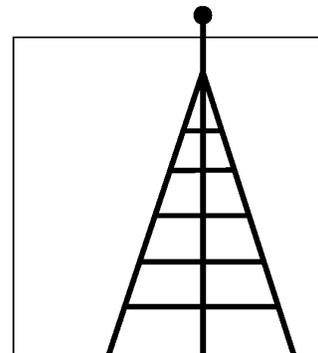


Zoning Regulations and Antenna Siting 8

One of the most contentious issues facing the wireless industry today involves the location of transmitting antennas. The cellular and personal communications service (PCS) industries estimate that they will have to build 100,000 new antennas by the year 2000 in order to provide adequate mobile telephone service to the public.¹ Local communities, however, are increasingly opposed to the new antennas for aesthetic, health, and safety reasons, and are applying local zoning rules and municipal ordinances to force carriers to locate the antennas elsewhere or halt construction altogether.² In response to the increasing number and cost of these objections, two wireless industry trade associations petitioned the Federal Communications Commission (FCC) to nullify or preempt local regula-

¹ Bob Roche, director of research, Cellular Telecommunications Industry Association, personal communication, May 31, 1995.

² Examples of reporting on this issue from local communities include: James Rush, "Towering Controversy: Expansion of Cellular Antenna Systems a Local, National Issue," *The Seattle Press*, vol. 10, No. 3, Apr. 12-26, 1995, pp. 1ff; Sandi Coburn, "Cellular One's Call Waiting," *Suburban News* (New Jersey), June 15, 1994, pp. 1, 14; Michelle DeBlase and Dina Masarani, "East Brunswick, Old Bridge Vote: Local Officials Urge Cellular Tower Limits," *Home News* (New Jersey), Sept. 30, 1994, pp. B1, B6; Norman O'Donnell, "Phone Trouble: Everyone Wants Cellular Phones, but Many Don't Want To Live Near the Antennas That Make Them Work," *Gannett Suburban Newspapers* (New Jersey), Aug. 24, 1994, pp. 1A, 2A; "Cellular Phones: West Hollywood, Cal., Denies Transmission Post," *EMF Litigation News*, November 1993, p. 535.



tions on antenna siting.³ The FCC has not yet acted on these petitions. Local restrictions have also been a serious concern to the satellite broadcast industry, which has been fighting local rules on satellite receiving dishes for many years. At their foundation, these issues revolve around the question of which should take preeminence: federal policy or local law?

FINDING

The issue of federal preemption of local zoning and other regulations represents a battle between two valid, but conflicting, public policy goals. On the one side, federal policymakers, as set forth in the Communications Act of 1934, are trying to bring advanced communications services to the public. On the other side, communities and citizens are trying to preserve local control over their land and affairs—a long-standing tenet of American political culture. **In essence, the issues surrounding federal preemption of local regulations affecting antenna siting derive from ambiguous language contained in the Omnibus Budget Reconciliation Act of 1993—the legislation that established the Commercial Mobile Radio Service (CMRS).**⁴ In that Act, Congress stated in part “...no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services.” Each side in the preemption debate has interpreted this passage as supporting its position.

Without additional information or clarification, congressional intent regarding preemption in the case of zoning and antenna siting remains unknown. This ambiguity is likely to cause continuing uncertainty until the FCC and appeals processes run their course. The Congress has not engaged in any debate or action on federal preemption of local regulations of wireless operations, and there is no information that could clarify what the Congress might think on this issue. As a result, attention is currently focused on the FCC, where the petitions for rulemaking have been submitted and the process of evaluating them is under way.

In responding to this issue, Congress has two primary options. First, it could let the FCC process run its course. The existing petitions for rulemaking, if accepted by the FCC, could result in a formal proceeding being established. This proceeding would doubtless receive considerable attention in the industry and in state and local communities, and there are indications that the FCC is looking at this issue carefully. The process would, however, take several years to wind its way through the FCC rulemaking process and the almost inevitable court challenges and appeals.

Secondly, Congress could make clear its intentions regarding the legislative language and offer a specific interpretation regarding local zoning and antenna siting—either by supporting it explicitly,⁵ or by requiring states and local governments to resolve the antenna siting issues through negotiations with the wireless companies. A specific finding from Congress—either for or against preemption—would at least remove the uncertainty

³ Cellular Telecommunications Industry Association, “Petition for Rulemaking,” before the Federal Communications Commission, *In the Matter of Amendment of the Commission’s Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Dec. 22, 1994, and Electromagnetic Energy Association, “Petition for Further Notice of Proposed Rulemaking,” before the Federal Communications Commission, *In the Matter of Guidelines for Evaluating the Environmental Effects of Radiofrequency Radiation*, ET Docket No. 93-62, Dec. 22, 1994.

⁴ 47 U.S.C., sec. 332(c)(3)(A).

⁵ Some leaders in the House of Representatives have already signaled that they now support preemption. See remarks by Rep. Newt Gingrich to Wireless ‘95 conference, New Orleans, LA, Feb. 1, 1995.

surrounding the issue, and allow the industry to move ahead with existing plans or pursue alternatives. Congressional action could also help clarify the issue of local restrictions on receive-only satellite dish placement, a matter that the FCC ruled on in 1986 when it partially preempted local regulations.⁶

BACKGROUND

The battle over antennas used to send and receive radio signals is not new, but its character is changing. In the 1980s, the fight was over local restrictions on the “big ugly dishes” used for receiving C-band satellite transmissions—pitting homeowner against homeowner or local zoning board. Today, although restrictions on satellite dishes remain contentious, the dispute has broadened as citizens and local governments have taken up positions against unwanted transmission towers used primarily to provide cellular telephone (and future PCS) services.

Wireless telephone service providers—cellular, PCS, and ESMR—are now in the process of establishing or expanding their networks. In order to deliver services, they have to place antennas in areas that will allow them to reach their customers. Sometimes these antennas can be located away from residential areas, but in other cases, engineering, topographical, or capacity considerations mean that antennas have to be located close to homes.

In the early days of cellular telephone system construction, it was relatively easy for companies to locate sites and build antennas. Property owners could be found who had little objection to antennas or base-station equipment, and many did not understand that their locations had value to

carriers. Communities did not have ordinances limiting antenna siting or other characteristics of radio facilities. Furthermore, wireless carriers had more latitude in placing antennas; objections could usually be met by simply moving to another suitable site close by.

Today, cellular and PCS companies are having a much harder time siting antennas, both technically and politically. They are trying to erect new antennas to cover areas that currently have poor service, usually due to topography or cellular system congestion associated with high demand. Changes in cell structure and system architecture, however, are more difficult to make now because adjacent cells are already established. To function most effectively, antennas generally need to be located close to the center of their cells; as cells get smaller, the latitude for placement shrinks as well (see figure 8-1).⁷ In a typical high-density area, where cells may be as small as one mile in diameter, this means that an antenna would ideally be located in a central four-city-block area.⁸

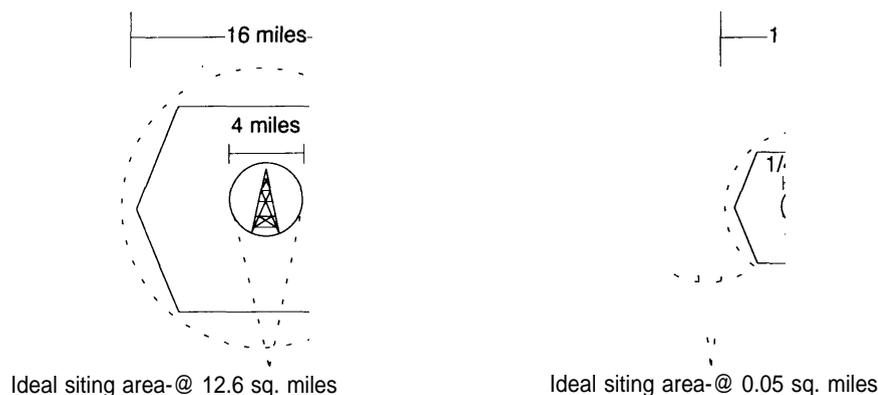
At the same time, despite the increasing reliance and value that many residents put on wireless communications, public opposition to these antennas is growing rapidly. Ironically, it arises most often, although not exclusively, in communities that have the highest per capita use of cellular telecommunications, notably wealthy suburban neighborhoods close to major metropolitan centers. Citizens often object to the antennas because they can be unsightly and bring down property values, and because they fear the possible health hazards associated with the radio waves the antennas emit (see chapter 11). Some question the need for or appropriateness of these new services. In a few cases, minor changes—

⁶ Federal Communications Commission, *Preemption of Local Zoning or Other Regulation of Receive-Only Satellite Earth Stations*, 59 R.R.2d 1073 (1986).

⁷ Ideally, the transmitter should be located at the center of the cell, but in any case should be located at a distance no more than one-fourth of the cell radius from the center. Cellular Telecommunications Industry Association, “Local Zoning vs. Wireless Communication: A Case for Federal Preemption?” briefing paper, (January 1995), p. 2.

⁸ Jaymes D. Littlejohn, “The Impact of Land Use Regulation on Cellular Communications: Is Federal Preemption Warranted?” *Federal Communications Law Journal*, vol. 45, No. 2, April 1993, p. 250.

FIGURE 8-1: Theoretical Antenna Sitting Constraints



NOTE: Figure not drawn to scale.
 SOURCE: Office of Technology Assessment, 1995.

planting bushes around equipment shacks or somehow disguising the antennas-are enough to satisfy citizen objections. In other cases, however, citizens want the antennas/towers moved so that they are less obvious or further away from populated areas-to lessen any possible health risks. And in some cases, citizens feel so strongly that no changes are acceptable; they seek to prohibit the tower/antenna altogether.

Citizen objections manifest themselves in restrictive zoning regulations or other municipal ordinances. This gives citizens' groups the ability to challenge the siting of each tower or antenna a wireless company wants to put up. They maintain that carriers can move their towers to other locations, but are usually unwilling to do so because it will cost them more money. There is also resentment among some citizens and public interest groups at the arrogant way they believe the carriers have treated their objections.

The process of challenging a particular antenna site, which can work itself out in both local zoning hearings and in court, is both time-consuming and expensive.⁹ As a result, the wireless industry

wants the federal government to preempt local and state regulations on antenna siting, so that they can move ahead with building their systems. They maintain that it is often not just a matter of cost, but of engineering requirements that dictates antenna placement. Early on, the industry received some support from FCC chairman Reed Hundt, who noted that local taxation, zoning, and other local restrictions could slow the widespread deployment of wireless technologies. In speeches to city and county organizations he encouraged them "to find a way to tolerate the presence of the new [PCS] equipment—relay stations and antennas—that this service requires."¹⁰ To date, no general accommodations have been reached, and the issue has become highly politicized in many communities.

The satellite industry, meanwhile, is still fighting the battles first joined in the 1980s, when local restrictions on satellite dishes were put into place. Today, public zoning restrictions on satellite dishes are limited, but private homeowners' association rules or condominium covenants are permitted by the FCC. In addition, some commu-

⁹Estimates of the added costs to the wireless industry of local regulatory proceedings are not available.

¹⁰"Hundt Says Local Government Regs Could Slow Competition," *Telecommunications Reports*, Mar. 13, 1995, p. 24.

nities do not follow the guidelines specified in the FCC's preemption order, and since the FCC has limited enforcement resources, in these communities the law is ignored. The FCC has brokered discussions between the direct broadcast satellite industry and local government representatives on a blanket preemption of restrictions on direct broadcast service antennas.¹¹ As in the case of cellular and PCS antennas, the issue is not yet resolved.

■ Antenna Siting for Cellular and PCS Services

Antennas and base-station equipment for land-based wireless telecommunications systems vary in size and appearance depending on factors such as power output, frequency, topography, and expected usage. Engineering considerations determine both the number of radios needed per cell site (based on number of customers served) and the power levels of the radios—smaller cells use lower power. PCS base-stations, for example, may have a power output of up to 100 watts per channel—a typical site might have up to 30 channels, so total output might reach 3,000 watts if all channels were in use simultaneously.¹²

The equipment needed at each cellular or PCS base station generally consists of an antenna, radio transceivers, and the hardware needed to link to other cell sites or switches in the system. Because of differences in power levels and architectures, the equipment needed for individual cellular and PCS cell sites varies in size and configuration. For cellular base stations, antennas can be a small (3 to 4 feet) rod, a panel (4 to 8 feet tall and 1 to 2 feet wide), or a combination of rods and panels. In high-use areas, a complete antenna installation

may consist of 12 to 16 panels, located on a free-standing pole (up to 150 feet), a tall building, or another high structure (water towers, television antennas, etc.). In lower use areas, antennas can be mounted on smaller towers or even low-rise apartment buildings. The radio equipment for cellular telephone systems is usually housed in large trailer-sized (20' x 10' x 7') facilities equipped with air conditioners for peak-use cooling. PCS cell-site equipment consists of smaller whips and panels, and the radio hardware can be housed in a metal box about the size of a small refrigerator.

■ Siting Satellite Dishes

In the case of satellite dishes, local restrictions are aimed not at the large dishes used by companies to transmit programming to a satellite—these are usually located far from residential areas—but at the smaller (18 inches to 10 feet) dishes consumers use to receive programming at their homes. These antennas must be positioned so that they can easily receive signals from satellites. Depending on the consumer's exposure to the southern sky, and the landscaping and other physical structures present in the area, a customer may be able to put a dish in the backyard, on the roof, or in a place out of sight of neighbors.¹³ Some customers, however, must put their dishes in their front yards or elsewhere in view of others in the area.

Some communities have zoning ordinances, or restrictive covenants, or other conditions that limit the type, placement, or appearance of these dishes, and some forbid their use altogether. Restrictions exist because residents object to the size or appearance of these dishes. In a few cases, developers make arrangements with cable companies to pre-wire communities, at the cable compa-

¹¹ Cellular Telecommunications Industry Association, "Reinventing Competition: The Wireless Paradigm and the Information Age," (February 1995), p. 13.

¹² Due to collocation of antennas, local effective radiated power levels may vary substantially.

¹³ There are three generally available types of satellite dishes that correspond to different satellite frequencies and services: 1) large 8- to 12-foot diameter dishes, known as C-band antennas; 2) smaller dishes, about 3 feet in diameter, known as Ku-band antennas, used, for example, to receive broadcasts from Primostar; and 3) small dishes, about 18 inches across, known as direct satellite service (DSS) dishes, used to receive broadcasts from DirecTV and United States Satellite Broadcasting (USSB).

nies' expense, in exchange for restrictive covenants that are written into deeds or other community rules. Some communities restrict only satellite dishes of a certain size or those not camouflaged (a typical disguise is a patio umbrella), while others make no distinction at all, prohibiting even traditional television antennas.

In response to growing concerns that restrictive covenants would affect the health of the satellite industry, in 1986, at industry's urging, the FCC ruled that the only permissible local restrictions were those that were narrowly written; based on health, safety, or aesthetic concerns; and that did not discriminate against receive-only satellite antennas. All other restrictions would be preempted.¹⁴ With this ruling, the FCC attempted to balance the interests of the industry and consumers in receiving satellite broadcasts with the interests of communities in local control of land-use and enforcement of health, safety, and aesthetic regulations.

In 1993, the satellite industry pressed the FCC to modify the 1986 order to clarify the types of local restrictions that would be prohibited.¹⁵ The industry claimed that many communities were imposing "noncompliant" regulations that the FCC was powerless to oppose—in particular size and height restrictions—which, by their nature, single out satellite dishes, including lot size limitations, limits in commercial or industrial areas, and other placement or screening requirements, or any flat bans.¹⁶ The FCC is currently considering modifications to the 1986 order.

GENERAL COURT GUIDELINES ON FEDERAL PREEMPTION

Politically, there are few issues that raise the ire of a small but vocal segment of the population more than federal preemption of states' rights and local regulations. The recent Supreme Court decision striking down federal restrictions on gun possession near public schools,¹⁷ that reversed decades of Court rulings on use of the interstate commerce clause of the Constitution to accomplish federal goals, underlines the necessity of considering carefully the appropriate and justifiable division of regulatory responsibilities between the states and the federal government. When coupled with continuing concern about the health effects of electromagnetic radiation, the local control of antennas could become a very divisive issue for policymakers.

The issues surrounding federal preemption of local zoning laws regarding antenna siting are part of a larger conflict between federal policy and state laws. In general, the supremacy clause of the Federal Constitution says that federal law overrides, or can prohibit, exercise of state laws. General rules on preemption are impossible to formulate because of the diversity and complexity of circumstances.¹⁸ As Supreme Court Justice Black wrote for the majority in *Hines v. Davidowitz*, the test to be applied in such cases is whether a state law "stands as an obstacle to the accomplishment and execution of the full purposes and objectives of Congress."¹⁹

¹⁴ Federal Communications Commission, "Preemption of Local Zoning or Other Regulation of Receive-Only Satellite Earth Stations," report and order, 47 CFR Part 25, *Federal Register* 51(31):5519-5527, Mar. 14, 1986.

¹⁵ Satellite Broadcasting and Communications Association of America, "Reply Comments," before the Federal Communications Commission, *Preemption of Local Zoning Regulation of Satellite Antennas*, Report No. DS-1311, July 12, 1993.

¹⁶ *Ibid.*, pp. 9-12.

¹⁷ *United States v. Lopez*, No. 93-1260, decided Apr. 26, 1995.

¹⁸ Ronald D. Rotunda and John E. Nowak, *Treatise on Constitutional Law: Substance and Procedure*, 2nd ed., vol. 2, sec. 12.1, pp. 62-63. It should be noted that there is no mention of preemption in the Constitution itself.

¹⁹ 312 U.S. 52, at 67 (1941).

Thus, congressional intent to preempt state law is the principal element of a preemption claim, and finding congressional intent when it is otherwise not explicitly expressed has been the task of the courts. Where no explicit congressional intent can be found, the courts have labored to balance state and federal interests to avoid conflicting regulation at the different levels of government. In general, the Court has given greater deference to state and municipal regulations that concern traditionally local issues—such as zoning, health, and safety measures—even while attending to the facts of each case considered on its own.²⁰ In other cases, although federal preemption has been granted by the courts with some ease, there seems to be increasing reluctance to allow it. One indication of this reluctance was shown when, in 1987, President Ronald Reagan issued an executive order directing that federal preemption should be sought:

... only when a statute contains an express preemption provision or there is some other firm and palpable evidence compelling the conclusion that the Congress intended preemption of the state law, or when the exercise of State authority directly conflicts with the exercise of Federal authority under the Federal statute.... Any regulatory preemption of State law shall be restricted to the minimum level necessary to achieve the objectives of the statute pursuant to which the regulations are promulgated.²¹

This order confirmed the trend evident in the Supreme Court, that had, by that time, begun to show increasing reluctance to usurp state and local law.²²

THE CASE FOR FEDERAL PREEMPTION

The legal issue of land-use regulation and wireless telecommunications has been framed in terms of: 1) whether Congress's intent that new wireless services be quickly and comprehensively rolled out means that it intended that state and local land-use regulations be preempted, and 2) whether the FCC has the authority to preempt state and local regulations that impede the development of commercial mobile radio services (CMRS).

In building its case for preemption, the industry argues that Congress and the FCC have determined that development of nationwide wireless telecommunications services is a policy objective of the United States, citing language from the FCC's own rulings:

We [the FCC] expect cellular to become an important communications tool, the extensive use of which can be of significant benefit to the American economy and to the more general public interest, and we are accordingly anxious to have it implemented as quickly as possible.... We believe that cellular is important enough to the public interest to warrant special attention to avoid delays.²³

In order to meet this goal, wireless carriers maintain that they must be free to build towers where they are needed and not be subject to long local procedures that delay implementation. They argue that preemption is needed if services are to be deployed as quickly and widely as possible.

In the Omnibus Budget and Reconciliation Act of 1993, which amended section 332 of the Communications Act,²⁴ Congress said that “[n]o State

²⁰ Rotunda and Nowak, *op. cit.*, footnote 18, sec. 12.3, p. 73.

²¹ Reagan, R. R., President, United States, “Executive Order No. 12612—Federalism,” (Oct. 26, 1987), secs. 4(a), (c), reprinted in 52 FR 41685 (1987).

²² Rotunda and Nowak, *op. cit.*, footnote 18, sec. 12.4, p. 76.

²³ Federal Communications Commission, “Public Mobile Radio Services,” final rule, 47 FR 10,018, 10,033 (1982), cited in Littlejohn, *op. cit.*, footnote 8, p. 259.

²⁴ This amendment streamlined all commercial mobile radio services into one regulatory framework. Public Law 103-66, Aug. 10, 1993.

or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service.” States may only regulate “other terms and conditions.”²⁵ The industry argues that only a narrow reservation of authority was reserved for state and local governments over telecommunications activities in order that “[s]tate and local governments may not lawfully bar entry, create regulatory disparities or introduce significant inefficiencies in the production of CMRS through zoning and other similar regulation.”²⁶ By this, the wireless industry asserts that: 1) Congress tacitly allowed federal preemption, because zoning regulations introduce inefficiencies in the establishment of CMRS services, and 2) given the FCC’s long-standing commitment to efficiency as a major criterion in regulating radio services, the FCC should preempt local zoning regulations.²⁷

In carrying out congressional mandates, questions have arisen regarding the authority of the FCC to preempt local regulation. Under the interstate commerce clause, as developed through various court cases dealing with telecommunications regulation,²⁸ the FCC has regulatory authority over telecommunications that have interstate connections. This discretionary power generally covers any system connected to the public

switched telephone network, including cellular telephony and new PCS. Preemption proponents argue further that the FCC has jurisdiction over equipment that is used in providing wireless services, such as antenna siting where heights and locations can affect service delivery. They note that the Court of Appeals for the District of Columbia Circuit has held that:

If the [1934 Communication] Act’s goal of providing uniform, efficient service is ever to be realized, the Commission must be free to strike down the costly and inefficient burdens on interstate communications which are sometimes imposed by state regulation.²⁹

To date, however, the FCC has not decided whether it should act on this issue. Although it can strike down regulations that restrain interstate telecommunications activities, it is not required to do so, nor does it mean that sweeping national preemption is necessary. Until such a determination is made by the FCC or Congress, each challenge to local laws and regulations (each individual siting) must be argued by the cellular carriers on an individual basis.³⁰ Because each local proceeding could take many months, this could slow service deployment or upgrades, add significantly to the network’s start-up costs, and slow earnings of wireless operators.³¹

²⁵ 47 U.S.C., sec. 332(c)(3)(A). OTA found no legislative history in this regard.

²⁶ Cellular Telecommunications Industry Association, *op. cit.*, footnote 3, p. 7.

²⁷ Littlejohn, *op. cit.*, footnote 8, pp. 259-261.

²⁸ *Ibid.*, pp. 253-256, citing *Puerto Rico Telephone Company v. FCC*, 553 F.2d 694, 698 (1st Cir. 1977), which determined that the FCC could prohibit the private branch exchange (PBX) rule as it, in effect, encroached on the FCC’s authority over interstate commerce, and relied on *Ambassador, Inc. v. United States*, 325 U.S. 317 (1945), which affirmed that the FCC’s jurisdiction “extends to ‘interstate wire communication from its inception to its completion.’”

²⁹ *National Association of Regulatory Utility Commissions v. FCC*, 746 F.2d 1492, 1501 (D.C. Cir. 1984), cited in Littlejohn, *op. cit.*, footnote 8, p. 256.

³⁰ Littlejohn, *op. cit.*, footnote 8, p. 256.

³¹ For examples of local opposition to cellular antennas that wireless companies say show significant added costs or other burdens, see McCaw Cellular Communications, Inc., “Comments,” before the Federal Communications Commission, *In the Matter of Amendment of the Commission’s Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Feb. 17, 1995, pp. 10-19, and Southwestern Bell Mobile Systems, Inc., “Comments,” before the Federal Communications Commission, *In the Matter of Amendment of the Commission’s Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Feb. 16, 1995, pp. 8-15.

THE CASE AGAINST FEDERAL PREEMPTION

Opponents of preemption argue that state and local rights, including regulating the power output of facilities in their jurisdictions, must be preserved because they are the appropriate loci for protecting public health, safety, and welfare.³² They object to antennas on several grounds: antennas can be obtrusive and may have unacceptable visual impacts on neighborhoods, which lowers property values; there may be health hazards from electromagnetic radiation emitted from antennas close to residences and schools; and without local regulations tailored to local conditions, antennas may be poorly constructed or unsafe.

■ Local Control

Preemption opponents argue that there is a limitation to the FCC's power when matters pertain exclusively to local or intrastate matters.³³ Under sec. 332 (c) (3) of the Communications Act:

... no State or local government shall have any authority to regulate the entry of or the rates charged by any commercial mobile service or any private mobile service, except that this paragraph shall not prohibit a State from regulating the other terms and conditions of commercial mobile services.

Opponents argue that this exception permits them to continue to regulate antenna placements under local zoning laws because zoning falls under "other terms and conditions," and is not re-

lated to "entry of or the rates charged by" CMRS providers. In their view, while it may be more costly or difficult to establish service quickly, CMRS providers can, nevertheless, establish service. The Cellular Telecommunications Industry Association's (CTIA) position that any regulation is an obstacle to entry is overly narrow, opponents argue.³⁴ Opponents of preemption point to tests of federal preemption involving amateur radio antenna regulations, as decided in *Guschke v. City of Oklahoma City*.³⁵ This case determined that despite general federal encouragement of amateur radio as socially important, that finding alone was not sufficient to warrant federal preemption of local regulations.

Furthermore, where the relevant market for service is local, as it is with many wireless services, communities argue that they have the right to decide what costs and benefits they are willing to sustain, as long as there are no substantial impacts on other areas. If local costs are raised by local restrictions, and these costs are not borne by other communities, then it could be argued that preemption is an unnecessary intrusion.³⁶

Communities feel that opening the door to federal preemption of local zoning and land-use restrictions may result in other intrusions:

This attempt at preemption by the cellular phone industry with the cooperation of the FCC is a blatant attack on our communities that is more of a threat and at a lower level of morality than any neighborhood drug dealer... If this preemption is allowed it will open the door for the federal government to attack any and all zoning

³² "Local Groups Oppose Radio Tower Preemption Request," *Telecommunications Reports*, Feb. 20, 1995, p. 45.

³³ *Louisiana Public Service Commission v. FCC*, 476 U.S. 355 (1986), sec. 2(B), cited in Natural Resources Defense Council, "Comments," before the Federal Communications Commission, *In the Matter of Amendment of the Commission's Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Feb. 16, 1995, p. 5.

³⁴ Natural Resources Defense Council, op. cit., footnote 33, p. 3.

³⁵ 763 F.2d 379 (10th Cir. 1985), cited in Littlejohn, op. cit., footnote 8, p. 260.

³⁶ According to the economic analysis of rights, as articulated by Ronald Coase, for an efficient economic outcome to be achieved, it matters little which party bears the economic burden of ameliorating a noxious or objectionable condition. In the case of antenna siting, either the wireless company or the local residents pay for making antenna siting less objectionable, but in the end the cost of service will be the same. The fact that costs can be arbitrarily allocated means that some basis for deciding must be determined. For a discussion of Coase's Theorem, see Charles Fried, *Right and Wrong* (Cambridge, MA: Harvard University Press, 1978), pp. 81-107.

regulations in all of our communities whenever a wealthy and powerful industry group with an influential lobby sees those regulations as an obstacle to increased profit... At a time when there is so much talk in Washington, D.C. about taking back our neighborhoods there is a clear example here of us losing those very neighborhoods to big business.³⁷

■ Health, Safety and Aesthetic Concerns

In addition to arguments concerning the legality of preemption, opponents further argue that the safety of radio emissions has not been fully established, and that local zoning and other regulations are appropriate measures to take in order to protect public safety (see chapter 11 for more discussion of health issues). Aesthetic concerns undoubtedly lie at the core of many objections to antennas, but these are harder to argue for without running afoul of charges of inconsistency, beauty being in the eye of the beholder.³⁸ As a practical matter, aesthetics is generally formally given as a reason for restricting antenna siting in cases where obvious historical or other design considerations are at stake in a community.

The Natural Resources Defense Council notes that section 332 (a) of the Communications Act³⁹ directs the FCC to take action after considering whether such action will “promote the safety of life and property.” It argues that local zoning regulations are designed to protect public health, and that preempting them could harm the public. Communities claim that this language provides them with legitimate grounds for regulating or prohibiting the placement of antennas within their boundaries. Until a consensus on the safety of

broadcast antennas is established, they will continue to have the right to limit placements.

The industry counters that health concerns are used arbitrarily and capriciously by communities to delay or prevent antenna installations:

Despite overwhelming and uncontroverted evidence that the extremely low power emissions or radio frequencies from properly designed and constructed antenna sites fall well below every state and federal exposure limitation, (usually by factors of 500 to 3000 percent), the unfounded health and safety concerns of local citizens are most easily appeased by simply rejecting applications and letting the courts overturn the decision—at great expense and costly delay for the commercial mobile service provider.

Health and safety claims are also often a subterfuge for underlying and unreasonable “aesthetic” concerns. In most typical communities telephone poles, water towers, broadcast towers and microwave relay sites proliferate, yet zoning boards often find that mobile antennae poles and towers violate vague “aesthetic” standards included in local zoning codes. Were the same standards to be applied to other forms of communications these communities would have no telephone service, no radio service, no television service and no utilities.⁴⁰

Regarding the aesthetics of satellite dishes, the FCC has held that local regulations do hold sway in some cases:

State and local zoning regulation or other regulations that differentiate between satellite receive-only antennas and other types of antenna facilities are preempted unless such regulations (a) have a reasonable and clearly defined

³⁷ See George Curtis of Seattle, WA, “Comments,” and R. James Pidduck, of Edmonds, WA, “Comments,” before the Federal Communications Commission, *In the Matter of Amendment of the Commission’s Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Feb. 14, 1995 and Feb. 17, 1995.

³⁸ See, for example, Town of Greenburgh, NY, “Local Law on Temporary Moratorium on the Establishment of New Commercial Antenna,” 1995, and Abby Gilbert of Washington, DC, “Comments,” before the Federal Communications Commission, *In the Matter of Amendment of the Commission’s Rule To Preempt State and Local Regulation of Tower Siting For Commercial Mobile Services Providers*, RM-8577, Feb. 12, 1995.

³⁹ 47 U.S.C., sec. 332 (a).

⁴⁰ Cellular Telecommunications Industry Association, *op. cit.*, footnote 7, p. 5.

health, safety, or aesthetic objective; and (b) do not operate to impose unreasonable limitations on, or prevent, reception of satellite delivered signals by receive-only antennas or to impose costs on the users of such antennas that are excessive in light of the purchase and installation cost of the equipment.

Regulation of satellite transmitting antennas is preempted in the same manner except that state and local health and safety regulation is not preempted.⁴¹

These issues will likely continue to be contentious for the foreseeable future, given their pervasive scope, and because they pit national objectives for quick and inexpensive service provision against deeply held beliefs, traditions and laws concerning local land use regulation. Some basis must be given for deciding who will bear the costs of antenna siting; this would seem to be the primary responsibility of the Congress.

⁴¹ 47 CFR 25.104.