regulatory Conditions*, 27 COLO. LAW. 75, 76 (1998).

changes²⁴⁵ are available to serve as models for localities still in the transition period, making it all the more likely that localities can make zoning changes quickly and efficiently. Once a locality lifts a moratorium, the zoning board must be ready to consider and approve facilities immediately to avoid a court challenge by a provider.

A second way that a locality can comply with the "reasonable time" requirement is by identifying a maximum time limit for consideration and processing of applications. A sixty-day requirement would be reasonable because localities can require that providers' applications include all relevant information at the time of submission.²⁴⁶ By adopting a fast-track approach to these applications, zoning boards will free themselves to consider more important projects in their locality. While a fast-track approach might limit a citizen's opportunity to oppose granting the wireless provider's zoning application, the courts' refusal to allow citizen complaints as a major rationale for denying applications suggests that there is little reason to schedule the process in a way that favors the development of organized citizen opposition.

Step Eight: Equal Treatment for All Providers

The Act has created a simple, bright-line test for considering applications for wireless facilities: A locality cannot deny new providers access to the community simply because the locality already has existing wireless technologies. The goals of the Act were to allow new and emerging technologies to make a seamless transition and to lower the entry barriers they face in attacking established technologies.²⁴⁷ The courts have yet to accept

245. See generally CAPE COD COMMISSION & KREINES & KREINES, INC., *supra* note 192 (presenting the Model Bylaw for Wireless Facilities for towns in Barnstable County, Massachusetts).

246. See FCC FACT SHEET #2, *supra* note 21, at 7 (stating that "it is helpful for wireless service providers to supply as much advance information as possible").

247. See 141 CONG. REC. H8270 (daily ed. Aug. 2, 1995) (statement of Rep. Linder) (stating the goal of the telecommunications legislation is to encourage competition and reduce market barriers); see also Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7)(iv) (Supp. II 1996) (forbidding localities from denying placement, construction, or modification of wireless facilities based on environmental effects of radio frequency emissions).

any of the arguments presented by localities on this issue.²⁴⁸ A locality still can decline a PCS application, but it must be able to show that it would have denied a similar application from a cellular provider in the area.

Step Nine: Defining Height Restrictions

It is difficult to ascertain "how high is too high" when it comes to the size of wireless facilities, as there are a number of factors involved in such a determination. A locality's height restrictions for wireless facilities should be similar to its restrictions on height for all buildings because the restrictions it chooses reflect its values as a community.²⁴⁹ The locality should clearly define and justify height considerations in its master plan for proposed wireless facilities. For example, a locality can justify a height restriction if it also will allow more facilities to be built to compensate for the height limitations that dampen transmission.²⁵⁰ Legal problems arise when the zoning board restricts the height of proposed facilities and simultaneously prevents providers from building more facilities. It would make sense for a locality to have different requirements for heights in different zones, just as each zone might have different camouflage requirements for the wireless facilities. Inside each zone, the locality must be able to show the height restrictions will not affect the provider adversely.

CONCLUSION

Citizens want, and will soon demand, the ability to communicate with others from anywhere at any time. If providers and localities can agree effectively and efficiently to build wireless systems quickly enough to satisfy consumer demand, prices will fall even as demand continues to increase. Communities without full and complete access to wireless technology eventually will feel the negative effects of their inaccessibility and will be forced

248. See, e.g., *supra* notes 117-28 and accompanying text.

249. See KREINES & KREINES INC. & CAPE COD COMMISSION, *supra* note 2, at 40.

250. See *id.* at 13 (noting that since shorter wireless facilities have reduced coverage, more are needed to generate coverage comparable to taller facilities).

to change. Communities that have the foresight to accommodate cutting-edge wireless technologies now will thrive in the future. Consumers will soon realize the futility and economic waste involved in paying taxes for zoning boards to defend their actions in court while simultaneously paying the wireless providers' hidden litigation costs incurred in obtaining the board's approval to construct the system's facilities. Once communities recognize that their future economic success can depend in part on their access to wireless technology, compliance with section 704 of the Act will become a privilege and a civic duty rather than a distasteful burden.

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