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LAND AESTHETICS V. WIRELESS CHANNEL ACCESS: 
THE CASE FOR LOCAL AUTHORITY TO REGULATE 
THE VISIBLE, BUT NOT THE WIRELESS, INTERFACE OF ANTENNAS

Douglas Spoerl

I. INTRODUCTION

National acceleration of the deployment of faster next generation networks increases access to broadband, thereby imparting amazing benefits to society. With the proliferation of mobile electronic devices, "build-out" of wireless networks – and the necessary “facilities


4. Wireless services, or “cell” or “Personal Wireless Services,” includes all public mobile, or fixed, cellular wireless services that are operated as Commercial Mobile Services. E.g., 47 U.S.C. § 332(d)(1) (2009); 47 C.F.R. § 20 (2011). This includes certain “Miscellaneous Wireless Communications Services.” 47 C.F.R. § 27 (2007). Wireless is therefore a mobile service – a "radio communication service carried on between mobile stations or receiv-
is an important process that facilitates access. However, while build-out serves the greater public good nationwide, section 332(c)(7) of the Communications Act preserves within the field of telecommunications the authority for state and local governments [hereinafter localities] to regulate the siting of facilities in their communities in the field of land use. Under this "preservation provision," localities have rightfully sought to preserve aesthetics in the wake of the proliferation of towers, including by means of preference for newer antenna facilities-technology types that require facilities that are "less intrusive" than towers. The Court of Appeals for the Second Circuit invalidated such preference though under the Constitutional doctrine of field preemption because, under the court's interpretation of the Act, the preference was not a regulation of land use, but rather a regulation of the field of "technical and operational aspects of wireless telecommunications services." However, the court should not have reached its legal conclusion because it failed to detail what that field encompasses. Furthermore, because the Federal Communications Commission already interprets the requirements of section 332(c)(7), the court should have resolved this discrepancy by seeking the Commission's interpretation of the preservation provision.

Section II recounts one town's zoning ordinance that preferred newer antenna facilities-technologies as a solution to the proliferation of wireless tower facilities and the town's trip to the Court of Appeals for the Second Circuit, where the court enjoined the enforcement of the ordinance on the grounds of field preemption. Section III dis-

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6. See H.R. Rep. No. 104-458, at 208-09 (1996) ("The conferees ... intend that the phrase ‘unreasonably discriminate among providers of functionally equivalent services’ will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services.").
7. See New York SMSA Ltd. P'ship v. Town of Clarkstown, 612 F.3d 97, 100 (2d Cir. 2010).
8. Id. at 105-06.
9. See id.
10. See Communications Act of 1934 § 1. 47 U.S.C. § 151 (2009) (creating the Federal Communications Commission to "execute and enforce the provisions of the Act"); see also Rights-of-Way Notice of Inquiry, supra note 1, at 28, 397-401 (the Commission has sought comments to interpret the requirements of 47 U.S.C. § 332(c)(7)).
12. See Clarkstown, 612 F.3d at 105-07. The court held that the federal regulatory framework occupies the field of antenna "technical and operational aspects of wireless telecommunications services," and that localities regulating the field of land use are therefore preempted from preferring antenna
discusses the Communications Act and the regulatory framework deriving from it, especially the Commission's technical and operational rules of wireless telecommunications services. The court's construction of federal regulation of technical and operational aspects is distinct from that which the Act envisions. Section IV analyzes the field preemption holding of the court under this misconstruction of the Act and concludes that, for legal and policy purposes, its holding is unfortunate as it defeats the intent of the preservation provision. The section further recommends that, because the Commission interprets the "preservation provision" of the Act, courts in the future should seek the Commission's interpretation of the provision.

II. THE LOCAL EXPERIENCE: NEW YORK SMSA V. CLARKSTOWN

A. Pre-Claim

In May 2006 the town of Clarkstown, New York, "prompted by both an increase in the number of cell tower applications being filed as well as an increased number of requests by carriers to site towers in or near residential neighborhoods[,]" declared a moratorium prohibiting the approval of wireless facility siting applications. During this time, Clarkstown studied and reviewed its laws and application process with the goal of revising them to "address the impact of new and emerging technologies upon the character of . . . residential neighborhoods." The town was not alone in this process; it worked with an inter-municipal committee of other state and local agencies and representatives, as well as legal and telecommunications experts. Together, the committee explored new antenna technologies as alternatives to wireless tower facilities and developed and prepared a siting plan and process for evaluating sites to meet its goal while still allowing wireless carriers to provide coverage. A town attorney stated that the revisions would "provide[ ] an incentive for carriers to seek out high ranking sites, deploy less intrusive technology and put[ ] the onus on the carriers to justify their site selections."

The lawyer also hoped that the new law would serve as a model for other municipalities facing the issues arising from the proliferation of wireless technology.

13. See Clarkstown, 612 F.3d at 97.
15. Id.
16. See id.
17. See id.
18. Id.
19. See id.
The town thereafter held six public meetings, with the town board finally adopting a new ordinance which, among other things, provided for the preference of alternative wireless facilities over tower facilities. However, after all was thought to be said and done, carriers challenged the ordinance, seeking declaratory and injunctive relief to prevent Clarkstown from enforcing its new law.

B. The Claim

In *New York SMSA Limited Partnership v. Town of Clarkstown* 22 SMSA 23 claimed that Clarkstown’s ordinance went “beyond traditional land use issues such as lot size and set backs,” and instead “trampled upon numerous areas that the federal government has reserved to itself” in violation of federal law which the town was expressly preempted by. 24 SMSA backed its claim by stating that the ordinance violated section 332(c)(3) of the Communications Act, 25 was preempted by the Federal Communications Commission’s authority to establish technical standards for wireless services, 26 and that the ordinance ran afoul of the federal government’s preemption of the entire field of the “tech-

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22. *New York SMSA Ltd. P’ship v. Town of Clarkstown, 612 F.3d 97 (2nd Cir. 2010).*

23. SMSA is comprised of Verizon Wireless, New Cingular Wireless, Sprint, and T-Mobile. *See id.*

24. *Complaint for Declaratory and Injunctive Relief, supra note 21, at ¶¶ 2, 4.*


26. *See Complaint for Declaratory and Injunctive Relief, supra note 21, at ¶¶ 1-126, 134-57. (citing City of New York v. FCC, 486 U.S. 57, 63-64 (1988) (“[W]e have also recognized that ‘a federal agency acting within the scope of its congressionally delegated authority may pre-empt state regulation’ and hence render unenforceable state or local laws that are otherwise not inconsistent with federal law.”). But the case cited only stands for the proposition that the Commission may – not that it always does – pre-empt state regulation.*

*See City of New York v. FCC, 486 U.S. 63-64 (1988).* It seems
Clarkstown countered that SMSA's claims were without merit and that its memorandum of law supporting summary judgment was a "wireless industry manifesto" that advocated the abolishment of virtually any local controls over cellular facilities. Their major attack on the carrier's claims resided in section 332(c)(7) of the Communications Act which preserves local regulation of wireless facility siting. Clarkstown pointed out that, while SMSA identified the section, SMSA did not identify or confront the issues arising from it; whereas section 332(c)(7) expressly preempts Clarkstown from pursuing certain regulations in the field of land use on the basis of radio frequency (RF) emissions, SMSA sought to impliedly preempt Clarkstown from pursuing regulations in the field of land use on the basis of something other than RF emissions. Clarkstown found this reading troubling because Second Circuit precedent had held that the section allowed any regulation in the field of land use as long as the regulation did not prohibit, or have the effect of prohibiting, cellular facilities on the basis of RF emissions, for which a corollary to that is that there is limited federal preemption of the field of land use regulation.

C. The Court of Appeals' Decision

SMSA sought to invalidate Clarkstown's ordinance on the grounds that the ordinance was preempted by federal law, specifically the
Communications Act. Clarkstown disputed this on the grounds that section 332(c)(7) of the Act preserved for localities such authority and that Second Circuit precedent required a broader reading. The Court of Appeals, however, agreed with SMSA, and applied the doctrine of field preemption to invalidate Clarkstown’s ordinance.

The court, focusing on Clarkstown’s section 332(c)(7) argument, split the field of telecommunications into the fields of (1) land use and zoning, which is not preempted by federal law, and (2) technical and operational aspects of wireless services, which is preempted by federal law. The court found that Clarkstown’s preference for alternative technologies was preempted because it was a regulation of both fields. Clarkstown contended this finding on the grounds that preference for alternative technology was not a regulation of the technical and operational aspects of antennas, but instead only a preference for siting “less intrusive” antenna technologies in the community. Yet, the court skirted this contention and the issue of how to define the field of technical and operational aspects. Instead, the court merely noted that the ordinance expedited, and subjected to less rigorous scrutiny, applications to use newer antenna technologies over applications proposing to use non-preferred antenna technologies, such as technologies located on towers. The court, having found this discriminatory effect to be “so substantial that it [interfered] with the federal regulatory scheme that occupies the field” of telecommunications and “Congress’s goal of facilitating the spread of new technologies and the growth of [cellular services],” held such a preference to be impliedly preempted.

33. See 47 U.S.C. § 332(c)(7)(A) (2009)).
34. See Clarkstown, 612 F.3d at 104-06.
35. See id. at 106.
36. See id. at 105-07 (citing 47 U.S.C. § 332(c)(7) (2009), H.R. Rep. No. 104-458, at 207-09 (1996), Omnipoint Commc’ns, Inc. v. City of White Plains, 430 F.3d 529, 531 (2d Cir. 2005), Bastien v. AT&T Wireless Servs., Inc., 205 F.3d 983, 986, 989 (7th Cir. 2000), Freeman v. Burlington Broadcasters, Inc., 204 F.3d 311, 322 (2d Cir. 2000), and Sprint Spectrum L.P. v. Willoth, 176 F.3d 630, 639, 643 (2d Cir.1999)). The court invalidated two provisions of Chapter 251, of which the first provision “preferred” the placement of small and less intrusive antennas in residential areas. See Clarkstown, 612 F.3d at 100. Through this provision, the city expected to address “the safety, visual and aesthetic aspects of . . . facilities and to provide for public input in the process of siting . . . towers.” Id. at 101. It favored “distributed antenna systems (DAS)” over “macrocell” towers. Id. at 101-02. DAS consists of a grid of low-level antennas, whereas macrocell facilities consist of towers; service providers prefer the macrocell towers. See id.
37. Id. at 106.
38. See id. at 106, note 1 (citing Altria Group, Inc. v. Good, 555 U.S. 70, 76 (2008)).
39. See Clarkstown, 612 F.3d at 106.
40. Id.
Furthermore, even though Clarkstown defended its ordinance on the grounds of Second Circuit precedent, the court distinguished the Clarkstown holding from earlier holdings that localities could reject applications to build cell facilities on the grounds that less intrusive means for providing service existed. \(^{41}\) Clarkstown argued that these holdings legitimized its ordinance because it also simply required less intrusive means. \(^{42}\) However, the court noted that it had not yet settled the issue of field preemption, meaning that the earlier holdings did not apply. \(^{43}\) Also, because the earlier holdings involved individual permits involving specific applications to build facilities on specific sites, whereas Clarkstown involved a local ordinance that applied generally to all applications to build facilities within the entire community, those holdings were further not controlling. \(^{44}\) However, the court should have been less quick to reach its holdings in Clarkstown without a deeper analysis of the telecommunications framework and the meaning of “technical and operational aspects” within the framework’s confines. \(^{45}\)

III. THE TELECOMMUNICATIONS FRAMEWORK: FROM THE COMMUNICATIONS ACT OF 1934 TO THE TELECOMMUNICATIONS ACT OF 1996

The Court of Appeals for the Second Circuit would have found that the field of telecommunications entails a complex regulatory framework derived from the Communications Act and its amendments, the most notable being the Telecommunications Act of 1996. \(^{46}\) However, the court did not consider much of the Acts’ provisions and policies, such as those that aim at promoting new technologies and services and public access to these technologies. \(^{47}\) Instead, the court mini-

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\(^{41}\) See id. at 107 (citing Omnipoint Commc’ns, Inc. v. City of White Plains, 430 F.3d 529, 529 (2d Cir. 2005), and Sprint Spectrum L.P. v. Willoth, 176 F.3d 630, 630 (2d Cir.1999)).

\(^{42}\) See Clarkstown, 612 F.3d at 106. This less intrusive means test is the subject of circuit split right now. See infra note 172.

\(^{43}\) See Clarkstown, 612 F.3d at 106.

\(^{44}\) See id. at 107 (comparing Omnipoint Commc’ns, Inc., 430 F.3d at 530, and Sprint Spectrum L.P., 176 F.3d at 636, with Clarkstown, N.Y., Res. No. 431-2007, supra, note 20).

\(^{45}\) See discussion infra Section III.


\(^{47}\) See Clarkstown, 612 F.3d at 103-07. The court may have found a favorable proposition for its field preemption holding to the extent that the Acts aim at streamlining wireless network build-out via deregulation. See, e.g., 47
mally glanced over the legal provisions, and the Federal Communications Commission’s rules, that provide the framework relevant to build-out and wireless services’ facility siting in local communities.\textsuperscript{48}

The court should have noted first that while the Commission has the authority to enforce the laws applicable to wireless communications, the Commission’s role in this field is to primarily maintain control over and provide access to, and use of, the wireless channel interface.\textsuperscript{49} Inasmuch as the Commission has authority over all wireless interface requirements, it is limited in regulating land use because the federal government itself does not exercise jurisdiction over much of the country’s land.\textsuperscript{50} As the court failed to note, this requires that the federal government balance the interstate commerce purposes of the Acts and the intrastate interests of local land use.\textsuperscript{51} The balancing factors for intrastate interests are found mainly through sections 332(c)(3) and 332(c)(7) concerning the regulatory treatment of wireless services at the locality level and include “state preemption” and “preservation of local zoning authority (i.e. the “preservation provision”).\textsuperscript{52}

While the court would have found that section 332(c)(3) preempts localities from regulating the entry of, or the rates charged by, any wireless licensee,\textsuperscript{53} the court also would have found that localities are not preempted from regulating “other terms and conditions.”\textsuperscript{54} Furthermore, the court would have found under this provision that the Commission does not have jurisdiction with respect to classifications, practices, services, facilities, or regulations for or in connection with [wireless services] even though a portion of such exchange service[ ] constitutes interstate or foreign communication, in

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\textsuperscript{48} U.S.C. § 1302; H.R. Rep. No. 104-458, at 1 (1996) (The committee recommended the Telecommunications Act in order “to provide for a pro-competitive, de-regulatory national policy framework designed to accelerate rapidly private sector deployment of advanced telecommunications and information technologies and services to all Americans by opening all telecommunications markets to competition.”). However, this “deregulation” effectuates a policy promoting competition as the means to accelerate deployment, but does not clearly indicate a policy preempting any regulation that does not affect competition. \textit{See id.}


\textsuperscript{54} \textit{Id.}
any case where such [a matter is] subject to regulation by a
... local governmental authority [that comports with the
Commission's authority to provide licensee access to the
channels of wireless communications].

The court would have found this to mean that localities may regu-
late everything but licensees' access to the wireless channels and the
rates charged, that the federal role is more minimal than at first
stance because the ordinance still permitted "licensees access to the
channels of wireless communications." Furthermore, the court
should not have scrutinized Clarkstown's ordinance under this provi-
sion because decisions regarding the placement, construction, and
modification of wireless facilities are not limited or affected by any
other provisions of the Communications Act.

The court should have instead scrutinized an action by Clarkstown
under this ordinance using section 332(c)(7). While SMSA did not
base its complaint on section 332(c)(7) of the Act, the court should
have limited itself to findings under the section that Clarkstown

[1] [did] not unreasonably discriminate among providers of
functionally equivalent services, [2] [did] not prohibit or
have the effect of prohibiting the provision of ... wireless
services, [3] ... [did not regulate] on the basis of the envi-
ronmental effects of radio frequency emissions to the extent
that such facilities comply with the Commission's regulations
concerning such emissions, [4] act[ed] on any request for
authorization to place, construct, or modify ... 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, [and] [5]
maintained] ... [all] decision[s] to deny [such] a request
... in writing, and support[ ] [such decisions] by substantial
evidence contained in a written record.

The court should have therefore limited itself to finding that Clarks-
town's "final action or failure to act [was not] inconsistent with [the
requirements of section 332(c)(7)]" before allowing SMSA to "com-
mence [its] action."

57. Id.
59. Id. at § 332(c)(7).
61. Id. at § 332(c)(7)(v). Persons may furthermore petition the Commission
for relief if such actions or failures to act based on the environmental ef-
facts of radio frequency (RF) emissions. See id.
The court would have also found that the Commission, with regard to wireless services, has acted on its authority to primarily regulate access to, and use of, the wireless channel interface. The court would find in turn the Commission has simply promulgated rules for common carrier licensees which set forth conditions on the technical and operational aspects of wireless systems only at these systems' interfaces with wireless transmissions. While the court was therefore correct to conclude that the Commission regulates "technical and operational aspects of wireless telecommunications services," it should have also found that its conception of this phrase is not the same as that conceived by the Communications and Telecommunications Acts.

A. By Land and by Air: Dividing up the Spectrum of Authority over Technical and Operational Aspects of Wireless Telecommunications Services

The court would have found first that the Commission has followed through with its authority to regulate wireless transmissions by allotting spectrum for the purposes of licensing it to multiple users. In a way this comprises both air and land use zoning because the spectrum is subdivided into wireless channels as well as market service areas.


63. See supra note 62.


However, beyond the Commission’s primary role coordinating carriers’ access to, and usage of, these channels via the antennas’ interfaces with wireless signaling, localities have the authority to place other terms and conditions on wireless facilities, such as preference for facilities’ technical and operational aspects at the antennas’ interfaces with land use.

B. Technical and Operational Criteria for Wireless Service Networks

The court would have found that in the past the Commission required wireless services networks to use “analog” antenna technology. However, the court would also have found that licensees may provide technology and systems that meet all applicable technical and operational requirements, meaning that the Commission does not per se regulate “technology type.” The Commission instead simply regulates licensees access to, and usage of, the wireless interface, which requires some regulation of (1) the functionality of antennas, (2) the operation of antennas and facilities (3) the build-out of “non-site specific” wireless networks, and (4) the effects of these three things on other spectrum users, human and environment health, and air travel. By delving deeper into the Commission’s rules, the court should have found that its idea of the field of technical and operational aspects of wireless networks is not the same as that conceived by the federal government, which again is to provide for the access to, and usage of, the wireless channels.

i. Antenna Technical Criteria

The court would find that equipment implemented in a wireless network must conform to the Commission’s rules regarding the field of technical aspects of antenna technology. However, the court would have to find that this authorization is to ensure that the equipment’s technical specifications allow it to operate correctly at the wireless channel interface. The court would thereafter have to conclude

68. See 47 C.F.R. § 22.901 (2012). This requirement ended February 18, 2008. See id.
69. Id.
70. See discussion infra Section III(B) (i-iv).
74. See 47 C.F.R. §24.51 (2012) (PCS transmitters must comply with IEEE standards setting forth the “safety levels with respect to human exposure to radio frequency electromagnetic fields”). This means that the entire antenna product line has a single “FCC” identifier which states that the antennas are validated to conform to the Commission’s “non-site specific” rules. 47 C.F.R. § 2.926 (2012).
that licensees must operate their conforming antennas—and the facilities that they are attached to—within certain limits to maintain conformity with the product's validation license, and that localities are preempted from causing validated equipment to operate outside of these confines, but may otherwise pursue actions that simply prefer implementation of validated antenna technology.

ii. Operation of Antenna's and Coordination of the Use of Wireless Channels

The court would have found that wireless licenses need only operate facilities (e.g. towers and the attached validated equipment) in compliance with the Commission's rules. This is, the facilities must comply with rules regulating height (which is to conform the Commission's regulations to those created under the Federal Aviation Administration's authority), environmental effects (which is to conform the Commission's regulations to the Environmental Protection Act), and international agreements on the wireless channel interface. Furthermore, the Commission requires that certain licensees (1) coordinate prevention of interference, (2) notify certain spectrum users of

75. See 47 C.F.R. § 24.52 (2012) (citing 47 C.F.R. §§1.1310 (2010), 2.1903). This requires that certain licensees (1) maintain their transceivers so that they radiate into certain frequency stability ranges, (2) limit the maximum field strength at the edge of the service area boundary (SAB) unless they agree with another licensee that they may exceed it, and (3) coordinate their frequency usage with co-channel and adjacent channel licensees before operating any base station, and (4) not allow their antenna structures to become hazardous to air navigation. See 47 C.F.R. §§24.236-237, 24.135, 24.235 (2012); see 77 F.R. 24872 (proposed April 26, 2012) (to be codified at 47 C.F.R.§27.55). Narrowband PCS licensees must measure frequency stability from the center of their band within a dynamic temperature range at normal static supply voltage, and over a dynamic voltage range at a static temperature. See §24.135. The transmitter may be tested within a narrow temperature range, but it must cease to radiate before it exceeds the frequency stability range. See id. Battery powered transmitters must also meet this requirement. See id. Broadband PCS and MWCS licensees need however only to ensure that the frequency stability is sufficient so that fundamental emission stays within the authorized “frequency block” and “bands of operation,” respectively. §§24.235, 27.54-.55 (citing 47 C.F.R. pt. 17). This places limits on height, for which the determination is made via section 24.53, which gives the technical calculation for HAAT. See, e.g., id; §27.56.

76. See §22.107.

77. See §§1.1301-1.1319, 17.7, 22.143, 27.11. The Commission also only requires licensees to follow procedural and substantive rules in order to coordinate spectrum use with other users of the same spectrum before applying, requiring that they give notice regarding technical details of their proposal. See §22.150. This includes geographical coordinates of their site(s), transmitting and receiving channels to be added or changed, transmitting power, emission type and polarization, transmitter pattern and maximum gain, and transmitter height. See id.

78. See 47 C.F.R. §§27.57-.58, .60, .63, .64, .1131-.1135.
activation or modification services when requested by them, (3) coordinate with the Commission any plans to activate or modify transmitters near an existing or planned public safety base station receiver, (4) conform with application requirements that require technical information, (5) coordinate leasing of guard band licenses to lessees, (6) restrict the services authorized on certain bands, and (7) ensure that field strength is within a certain limit when near a healthcare facility. The court would therefore have to find that these rules evidence federal coordination of antenna interaction at the wireless channel interface, not at the visual interface. However, because each facility’s wireless radiation covers a single cellular geographic area, the court would have to consider the bigger picture of the wireless system build-out.

iii. Build-out of Wireless Systems

The court would have found that the Commission grants licenses within market services areas (MSAs) to licensees to build-out their wireless systems. In turn, the court would find that the total system is the aggregate of all of the cell systems’ service areas, which may or may not cover, or even extend beyond, the entire MSA. Addition-

79. See §§ 27.70, .72, .73.
80. See § 27.303. In this case, the Commission may impose restriction on operations. See § 27.303(d).
81. See § 27.308.
82. See § 27.601-6097.
83. See §§ 27.802, .902.
84. See 47 C.F.R. § 27.804.
85. See 47 C.F.R. § 22.99 (describing a “five year build-out period”), 47 C.F.R.§ 947 (granting a five year build-out period).
86. Wireless cell system’s service area extends to its “service area boundary (SAB),” which is the geographic area bounded by a single antenna’s radiation. See 47 C.F.R. § 22.911. The service area in turn is normally calculated as a function of effective radiation power (ERP) and antenna “center of radiation” “height above average terrain (HAAT).” 47 C.F.R. § 22.913. The Commission restricts the maximum ERP so that the average distance of SABs, the average of the eight radial distances, is at most 49 miles for systems authorized to serve the Gulf of Mexico MSA and 25 miles for all other MSAs. See id. Furthermore, the composite of the service areas of all of the cells in the system, excluding any area covered outside of cellular market boundaries, is further known as the cellular geographic service area (CGSA). See 47 C.F.R. § 22.911. The CGSA is important because systems contained to it are entitled to protection. See id.
87. Licensees must normally orient their transceivers so that their CGSAs do not extend beyond their MSA boundaries. See 47 C.F.R. §§ 22.912, 22.165(e). Additionally, the Commission requires licensees to attenuate all emissions outside of their channel block below a certain transmitting power factor. See 47 C.F.R. §§ 22.911, .917. However, licensees may extend SABs into other licensees’ MSAs when demonstrated that it is an unavoidable consequence for technical reasons of sound engineering design, and that their CGSA will not extend into the MSAs of other licensees’ systems on the same channel block. See 47 C.F.R. § 22.912. Licensees may also extend the
ally, when the Commission grants a license, the licensee must build out its network and provide services to subscribers within a specified commencement period. This only demands that licensees build-out networks either covering (1) a percentage of the population of the MSA, (2) some finite area or percentage of the MSA, or (3) providing “substantial service.” Besides finding that localities cannot impede

SABs to the extent that extension into their own CGSA during the build-out or prior extension into SABs of their previously authorized facilities would be allowed. Id. Furthermore, licensees need not comply with certain limits if they coordinate with other licensees of affected cell systems on the same channel block. See 47 C.F.R. § 22.911. In any case though, licensees must provide notice to the Commission of any transmitter additions or “major modifications” that would impact the environment, require international frequency coordination, and modification to the CGSA that would cause it to extend over MSA boundaries. See, e.g., 47 C.F.R. §§ 1.1301–1319, 1.929(a)-(b), 22.165(e) (citing 47 C.F.R. §§ 22.953(a)(1)-(3)). Also, during emergencies licensees may only operate stations in a manner or configuration not normally allowed as long as they comply with the following technical limitations: the emergency communications must (1) be on the licensee’s authorized channels, (2) not exceed the normal operational authorized power limits, and (3) not radiate emissions types other than those authorized for normal operations. See 47 C.F.R. §§ 22.307(a)(1)-(3). Stations must also have at least one control point for operation and a person on duty responsible to operate it in case transmitters malfunction. See 47 C.F.R. § 22.325.

88. See 47 C.F.R. § 22.946 (“To satisfy this requirement, a cell system must be interconnected with the public switched telephone network (PSTN) and must be providing service to mobile stations operated by its subscribers and roamers. A cell system is considered to be providing service only if mobile stations can originate telephone calls to and receive telephone calls from wireline telephones through the PSTN.”) (citing 47 U.S.C. § 946), 47 C.F.R. § 22.947. The commencement dates begin on the date of grant of the initial authorization, and are not extended by the grand of subsequent authorizations for the system (such as major modifications). See 47 C.F.R. § 22.945.

89. By the first ten years, the licensee must cover 75 percent of the population or double the covered area. See 47 C.F.R. § 24.103. The licensee can however opt out of these requirements by showing within the ten years of build-out that they provide “substantial service,” which is “[s]ervice that is sound, favorable, and substantially above a level of mediocre service that would barely warrant renewal.” Id. To demonstrate compliance with these requirements the licensees have to base their calculations on signal field strengths that ensure reliable service for the technology utilized. See id. Like other wireless services, the calculation for determining the service area radius of a base station is provided. See id. This calculation determines the SAB, the allowable ERP, and the distance of separation between base stations of different service areas when the licensees of the service areas are different and use the same channel. See 47 C.F.R. §§ 24.103, 132-134. Broadband PCS 30 MHz block licensees’ construction requirements require that they build-out networks covering one-third of the MSA population within the first five years of being licensed. See 47 C.F.R. § 24.203(a). By the first ten years, the licensee must cover two-thirds of the population. The licensee could opt out though by showing within the five and ten year benchmark periods that they provide “substantial service.” 47 C.F.R. § 24.203(d). 10 and 15 MHz block licensees are required to build-out networks that cover one-quarter of the MSA population within the first five
build-out within the commencement periods, the court would also have to find that build-out technical and operational criteria evidence federal coordination of access to, and usage of, wireless channels.90 Furthermore, the Commission's reassertion of preemption of land use regulation based solely on the environmental effects of RF emissions would evidence the Commission's primary role at the interface of antennas with wireless channels.91 Additional evidence of this is the
Commission's limited involvement in regulating carrier additions or modifications to facilities within an existing system. Also, because the Commission "facilitate[s] the rendition of service on an interference-free basis," the court would have to consider the Commission's liability scheme, which further evidences the Commission's primary concern with the interface of antennas with wireless channels, and the preemption of local ordinances that would disrupt the scheme.

iv. Liability For Unacceptable Interference

The court would find that licensees may be liable for systems that exceed unacceptable interference limits. Licensees responsible for such interference must mitigate the effects. However, the Commission does not protect spectrum users from interference in all situations, nor dictate how they cooperate, but merely provides examples of mitigation procedures. Instead, users must coordinate amongst

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92. See 47 C.F.R. § 22.165. However, licensees must again ensure that the equipment and facilities do not have significant environmental effects nor require international coordination, and must register antenna structures required to be registered. See 47 C.F.R. § 1.1301-1.1319, 17.1-.58. Furthermore licensees must eliminate any harmful interference created by their networks using the same channel as a Mexican or Canadian entity located near the borders of Mexico and Canada to ensure continuance of equal access to the channel block by both countries. See 47 C.F.R. §§ 22.955, .957.


94. See 47 C.F.R. § 22.970, .971. In addition, carriers must comply with public safety and "critical infrastructure industries" licensees' requests to provide information before a new cell is activated or an existing site is modified; this includes the site location, the ERP, the antenna height, and the channels available for use. See 47 C.F.R. § 22.973. These licensees may not however only use the information to coordinate with the cell licensee mitigation procedures to avoid unacceptable interference. See id. While transceivers that are unacceptably interfered with must meet certain technical specifications in order to be entitled to lawful protection, the minimal specifications do not require that the transceiver be of some "technology type," only that it is in good condition, has certain minimum or maximum emissions characteristic, and that it is interfered with. See, e.g., id.; see e.g., 47 C.F.R. § 22.970.

95. See 47 C.F.R. § 22.972. Licensees may do this by decreasing the power of the signal, modifying the antenna height, modifying the antenna characteristics, or incorporating filters. See id. In addition, out of band emissions must be attenuated to a certain level so as not to interfere with other wireless services. See 47 C.F.R. § 22.917.

96. See 47 C.F.R. §§ 22.352, 22.972 (the seven situations include (1) when there is interference to base receivers from base or fixed transmitters, (2) interference to mobile receivers from mobile transmitters, (3) interference to bases receivers from mobile transmitters, (4) interference to fixed stations, (5) anomalous or infrequent propagation modes (6) facilities for which the Commission is not notified or operating pursuant to sections 1.929, 22.265, (7) or in-building radiation systems under section 22.383).
themselves to resolve interference issues, meaning that localities could not impede inter-operator resolution.

All things considered, the rules enumerated above do not amount to a federal government occupation of the field of the "technical and operational aspects of wireless telecommunications services," but only to the Commission's authority to regulate access to, and usage of, the wireless channels via antennas. To the extent that localities may prefer validated antennas or facilities as "other terms and conditions" for provision of services in their communities, they should be able to do so as long as they do not place conflicting requirements on validated equipment. Furthermore, localities' regulations must not have the effect of prohibiting carriers from fulfilling the Commission's build-out requirements, or creating unacceptable interference.

IV. ANALYSIS

Currently, the Federal Communications Commission regulates and facilitates most of the wireless network build-out under the framework emanating from the Communications Act of 1934 and the Telecommunications Act of 1996. But this build-out affects land use policy of localities, where regulation is normally tailored to local needs. The land use and enjoyment of people living within municipal boundaries are the ones most impacted by national policies and laws that

97. See 47 C.F.R. § 22.352. Users must only do this when the Commission would provide protection of the other station. See id. Licensees must comply with the rules to reach these ends, including (1) resolving cases of blanketing interference, (2) maintaining transmission frequency of each transmitter within a certain frequency tolerance, (3) orienting antenna structures so as not to violate Part 17, not disturbing AM radio broadcasts, (4) not using transmitters, including signal boosters, in-building radiation systems, and cellular repeaters that are not certificated by the Commission, and (5) not installing and operating in-building radiation systems located outside the licensee's protected service area. See 47 C.F.R. §§ 22.353, .355, .365, .371 (citing 47 C.F.R. § 17.6), 47 C.F.R. § 22.377 (citing 47 C.F.R. § 2.1-1517 (provisions for certificating transmitters), 47 C.F.R. §§ 22.401-.417 (provisions for developmental authorizations under Part 22), 47 C.F.R. § 22.383. Licensees need not seek prior authorization or notification of the Commission when they are installing or operating in-building radiation systems within their protected service area on the authorized channel or block. See id.

98. See supra note 61.


100. See discussion supra Section III.


102. See Nolon, supra note 50, at 106-07, note 6.
promote ubiquitous coverage, and hence the siting of infrastructure, such as wireless facilities, necessary to attain such coverage.\textsuperscript{103}

Sections 332(c)(7) of the Communications Act (the “preservation provision”) therefore preserves local zoning authority.\textsuperscript{104} This leaves localities in the position to regulate the siting of wireless facilities as best they can.\textsuperscript{105} However, many find the provision to be unclear as to the scope of authority that localities have with regard to regulating facilities,\textsuperscript{106} and has especially created a tension between localities and carriers over local preference of wireless technology types that meet their local land use objectives.\textsuperscript{107} The Court of Appeals for the Second Circuit ruled that localities may not prefer antenna technologies under the provision, such regulations being impliedly preempted because the federal government occupies the entire field of “technical and operational aspects of wireless telecommunications service.”\textsuperscript{108} The court’s reading is incorrect though because, unlike other provisions whereby localities are explicitly preempted from regulating “the entry of or the rates charged” or siting based on the “environmental effects of radio frequency emissions,”\textsuperscript{109} the preservation provision provides leeway to localities to work within the confines of the framework to preserve their local values as long as they do not interfere with the access to, and usage of, the wireless channels via the antenna interface.\textsuperscript{110}

Furthermore, the application of the field preemption doctrine by the court to Clarkstown’s ordinance, for which action under the ordinance could have otherwise necessitated a section 332(c)(7) analysis, seems somewhat erroneous.\textsuperscript{111} This is the unfortunate result of the

\textsuperscript{103}See generally John Copeland Nagle, Symposium on the Environment: Essay: Cell Phone Towers as Visual Pollution, 23 ND J.L. ETHICS & PUB POL’Y 537 (2009) (discussing how the proliferation of wireless services has led to local visual pollution complaints).


\textsuperscript{105}See Town of Clarkstown, Clarkstown to Propose New Cell Tower Law, supra note 14.

\textsuperscript{106}See 47 C.F.R. § 332(c) (2009). Cf. Bastien v. AT&T Wireless Servs., Inc., 99 C 49, 1999 WL 259939 (N.D. Ill. Apr. 21, 1999) aff’d, 205 F.3d 983 (7th Cir. 2000) (“The meaning of “other terms and conditions” is somewhat enigmatic, but guidance can be found in the legislative history of the section.”) (quotation marks in original). Contra New York SMSA Ltd. P’ship v. Town of Clarkstown, 612 F.3d 97, 104 (2nd Cir. 2010) (standing for the proposition that state and local land use regulation cannot include regulation of “technical and operational aspects wireless telecommunications services”).

\textsuperscript{107}See Rights-of-Way Notice of Inquiry, supra note 1, at 28,397-401.

\textsuperscript{108}Clarkstown, 612 F.3d at 104 (citing Bastien, 205 F.3d at 988 (“The Act makes the FCC responsible for determining the number, placement and operation of the cellular towers and other infrastructure.”))


\textsuperscript{110}See id. at § 332(c)(7).

\textsuperscript{111}Compare Clarkstown, 612 F.3d at 104 (“Reviewing the applicable statutes, we held that Congress intended the FCC to possess exclusive authority over technical matters related to radio broadcasting and that Congress’s grant of
court applying the doctrine in a field outside of its legal and technological expertise when the field is otherwise regulated by an expert regulatory body.112 While the court was partially correct to find that the Act does preempt locality regulation of technical and operational criteria, the Commission’s role in this field is to ensure access to, and usage of, the wireless channel interface, which is not the same as the court’s conception of “technical and operational aspects of wireless telecommunications services.”113 Furthermore, the Commission works with localities to reduce obstacles to deployment of infrastructure and ensure that carriers have a fair shot at accessing the wireless channels.114 If anything, courts dealing with ordinances which communities believe are land use ordinances, should simply follow what section 332(c)(7) requires of them and otherwise allow the Commission to cooperate with localities and carriers to deal with everything else, such as interpretation, execution, and enforcement of the Act.115

authority to the FCC was intended to be exclusive and to preempt local regulation.” (citing Freeman v. Burlington Broadcasters, 204 F.3d 311, 320-21 (2d Cir.2000), and Southwestern Bell Wireless Inc. v. Johnson County Bd. of County Comm’rs, 199 F.3d 1185, 1193 (10th Cir.1999) (“Congress intended federal regulation of [radio frequency interference] issues to be so pervasive as to occupy the field.”))) (internal quotations omitted), with Farina v. Nokia Inc., 625 F.3d 97, 121-22 (3rd Cir. 2010) cert. denied, 132 S. Ct. 365 (2011) (“Given Congress’s and the FCC’s demonstrated hesitation to override all state law and recognition of a role for state regulation within the field of RF emissions, we cannot conclude that federal law “so thoroughly occupies a legislative field ‘as to make reasonable the inference that Congress left no room for the States to supplement it.’ ” (citing Cipollone v. Liggett Group, 505 U.S. 516 (1992). This Comment does not concern itself with the regulation of the field of RF emissions. However, the Second Circuit finds that “Congress intended the [Commission] to possess exclusive authority over technical matters related to radio broadcasting.” Clarks-town, 612 F.3d at 104 (quoting Freeman, 204 F.3d at 320). This would be a contrary reading to that in Farina, which finds that at least some of the field of wireless communications is not impliedly preempted. Farina, 625 F.3d at 121-22.

112. See analysis infra Section IV and accompanying notes (discussing how judges should avoid applying the field preemption doctrine in fields that the Commission regulates because these matters are highly technical in nature).
113. See discussion supra Section III.
114. See supra note 2 and accompanying text (indicating that the Commission, state and local authorities, and private actors are cooperating)
115. But see H.R. Rep. No. 104-458, at 208 (1996) (“The conference agreement also provides a mechanism for judicial relief from zoning decisions that fail to comply with the provisions of this section. It is the intent of the confer- ees that other than under section 332(c)(7)(B)(iv) of the Communications Act of 1934 as amended by this Act and section 704 of the Telecommunica-tions Act of 1996 the courts shall have exclusive jurisdiction over all other disputes arising under this section.”).
A. *The Role of the Courts under the Communications Act*

Normally, the Commission interprets the Communications Act for the purposes of executing and enforcing it.\footnote{116} However, courts have exclusive authority over disputes arising under section 332(c)(7) of the Act to grant relief when zoning actions do not comply with the section's provisions.\footnote{117} Unfortunately, courts have had issues deciding how to resolve what scope of authority zoning bodies have under the section's provisions.\footnote{118} Courts must normally decide the merits based on whether the zoning authority followed the procedural and substantive requirements explicitly laid out in section 332(c)(7).\footnote{119} However, the Court of Appeals for the Second Circuit went outside of the confines of the section to decide the merits based on "field preemption" of the "technical and operational aspects of wireless telecommunications services."\footnote{120}

B. *The Communications Act and Preemption*

There are three basic types of federal preemption that arise under the Supremacy Clause of the Constitution.\footnote{121} Federal statutes may expressly preempt state and local laws "through [its] express language or . . . structure and purpose."\footnote{122} Courts may also infer preemption if there is conflict between federal and state or local law, or "if the scope of the statute indicates that Congress intended federal law to occupy the legislative field."\footnote{123} This later preemption doctrine is known as "field preemption."\footnote{124} With regard to the Communications Act of 1934, Title 47 of the United States Code, the Commission's rules, and many court and Commission proceedings, serve as the best indicators of what Congress intended to preempt, and what it intended the

\footnote{117} See, e.g., § 332(c)(7); see e.g., H.R. Rep. No. 104-458, at 207-09 (1996). This is except in cases where localities regulate siting based on the environmental effects of RF emissions. 47 C.F.R. § 332(c)(7) (2009).
\footnote{119} See discussion supra Section III § 5 (describing the procedural and substantive requirements of local action regarding facilities siting).
\footnote{120} Clarkstown, 603 F. Supp. 2d at 725.
\footnote{123} Id. at 76 (citing Freightliner Corp. v. Myrick, 514 U.S. 280, 287 (1995)).
\footnote{124} See Clarkstown, 612 F.3d at 104.
The Act contains two provisions that expressly preempt locality regulation of wireless services. First and foremost, localities may not regulate the entry of, or the rates charged by, any carrier. An additional clause in this has led to some troubling consequences because it should not be construed to "prohibit a State from regulating the other terms and conditions of [wireless] services." Such consequences are seen in a widely cited case from the Court of Appeals for the Seventh Circuit, _Bastien_, which involved section 332(c)(3) (the "preemption provision"), but not section 332(c)(7) (the "preservation provision"), and which has stood for an incorrect proposition that the Act "makes the [Commission] responsible for determining the number [and] placement [of] the cellular towers and other infrastructure." This is not true though because licensees determine the number and placement of towers and infrastructure, needing only to meet Commission's rules, which require that licensees at minimum provide "substantial service" using validated equipment. The Court of Appeals for the Second Circuit unfortunately advanced the erroneous _Bastien_ holding not by just quoting it, but by using it to justify its field preemption holding. The court further construed another _Bastien_ holding – that when there is "no room" for state regulation because of preemption, the case becomes a federal question – to incorrectly mean that there is "no room" for Clarkstown's provisions to prefer alternate technology.

Secondly, section 332(c)(7) limited localities from "unreasonably discriminating" against providers of functionally equivalent services, from prohibiting or having the effect of prohibiting the provision of wireless services, and from basing siting regulations on environmental effects of RF emissions to the extent that facilities comply with the Commission's rules. There is, however, no express preemption of laws that regulate the technology type employed at a wireless facil-

125. See discussion supra Section III.
126. See discussion supra Section III (describing 47 U.S.C. §§ 332(c)(3), (7) (2009)).
129. _Bastien_ v. AT&T Wireless Servs., Inc., 205 F.3d 983 (7th Cir. 2000).
130. Id. at 988, 989.
131. See discussion supra Section III(B) and accompanying notes (discussing the build-out requirements of licensees).
133. _Clarkstown_, 612 F.3d at 106 (citing _Bastien_, 205 F.3d at 986).
Clarkstown would have had in place an ordinance that allowed it to take action in a way that agreed with the substantive and procedural requirements of section 332(c)(7).

The court misplaced many holdings to make its finding that the town was preempted from preferring technology types. After misapplying the Bastien propositions, the court looked to the conference committee report on preservation provision to find that the preservation of locality authority over zoning and land use matters "does not extend to technical and operational matters, over which the [Commission] and the federal government have exclusive authority" to further justify its holding that field preemption applied. However, this reading does not comport with the reading that the Commission only regulates technical and operational criteria to ensure access to, and usage of, the wireless channel interface. Clarkstown's ordinance would not exercise authority over the antenna interface with the wireless channels, but only the interface with visual aesthetics and land use, and would also be within the preservation provision's confines to "[reasonably] discriminate among providers of functionally equivalent services" seeking access to wireless channels.

The court also misread a case from within its own circuit to support its finding of preemption. In Freeman, the Court of Appeals for the Second Circuit stated, "in light of the [Commission's] pervasive regulation of broadcasting technology, this provision is most reasonably understood as permitting localities to exercise zoning power based on matters not directly regulated by the [Commission]." However, this holding was in the context of the Commission's rules regarding RF interference, another exercise of the Commission's authority over access to, and usage of, the wireless channel interface.

The court, finding that the town was regulating the field of "technical and operational aspects" instead of the field of "zoning and land use matters," also did not even give Clarkstown's law a presumption against preemption, a part of field preemption doctrine that assumes "that the historic police powers of the States [are] not to be superseded by the Federal Act unless that was the clear and manifest pur-

135. See discussion supra Section III(B).
136. See discussion supra Section III(B).
137. See Clarkstown, 612 F.3d at 106.
139. See discussion supra Section III(B).
141. Clarkstown, 612 F.3d at 106 (citing Freeman v. Burlington Broadcasters, Inc., 204 F.3d 311, 323 (2d Cir. 2000)).
142. See Freeman v. Burlington Broadcasters, Inc., 204 F.3d 311, 323 (2d Cir. 2000).
pose of Congress." Furthermore, in the footnote following the \textit{Freeman} reading, the court further stated that "to the extent that section 332(c)(7)(A) explicitly addresses preemption, this is a case where implied preemption must still be considered because the substance and scope of Congress's preemption of local law remain in question." However, if the substance and scope of Congress' preemption in this case was in question, the court should have at least applied the presumption to consider (1) whether preference of validated equipment that may access the wireless channels falls within regulation of "technical and operational aspects of wireless telecommunications services" and (2) whether such regulation may be within the scope of "zoning and land use matters" intended by Congress. The court, erroneously applying the holdings of \textit{Bastien} and \textit{Freeman}, as well as the conference committee report on section 332(c)(7), and the common field preemption analysis steps, side-stepped the requirements set out under section 332(c)(7) to effectively enjoin Clarkstown's employment of its police power granted to it under that section. The court should have at least attempted to establish clearer policy and legal rational behind the preservation provision.

C. A Clearer Interpretation of Section 332(c)(7)

While it is clear that the Act provides localities the authority to place some restrictions on facilities, such as location and height, it is not clear whether localities may also prefer the antenna technology type, even where the locality prefers newer technology, in its land use planning scheme for legitimate land use purposes. This is interesting though because such a preference for newer antenna technologies


144. \textit{Clarkstown}, 612 F.3d at 107 (citing \textit{Altria Group}, 555 U.S. at 76).

145. See \textit{Clarkstown}, 612 F.3d at 105-06 (citing \textit{Bastien} v. AT&T Wireless Servs., Inc., 205 F.3d 983, 986, 989 (7th Cir. 2000), and \textit{Freeman}, 204 F.3d at 323).

146. Furthermore, the court should have looked at the section 332(c)(7) analysis, which requires that localities take a final action or fail to act that adversely affects persons and is inconsistent with its requirements, such as prohibit or have the effect of prohibiting the siting of PWS facilities. \textit{See} 47 U.S.C. § 332(c)(7)(v) (2011). The court skirted this preliminary jurisdictional requirement, instead skipping to the field preemption analysis. \textit{See} \textit{Clarkstown}, 612 F.3d at 105.


148. H.R. Rep. No. 104-458, at 208-09 (1996) ("The conferees also intend that the phrase "unreasonably discriminate among providers of functionally equivalent services" will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services."). I do not propose that preference of newer technologies over collocation is appropriate,
does not conflict with the Act’s policies of promoting “the deployment of new telecommunications technologies” or the preservation of locality use regulation. Nor does it conflict with the Commission’s authority to ensure access to, and usage of, the wireless channel interface, and would actually be within the preservation provisions confines to “[reasonably] discriminate among providers of functionally equivalent services” seeking access to wireless channels.

The Congress of 1996 knew that newer antenna technologies would be available in the future, and therefore allowed local zoning to discriminate against facilities. In fact, contrary to the Second Circuit’s contention that the Act prevents discrimination “among providers of functionally equivalent services,” the Act only prevents “unreasonable discrimination.” Furthermore, the Congress of 1996 intended that the phrase “unreasonably discriminate among providers of functionally equivalent services” will provide localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services. Again, the preservation provision practically allows leeway to localities to work within the confines of the Act to preserve their local values.

There is no reason then why localities should be prevented from preferring the deployment of new technologies over the construction of new towers when such preference falls within the Commission’s technical and operational criteria and when localities may make siting decisions based on aesthetics. Furthermore, the Act and the Commission’s rules do not suggest any preemption of localities’ antenna

and actually believe that collocation first is a better option than building any new site at all.

150. See supra note 61.
151. 47 U.S.C. § 332(c)(7)(B)(i)(I) (2011). Yet, even if this did conflict with some other provision of the Act, section 332(c)(7) explicitly states that “nothing in this [Act] shall limit or affect the authority of a [locality] over decisions regarding the placement, construction, and modification of personal wireless service [PWS] facilities.” Id. at § 332(c)(7)(A).
154. H.R. Rep. No. 104-458, supra note 148, at 208-09. Compare S. Rep. 110-204, 2008 U.S.C.C.A.N. 1707, 1711 (“[A] national broadband policy should support and assist State efforts to work cooperatively at a local level in identifying areas where deployment or adoption of broadband may be lagging and in tailoring solutions to meet the needs of local communities.”), with Clarkstown, 612 F.3d at 106 (enjoining a tailored solution to meet the needs of a local community).
155. See analysis supra Section IV ¶ 2.
156. See, e.g., H.R. Rep. No. 104-458, supra note 148, at 208-09; discussion supra Section III.
technology type preferences. The Clarkstown holding is therefore unfortunate because it takes away a valuable tool for localities to use in preserving their land aesthetics in the wake of the proliferation of wireless facilities as Clarkstown attempted to do, and which the framework otherwise allows.

D. The Clarkston Holding is Unfortunate.

The Court of Appeals for the Second Circuit should have found that localities can regulate wireless facility antenna technology based on the plain reading of the regulatory framework. It should have required a deeper analysis of the Commission's rules when holding that the entire field of "technical and operational aspects of wireless telecommunications services" – and that preference for technology type for land use purposes fell within this field – was occupied by the federal government. The doctrine of field preemption may be appropriate when properly applied, yet when it is not, it utterly flies in the face of any full analysis of the regulatory framework. This is because it is clear from analyzing the telecommunications framework that the Commission does not regulate antenna technology type or any aspect of locality regulation with regard to facility siting issues, unless of course the facility is sited in a way that requires the Commission to ensure access to, and usage of, the wireless channel interface, and would actually be outside the preservation provision's confines to "[reasonably] discriminate among providers of functionally equivalent services" seeking access to wireless channels.

From a legal standpoint, a plain reading of section 332(c)(7) does not present a case whereby localities are preempted from regulating the "technical and operational aspects wireless telecommunications services." While the Commission does have some jurisdiction to regulate the kind of equipment used in certain types of wireless communications, the Commission may only regulate them "with respect to [their] external effects and the purity and sharpness of the emissions from each station and from the apparatus therein." This

157. See discussion supra Section III.
158. See discussion supra Section III.
159. New York SMSA Ltd. P'ship v. Town of Clarkstown, 612 F.3d 97, 106 (2d Cir. 2010).
160. See analysis infra.
161. See 47 C.F.R. §§ 0.1-101.10527 (2011). In fact, the Commission mainly preempts what carriers do through regulation, not what localities do, which requires the carriers to deal with issues regarding the wireless channel interface, such as interference. See discussion supra Section III(B).
162. See discussion supra Section III(B).
163. See analysis infra.
164. See 47 U.S.C. § 303(e) (2009). Even when the Commission may regulate the apparatus though, it need not do so unless it finds that it is required because of "public convenience, interest, or necessity." Id.
165. Id.
again evidences only a rule over wireless transmissions and the effects on the access to, and usage of, the wireless channels, but does not indicate that the federal government occupies the field of technology type deployed, and especially not the visual interface of antennas.

From a policy standpoint, Clarkstown's preference could increase the monetary costs to build-out, thus making it difficult for carriers to access and use the wireless channels, although the Commission has found in some instances that the costs may be the same. Clarkstown's law preferring new technologies would however also further the policy encouraging "the rapid deployment of new telecommunications technologies." Furthermore, the preference is reasonable and therefore agrees with the Congressional intentions underlying section 332(c)(7) allowing localities the "flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services." Also, the flexibility accommodates future wireless developments, specifically the developments of new technology, land use issues, and the ability of new technology to address these issues "in a manner consistent with the public interest, convenience, and necessity." Where localities are competent to prefer new technologies through laws that are in agreement with the overall intentions of Congress and the specific provisions of section 332(c)(7) of the Act, localities should be allowed to do so.

The court should have read into these policies and found that localities are not impliedly preempted from preferring antenna technology types over others that address land use issues by the "least intrusive

166. See supra note 161.

167. See discussion supra Section III(B).

168. Compare Acquisition of T-Mobile USA, Inc. by AT&T Inc., Description of Transaction, Public Interest Showing and Related Demonstrations 18-54 (Apr. 21, 2011) (describing the need to increase capacity to meet the nation's broadband goals and how DAS is not as cost efficient to deploy in some settings), available at http://apps.FCC.gov/ecfs/document/view?id=7021240421, with FEDERAL COMMUNICATIONS COMMISSION STAFF ANALYSIS AND FINDINGS 77 ¶ 177 ("However, AT&T documents show that DAS is often the same cost or even less expensive to deploy than a macro tower over small capacity constrained areas.").

169. Cf. New York SMSA Ltd. P'ship v. Town of Clarkstown, 612 F.3d 97, 104 (2d Cir. 2010) (stating three times that congressional purpose is a central part of preemption analysis but not even getting into the purposes of the Act).


Because of the court's holding, localities may not be able to influence network build-out in ways that could actually be constructive, like promoting new technology that is compatible with future developments, thus keeping with the times and preventing wasteful construction of facilities that could become obsolete, that are aesthetically not pleasing, and that may harm human and environmental health. Either way, these are issues better left to the Commission, localities, and private parties to consider and work out, not for the courts.

E. The Court Should Have Confined Itself to a Section 332(c)(7) Analysis Because the FCC, Localities, and Carriers Are Cooperating to Overcome Obstacles to Infrastructure Build-out.

This court's holding was unfortunately made without guidance from the Commission, which is the expert in the field. The court should have instead sought clarification from the Commission on what is meant by “decisions regarding the placement, construction, and modification of [wireless] facilities,” and whether section 332(c)(7) allows local zoning authorities to zone with the preference for antenna technology type. By doing so, the court would have found that the Commission had already been dealing with questions regarding section 332(c)(7). The court would have also found that

172. E.g., Sprint Spectrum L.P. v. Willoth, 176 F.3d 630, 643 (2d Cir. 1999); Omnipoint Commc'ns Enterprises, L.P. v. Zoning Hearing Bd. of Easttown Twp., 331 F.3d 386, 390 (3d Cir. 2003); T-Mobile USA, Inc. v. City of Anacortes, 572 F.3d 987, 995 (9th Cir. 2009); T-Mobile Cent., LLC v. Unified Gov't of Wyandotte County, Kansas City, Kan., 546 F.3d 1299, 1309 (10th Cir. 2008) T-Mobile Cent. LLC v. Charter Twp. of W. Bloomfield, 09-13496, 2011 WL 1299357 (E.D. Mich. Mar. 31, 2011). However, some circuits have split on this, either not applying the least intrusive means test or rejecting it entirely. See, e.g., Omnipoint Holdings, Inc. v. City of Cranston, 586 F.3d 38, 50, note 8 (1st Cir. 2009) (discussing the “feasible plan” test which requires the carrier to show that there is no other feasible option for it to site its facilities (citing Town of Amherst, N.H. v. Omnipoint Commc’ns Enterprises, Inc., 173 F.3d 9, 14 (1st Cir. 1999)); see e.g., 360 degrees Commc’ns Co. of Charlottesville v. Bd. of Sup’rs of Albemarle Cnty., 211 F.3d 79, 87 (4th Cir. 2000) (rejecting the least intrusive means test and instead applying a case-by-case analysis); see e.g., VoiceStream Minneapolis, Inc. v. St. Croix County, 342 F.3d 818, 835 note 8 (7th Cir. 2003) (following the Fourth Circuit standard).


in 2009, the same year of the district court’s decision in Clarkstown, the FCC issued a declaratory ruling interpreting what a “reasonable time” was under section 332(c) (7). However, the court would have lacked an interpretation relevant to Clarkstown because the comments to the docket did not give evidence of any other specific controversy. Also, beyond its interpretation of a “reasonable time,” the Commission has barely interpreted section 332(c) (7).

The court would now find that the Commission has since initiated a second docket in the Spring of 2011, entitled the “Rights of Way Notice of Inquiry [NOI]” regarding section 332(c) (7) to expand the reach and reduce “the cost of broadband deployment by improving policies regarding public rights of way and wireless facilities siting.” Starting with a conference of leaders from “federal, localities, broadband providers, telecommunications carriers, tower companies, equipment suppliers, and utility companies,” the Commission began to identify opportunities to reduce regulatory and other barriers to broadband build-out.

The court would find that the Commission’s NOI asks for comments on “rights of way and wireless facilities siting issues,” specifically the “extent to which ordinances or statutes have been updated to reflect current communications technologies or innovative deployment practices” like the ordinance in Clarkstown. The court would find that the Commission is seeking to survey current practices at the locality level, solutions to issues impeding build-out of the network, and whether the Commission has the authority to promulgate any rules under section 332(c) (7), further evidencing that the court’s holding of field preemption may be scrutinized. Additionally, the court would find that the Commission’s examples of what rules it believes it may be able to promulgate with respect to section 332(c) (7) show that the Commission’s authority may only reach to the extent to

176. Clarkstown, 603 F. Supp. 2d at 715.
177. Petition for Declaratory Ruling to Clarify Provisions of Section 332(c) (7) (B) to Ensure Timely Siting Review and to Preempt Under Section 253 State and Local Ordinances that Classify All Wireless Siting Proposals as Requiring a Variance, 74 Fed. Reg. 67,871, WT Docket 08-165 (2009).
178. See id.
179. See, e.g., Rights-of-Way Notice of Inquiry, supra note 1, at 28,403 ¶ 51; see e.g., Petition for Declaratory Ruling to Clarify Provisions of Section 332(c) (7) (B), supra note 177.
181. The Commission has therefore called for comments in this process to help it interpret section 332(c) (7) and exercise its authority to promulgate rules with respect to local land use and zoning authority. See Rights-of-Way Notice of Inquiry, supra note 1, at 28403 ¶ 53.
define what constitutes a “prohibition on the provision” of wireless services, but not whether it preempts any locality in other matters.185

The court would find that there have been an astounding 221 comments and 71 responses to comments, as well as a congressional correspondence, letters, and ex parte meetings, from, among others, the federal government, localities, and carriers.186 Three of these filing address Clarkstown.187 The first filing is from a group of cities from California that adamantly reject any notion that the Commission may restrict its land use authority.188 However, the Wireless Industry (PCIA) quotes to this case to assert that courts have interpreted section 332(c)(7) to mean that the Commission preempts all locality land use regulations that involve some regulation of technical and operational aspects of wireless telecommunications services.189 All in all, the considerable level of discussion regarding section 332(c)(7) at the level of the Commission, and the Commission’s difficulty with interpreting what exactly the federal government’s and localities’ roles are regarding the section, show that the interpretation of the section by the Second Circuit may yet have been for naught. The court would have been wise to first petition the Commission for clarification of section 332(c)(7), as the court reached its holding in a field of law that still requires much deeper analysis regarding the legal interpretation of a significant provision that the Commission is much more qualified to deal with.

V. CONCLUSION

Full deployment of next generation networks will be a milestone for the country and the world. With the promise of ultra-high

186. See FCC, SEARCH FOR FILINGS, http://apps.FCC.gov/ecfs/comment_search/input?z=p0tjz (enter “11-59” into the “proceeding number” box; click “search for comments”) (last visited May 5, 2012). Others include broadband providers, telecommunications tower companies, equipment suppliers, and utility companies. Id.
187. See FCC, ECFS FULL TEXT SEARCH, http://apps.FCC.gov/ecfs/fulltext/form.jsp (enter “smsa” into the “key word” box; enter “11-59” into the “proceeding number” box; click “search for comments”) (last visited May 5, 2012).
throughput and breathtaking payload capacity for hosting multiple new applications on mobile devices, the citizens and the localities that access these services should be hard-pressed to prevent deployment of wireless infrastructure, such as antenna facilities. With the arrival of antenna facilities-technologies that are interchangeable substitutes to tower based technologies, such as distributed antenna systems (DAS) and other microcell-based facilities – and even their future replacements – that meet the Federal Communications Commission’s technical and operational criteria,\textsuperscript{190} localities should have options to choose from for purposes of fulfilling their land use objectives under section 332(c)(7) of the Communications Act. Localities must be able to take advantage of these technologies because the regulatory framework allows them flexibility to pursue their objectives in a way that does not interfere with the Commission’s authority to regulate access to, and usage of, the wireless channel interface.\textsuperscript{191} However, the Commission, not the courts, should provide clarity concerning the extent to which communities may regulate siting of wireless channel access facilities-technologies to fulfill the purposes of the Act because the Commission is significantly involved in matters of interpreting section 332(c)(7), whereas the courts seem limited in their technical and legal experience to interpret what the section stands for.

\textsuperscript{190} See discussion supra Section III(B).

\textsuperscript{191} Cf., e.g., 47 U.S.C. § 332(c) (2009); Cf. e.g., 47 U.S.C. § 1302 (2009) (preserving local authority to regulate wireless facilities siting and promoting public access to advanced telecommunications technology); H.R. Rep. No. 104-458, at 207-10 (1996) (advocating local authority to regulate wireless facilities siting on a discriminatory basis so that localities may preserve certain visual or aesthetic qualities); 47 C.F.R. §§ 0.1-101.10527 (2011) (restricting local authority only to the extent that localities do not prevent access to the wireless channels of communications).