17.20.010: Purpose

A. To assure a comprehensive review of impacts of such facilities, and to protect the health, safety and welfare of the county's citizens while attempting to ensure access to reliable wireless communications services throughout the county.

B. To ensure the placement, construction and modification of telecommunication facilities is consistent with the county's land use policies.

C. To minimize the impact of wireless telecommunication facilities, to encourage the co-location of wireless telecommunication facilities on existing structures, and to establish a fair and efficient process for review and approval of applications.

17.20.020: Definitions

All uses and structures specified in this chapter are defined within §17.07, "Definitions", of this title. Any other uses or structures not defined in this title shall be interpreted as defined by State and/or Federal Code or Rule.

17.20.030: Approval Authority

The authority responsible for the review and/or approval and the permits required for telecommunication facilities is as follows:

A. Major Modification - Conditional Use Permit
Requests for major modifications to legal, existing, conforming and nonconforming or new telecommunication facilities must obtain a conditional use permit in accordance with the standards set forth in this chapter and §17.06 of this title. Such modifications shall be considered as follows:

1. Improvements to existing Telecommunication Facilities or Support Structures that result in some material change to the Facility or Support Structure. Major Modifications include, but are not limited to:

a. An increase in Support Structure height.

b. Replacement of a Support Structure, except as provided in §17.20.030 [B][1]unless it is of like height and placement.

c. A new Telecommunication Facility with Support Structure(s) and any accessory equipment and/or structures.

B. Minor Modification - Administrative Zoning Clearance
Requests for minor modifications to legal, existing, conforming telecommunication facilities shall require the review and approval of the Director of Development Services in accordance with the standards set forth in this chapter. Such modifications shall be considered as follows:

1. Improvements to existing Telecommunication Facilities or Support Structures that result in some material change to the facility or Support Structure but of a level, quality or

intensity that is less than a major modification. Minor Modifications include, but are not limited to:

a. The co-location of antennas and/or dishes.

b. The placement of equipment and/or structures that are accessory to an existing Telecommunication Facility, such as utility or transmission equipment, power supplies, generators, batteries, cables, equipment buildings, cabinets and storage sheds, shelters, foundations, concrete slabs on grade, guy anchors, generators, and transmission cable supports.

c. The replacement of an existing Support Structure with a new or modified Support Structure at a height that is equal to or less than the existing structure and in a similar location.

C. Exempt

The following are exempt from the requirements of this chapter:

1. Typical Maintenance of existing Telecommunication Facilities and Support Structures.

2. Antennas used by residential households solely for broadcast radio and television reception. Antennas shall not exceed the maximum structure height as identified in 17.10.040 of this title.

3. Satellite antennas used solely for residential, household, or agricultural purposes. Antennas shall not exceed the maximum structure height as identified in 17.10.040 of this title.

4. COWs (Carrier or Cell on Wheels) placed for a period of not more than one hundred twenty (120) days at any location within the county after a declaration of an emergency or a disaster by the Governor or by the responsible official of the county.

17.20.040: Application and Review Procedure

A. Conditional Use Permit

1. All requests shall be reviewed and considered consistent with the procedures for the review of a conditional use as provided in Chapter 17.06.070 of this title, the standards of this chapter, and must include the following:

a. A completed zoning clearance application signed by the applicant.

b. A copy of the lease or a letter of authorization from property owner evidencing the applicant's authority to pursue a conditional use permit.

c. A development plan prepared and certified by an appropriate professional that consists of:

i. Property boundaries, setbacks, topography, elevation views, and dimensions of improvements drawn to scale.

ii. A written description and scaled drawings of the proposed Support Structure, including structure height, ground and structure design, and proposed materials.

iii. The number and type of proposed antennas and their height above ground level, including the proposed placement of antennas on the Support Structure.

iv. A line-of-sight diagram or photo simulation, showing the proposed Support Structure set against the skyline and viewed from at least three (3) directions within the surrounding areas.

d. A copy of the supporting federal certifications as follows:

i. Federal Communications Commission (FCC) license for the facility, or a signed, notarized statement from the owner and/or operator of the facility attesting that the facility complies with all current FCC regulations.

ii. Certification by the applicant that the proposed facility complies with all FCC standards for radio emissions.

iii. Certification by an appropriate professional that the proposed facility will comply with all of the applicable standards of the American National Standards Institute (ANSI), the Electronics Industries Association Standard for Antenna Towers and Antenna Support Structures, and any other applicable technical and structural codes.

e. A written description of how the proposed facility fits into the applicant's telecommunication network. As part of this description, the applicant shall describe anticipated maintenance needs, including frequency of service, personnel needs, equipment needs, and traffic, noise, or safety impacts of such maintenance. In all cases, the equipment at a Telecommunication Facility shall be automated to the greatest extent possible to reduce traffic, congestion, and noise associated with maintenance and upkeep of the facility.

f. As applicable, a statement justifying why co-location with an existing facility is not feasible. Such a statement shall include:

i. Such technical information and other justifications as are necessary to document the reasons why co-location is not a viable option.

ii. A list of all existing structures considered as alternatives to the proposed location. The applicant shall provide a written explanation why the alternatives considered were either unacceptable or infeasible due to technical, physical, or financial reasons. If an existing Support Structure was listed among the alternatives, applicant must specifically address why the modification of such Support Structure is not a viable option.

g. As applicable, a statement that the proposed Support Structure will be made available for co-location to other service providers at commercially reasonable rates.

h. Application fee.

B. Administrative Zoning Clearance

1. All requests must include the following:

a. A completed zoning clearance application signed by the applicant.

b. A copy of the lease or a letter of authorization from property owner evidencing the applicant's authority to pursue a zoning clearance.

c. A development plan prepared and certified by an appropriate professional that consists of:

i. Graphic and written descriptions of proposed improvements related to the requirements listed in this chapter and including property boundaries, setbacks, topography, elevation views, dimensions of improvements, the number and type of proposed antennas and their height above ground level, including the proposed placement of antennas on the Support Structure.

d. Application fee.

C. Exempt: No application or review required.

17.20.050: General Standards and Design Requirements

Unless otherwise specified herein, all telecommunication facilities and accessory structures are subject to the following standards and requirements:

A. Design

1. Support Structures shall be subject to the following:

a. Must be designed to accommodate multiple telecommunication providers.

b. The compound area surrounding a Support Structure must be of sufficient size to accommodate accessory equipment for each telecommunication provider.

c. Unless otherwise required by the Federal Communications Commission, the Federal Aviation Administration, or the county land use authority, Support Structures shall have a galvanized silver or gray finish.

2. Stealth Communication Facilities shall be designed to accommodate the co-location of other antennas whenever economically and technically feasible or aesthetically appropriate, as determined by the land use authority.

3. Upon the request of the applicant, the Planning Commission may waive the requirement that new Support Structures accommodate the co-location of other service providers if the applicant can identify, and the Planning Commission agrees, that co-location at the site is not essential to the public interest, or that the construction of a shorter Support Structure with fewer antennas will promote community compatibility.

B. Setbacks

1. Property Lines. Unless otherwise stated herein, Support Structures shall be setback from all property lines a distance equal to their height measured from the base of the structure to its highest point. Other accessory equipment and/or structures shall be governed by the setbacks required by the underlying base zoning district.

2. Residential Dwellings. Unless otherwise stated herein, Support Structures shall be setback from all off-site residential dwellings a distance equal to the height of the structure plus ten (10) feet.

3. The land use authority shall have the authority to reduce or waive any required setback upon the request of the applicant if the Telecommunication Facility accessory equipment and/or structures will be less visible as a result of the diminished setback. The land use authority must also find that the reduction or waiver of the setback is consistent with the purposes and intent of this ordinance. The structure must still meet the underlying setback requirements of the base zoning district.

C. Height

1. Support Structures shall not exceed a height equal to 45 feet from the base of the structure to the top of the highest point. Any proposed Support Structure shall be designed to be the minimum height needed to meet the service objectives of the applicant.

2. In all zones, the Planning Commission shall have the authority to reduce or waive the height restrictions listed in this section upon the request of the applicant, and a satisfactory showing of need for a greater height. With the waiver request, the applicant shall submit such technical information or other justifications as are necessary to document the need for the additional height to the satisfaction of the Planning Commission including, but not limited to:

a. A radio frequency analysis indicating the coverage of existing communications sites, coverage prediction, and design radius, together with a certification from the applicants radio frequency (RF) engineer that the proposed design is intended to

improve coverage or capacity potential or reduce interference, and that the proposed facility cannot be achieved by any other alternative such as a stealth facility, attached facility, replacement facility, or co-location.

D. Aesthetics

1. Lighting and Marking. Telecommunication facilities and Support Structures shall not be lighted or marked except as required by the Federal Communications Commission or the Federal Aviation Administration (FAA).

2. Signage. Signs located at a Telecommunication Facility shall be limited to ownership and contact information, FCC antenna registration number (if required) and any other information as required by government regulation. Commercial advertising is strictly prohibited.

3. Landscaping. In all zones, the land use authority shall have the authority to impose reasonable landscaping requirements surrounding accessory equipment and/or structures. Required landscaping shall be consistent with surrounding vegetation and shall be maintained by the facility owner. The land use authority may choose to not require landscaping for sites that are not visible from the public right-of-way or adjacent property or in instances where in the judgment of the land use authority, landscaping is not appropriate or necessary.

E. Accessory structures, including any buildings, cabinets or shelters, shall be used only to house equipment and other supplies in support of the operation of the Telecommunication Facility or Support Structure. Any equipment not used in direct support of such operation shall not be stored on the site.

1. If accessory equipment is at ground level in the RU2 or RU5 Zone, the land use authority may require that the building or shelter be faced with brick or other suitable material on all sides and that the compound area is surrounded by landscaping. The accessory equipment must conform to the setback standards of the applicable base zoning district. In the situation of stacked equipment buildings, additional screening/landscaping measures may be required.

F. Additional Provisions

1. Abandonment, and Removal

a. Abandonment. Any Telecommunication Facility or Support Structure that is not operated for a period of twelve (12) consecutive months shall be considered abandoned.

b. Removal. The owner of the Telecommunication Facility or Support Structure shall remove the Facility within six (6) months of its abandonment.

2. Multiple Uses on a Single Parcel or Lot

Telecommunication Facilities may be located on a parcel containing another principal use on the same site.

Definitions to be added to 17.07.040 with Telecommunications Ord.:

6240 TELECOMMUNICATION FACILITY: Any manned or unmanned location for the transmission and/or reception of radio frequency signals, or other wireless communications, and usually consisting of an antenna or group of antennas, transmission cables, and equipment cabinets, and may include an antenna support structure. Accessory uses include, but are not limited to, utility or transmission equipment, power supplies, generators, batteries, cables, equipment buildings, cabinets and storage sheds, shelters, foundations, concrete slabs on grade, guy anchors, generators, and transmission cable supports. ~~A facility used for the transmission or reception of electromagnetic or electro-optic information, which is placed on a structure. This use is not required to be located on a building lot or to comply with the minimum lot size requirement for the district in which it is located.~~

ANTENNA: Any apparatus designed for the transmitting and/or receiving of electromagnetic waves including, but not limited to, telephonic, radio or television communications. Types of antennas include, but are not limited to: omni-directional (whip) antennas, sectorized (panel) antennas, multi or single bay (FM & TV), yagi, or parabolic (dish) antennas.

CARRIER ON WHEELS OR CELL ON WHEELS (COW): A portable self-contained cell site that can be moved to a location and set up to provide personal wireless services on a temporary or emergency basis. A COW is normally vehicle-mounted and contains a telescoping boom as the Antenna support structure.

CO-LOCATION: The practice of siting multiple wireless carriers, service providers, and/or radio common carrier licensees on the same antenna support structure or attached wireless communication facility using different and separate antenna, feed lines, and radio frequency generating equipment.

STEALTH COMMUNICATIONS FACILITY: A communications facility, accessory structure, or equipment compound that is not readily identifiable as such, and is designed to be aesthetically compatible with existing and proposed building(s) and uses on a site. There are two types of stealth facilities:

A. Attached – Examples include, but are not limited to: Painted antenna and feed lines to match the color of a building or structure, faux windows, dormers or other architectural features that blend with an existing or proposed building or structure.
B. Freestanding – Examples usually have a secondary, obvious function which may be, but is not limited to the following: Church steeple, windmill, bell tower, clock tower, cupola, light standard, flagpole with or without a flag, or tree.

SUPPORT STRUCTURE: A vertical projection composed of metal or other material with or without a foundation that is designed for the express purpose of accommodating antennas at a desired height. Support structures do not include any device used to attach antennas to an existing building, unless the device extends above the highest point of the building by more than ten (10) feet and not to exceed maximum structure height as identified in 17.10.040 of this title.

Types of support structures include, but are not limited to: Guyed, lattice, and monopole structures, utility poles, and other freestanding, self-supporting structures.

TELECOMMUNICATION FACILITY, TYPICAL MAINTENANCE: – Ensuring that Telecommunication Facilities and Support Structures are kept in good operating condition. Typical Maintenance includes inspections, testing and modifications that maintain functional capacity and aesthetic and structural integrity. For example, the strengthening of a Support Structure's foundation or of the Support Structure itself. Typical Maintenance includes replacing antennas and accessory equipment on a like-for-like basis within an existing Telecommunication Facility and relocating the antennas of approved Telecommunication Facilities to different height levels on an existing monopole, lattice, guyed or similar structure upon which they are currently located. Typical Maintenance does not include Minor and Major Modifications.

i. Wherever a front yard is required for a lot facing on a street for which an official map has been recorded in the office of the county recorder, the depth of such front yard shall be measured from the mapped road right of way line provided by the official map.

ii. Where an official map has not been recorded, measurements shall be made from the existing right of way line or from the proposed right of way line, as required by this title or indicated in the transportation element of the Cache Countywide Comprehensive Plan or indicated in the CMPO long range transportation plan for the Logan urbanized area.

c. Exceptions; the area of required setbacks shall be open to the sky and unobstructed, except for the following:

i. The ordinary projections of roof eaves, bay windows, window wells, basement access ways, skylights, sills, belt courses, cornices, chimneys, flues, and other ornamental features which project into a setback not more than four feet (4'); provided, however, that there shall remain a minimum of eight feet (8') to side property lines;

ii. Uncovered steps leading to the main entrance in the front yard which are no more than four feet (4') in height and do not cause any danger or hazard to traffic by obstructing the clear view of the street or intersection.

~~6. Exceptions to Height Limitations:~~

~~a. Roof structures for the housing of elevators, stairways, tanks, ventilating fans or similar equipment required to operate and maintain the building, and/or parapet walls, skylights, towers, steeples, flagpoles, chimneys, smoke stacks, water tanks, wireless or television masts, silos, solar collectors, windmills or similar structures, and public uses and utilities may be erected above the height limits herein prescribed, but no space above the height limits shall be allowed for the purpose of providing additional floor space, and no height exception is permitted above the maximum allowed under applicable airport overlay zones. Height shall be measured from the average finished grade of the structure.~~

B. Supplemental development standards specific to the Mineral Extraction and Excavation (ME) zoning district are located within Chapter 17.13 of this title.

C. Supplemental development standards specific to the Resort Recreation (RR) zoning district are located within Chapter 17.14 of this title.

D. Supplemental development standards regarding sensitive areas for all zoning districts are located within Chapter 17.18 of this title.

17.10.060: Improvement Agreements:

Improvement agreements for improvements and/or conditions imposed by ordinance or by a land use authority within Title 17 may be issued in compliance with §§16.04.110 and 16.04.120.

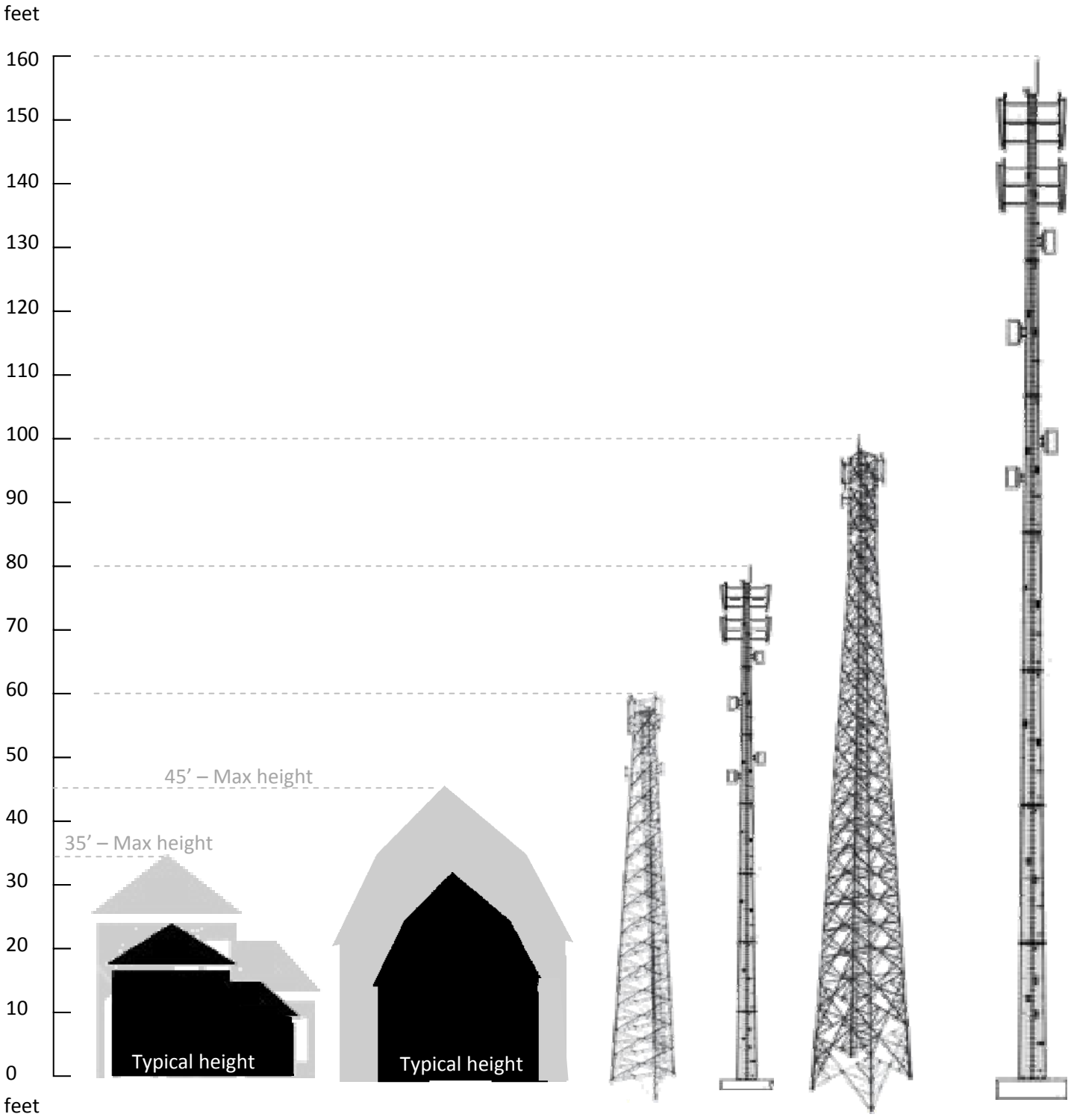
Telecommunication Structures in Unincorporated Cache County

Parcel Number	Structure Type	Structure Height (feet)	Zone
16-001-0009	Stealth	30	FR40
10-002-0013	Lattice	40	PI
13-004-0006	Lattice	40	A10
13-070-0001	Lattice	40	A10
08-020-0001	Monopole	50	PI
10-004-0006	Monopole	50	FR40
13-070-0001	Lattice	50	A10
13-070-0001	Lattice	60	A10
04-061-0002	Monopole	74	A10
08-020-0001	Monopole	80	PI
10-002-0013	Lattice	80	PI
13-004-0006	Lattice	80 (to be built)	PI
05-049-0015	Lattice	99	PI
02-117-0032	Monopole	100	PI
13-060-0006	Lattice	100	A10
11-052-0001	Monopole	100 (to be built)	PI
10-042-0015	Lattice	120	A10
12-033-0055	Monopole	120	A10
08-020-0010	Lattice	140	PI
01-061-0015	Monopole	150	PI
08-020-0001	Monopole	150	PI
13-004-0009	Lattice	150	A10
08-020-0010	Lattice	140 (160)	PI
11-052-0001	Lattice	350	A10
11-052-0010	Lattice	350	A10

25 Structures	Structures ≤ 80'	12
	Structures ≤ 100'	16
	Structures ≤ 125'	18
	Structures ≤ 150'	22

Excepting the towers with a height of 350 feet:

Avg. height:	**86.15 feet**
Median height:	**80 feet**

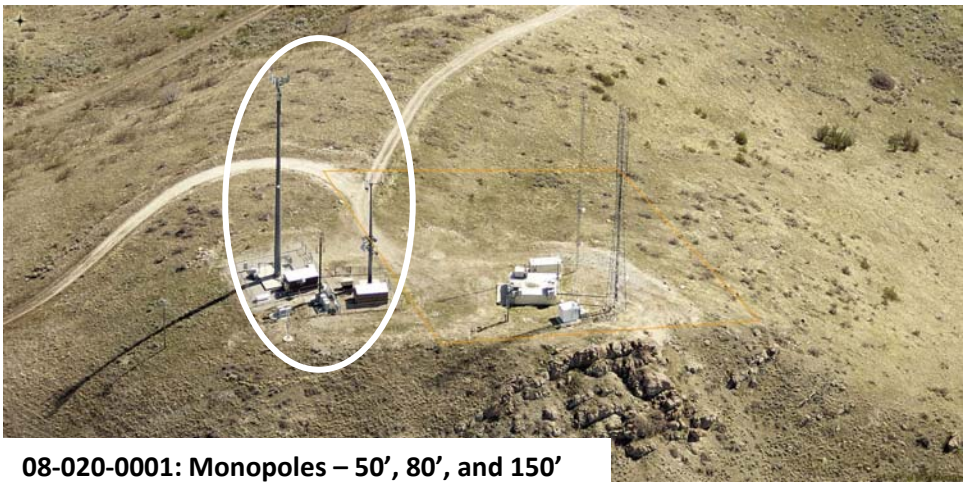

feet
160
150
140
130
120
110
100
90
80
70
60
50
45’ – Max height
40
35’ – Max height
30
20
10
0
feet
Typical height
Typical height

16-001-0009: Stealth - ~30’

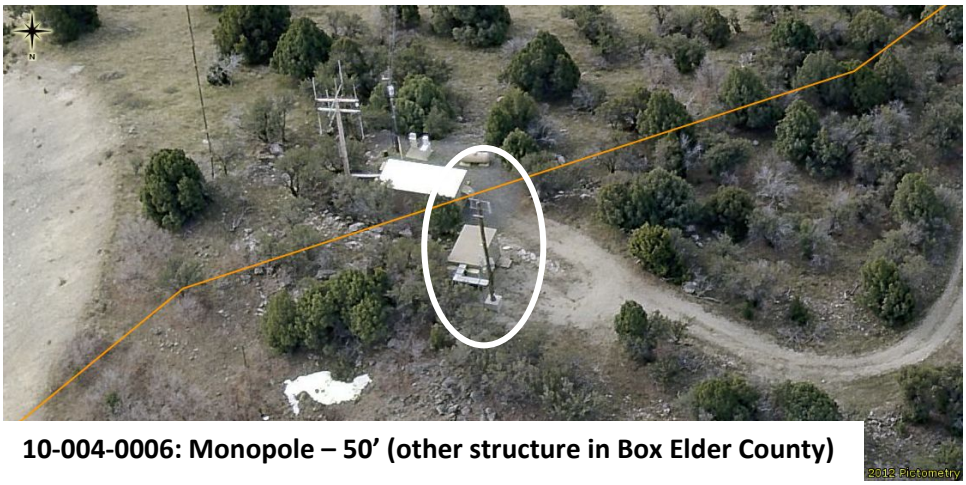
10-002-0013: Lattice - 40’and 80’; tallest tower is in Weber County

13-004-0006: Lattice – 40’ and 80’ (to be built)

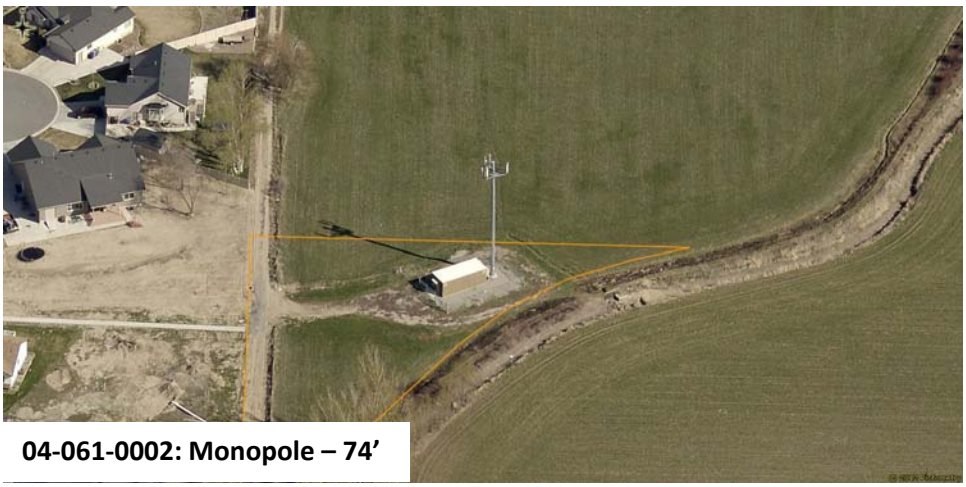
13-070-0001: Lattice – 40’, 50’, and 60’



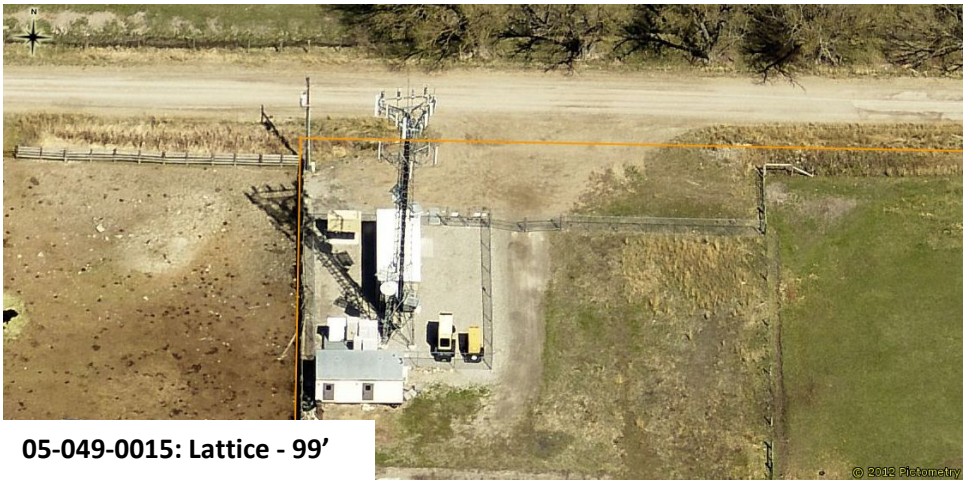
08-020-0001: Monopoles – 50’, 80’, and 150’



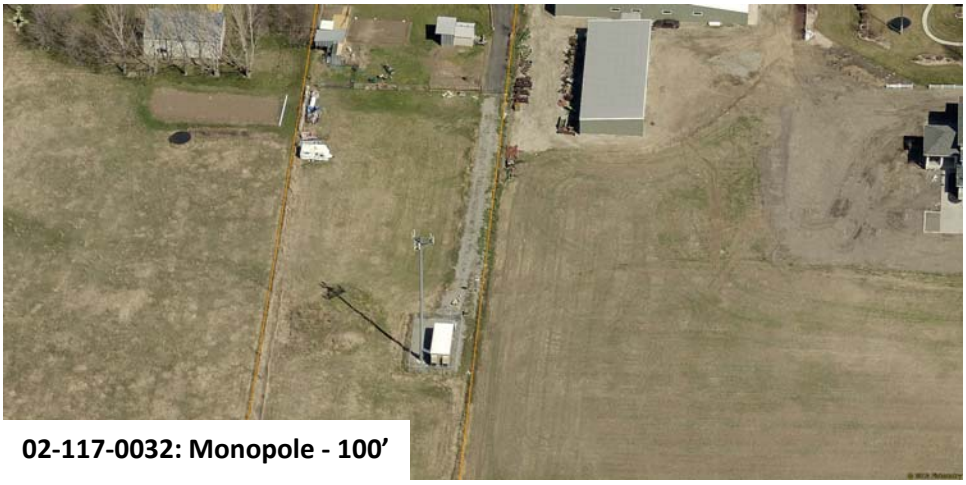
10-004-0006: Monopole – 50’ (other structure in Box Elder County)



04-061-0002: Monopole – 74’

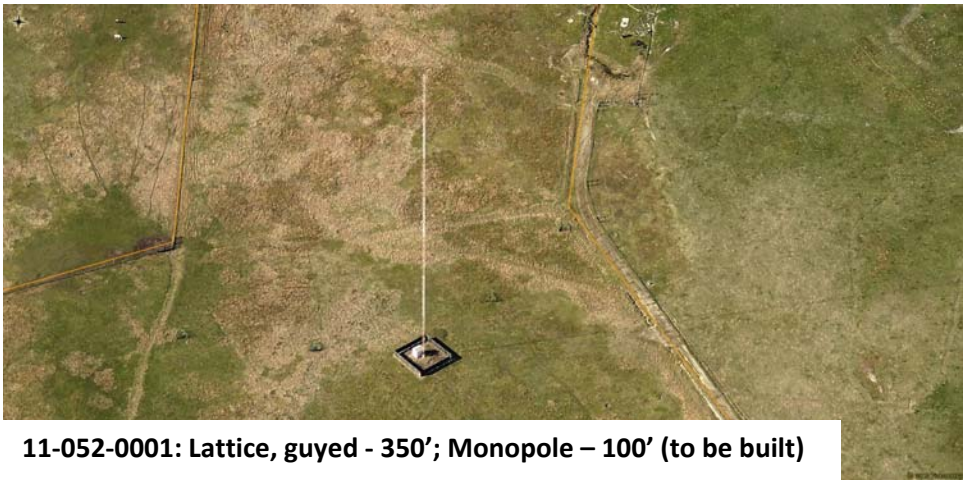


05-049-0015: Lattice - 99’



02-117-0032: Monopole - 100’

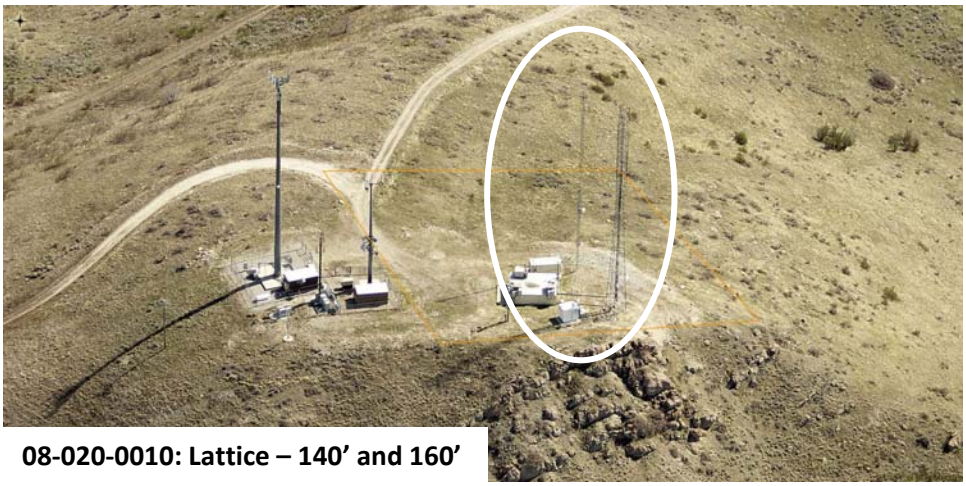
13-060-0006: Lattice - 100’



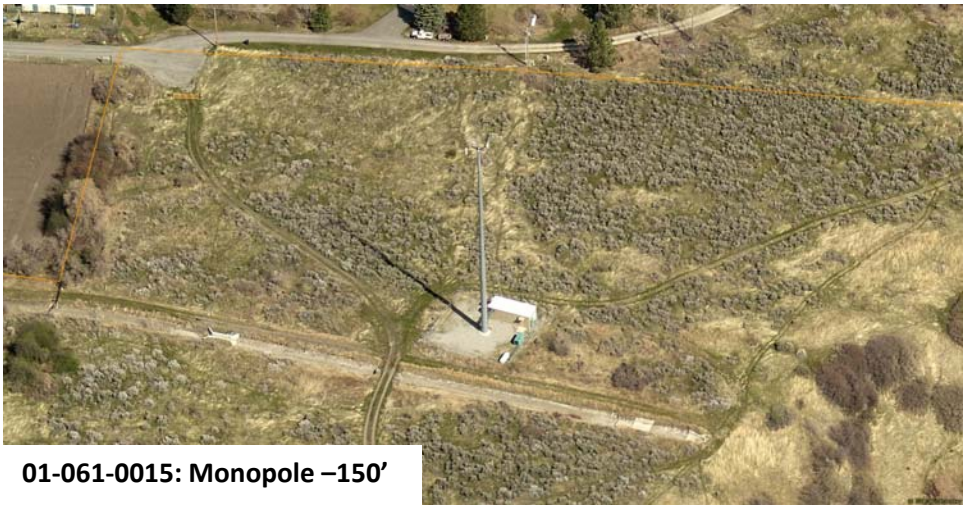
11-052-0001: Lattice, guyed - 350’; Monopole – 100’ (to be built)

10-042-0015: Lattice – 120’

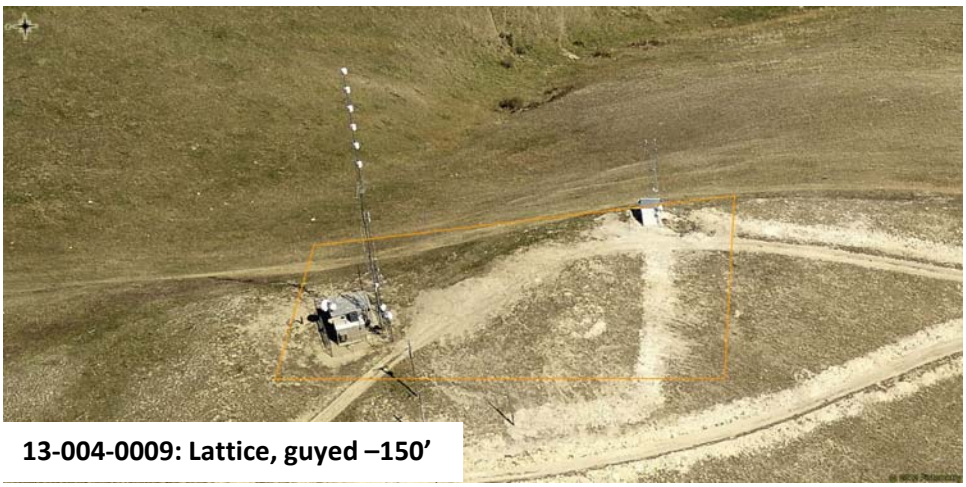
12-033-0055: Monopole – 120’



08-020-0010: Lattice – 140’ and 160’



01-061-0015: Monopole –150’



13-004-0009: Lattice, guyed –150’

11-052-0010: Lattice, guyed –350’

Title 17.20 Telecommunication Facilities: Initial Discussion with Planning Commission

Driving principles/consideration: Safety, function, visual impacts

Level of regulation: County Council/Rezone
Major issues re:
Rezone all existing towers to reflect PI overlay zone?

Level of regulation: Planning Commission/CUP
Major issues re:
Height of towers
Tower type - lattice/monopole
Max number of antennas/dishes per tower
Aesthetics - Colors and materials – BLM color swatches
Coverage mapping - What is needed/necessary?
Co-location - Height bonus? – Advantage to fewer tall towers or more short towers? (we currently have more tall towers)
Setbacks - Equal to the height of the tower?

Level of regulation: Director/Zoning Clearance
Minor issues re:
Buildings/generators/cabinets
Co-location - Adding antennas/dishes

April 23, 1996

FEDERAL COMMUNICATIONS COMMISSION

FACT SHEET

Information provided by the Wireless Telecommunications Bureau

NEW NATIONAL WIRELESS TOWER SITING POLICIES

The Telecommunications Act of 1996 contains important provisions concerning the placement of towers and other facilities for use in providing personal wireless services. Most state and local communities have worked closely with cellular and other wireless service providers on such placement plans, but this new law establishes new responsibilities for communities and for the Federal Communications Commission (FCC). The rapid expansion in the wireless industry makes these issues even more important.

This fact sheet is intended to explain the new provisions and to help state and local governments as they deal with the complex issues of facilities siting in their local communities. At the end of this fact sheet, you will find names of contacts for additional information about this area and other issues before the FCC.

Section 704 of the Telecommunications Act of 1996 (the "1996 Act") governs federal, state and local government oversight of siting of "personal wireless service" facilities. The 1996 Act establishes a comprehensive framework for the exercise of jurisdiction by state and local zoning authorities over the construction, modification and placement of facilities such as towers for cellular, personal communications service (PCS), and specialized mobile radio (SMR) transmitters:

- The new law preserves local zoning authority, but clarifies when the exercise of local zoning authority may be preempted by the FCC.

- Section 704 prohibits any action that would discriminate between different providers of personal wireless services, such as cellular, wide-area SMR and broadband PCS. It also prohibits any action that would ban altogether the construction, modification or placement of these kinds of facilities in a particular area.

- The law also specifies procedures which must be followed for acting on a request to place these kinds of facilities, and provides for review in the courts or the FCC of any decision by a zoning authority that is inconsistent with Section 704.

- Finally, Section 704 requires the federal government to take steps to help licensees in spectrum-based services, such as PCS and cellular, get access to preferred sites for their facilities. Federal agencies and departments will work directly with licensees to make federal property available for this purpose, and the FCC is directed to work with the states to find ways for states to accommodate licensees who wish to erect towers on state property, or use state easements and rights-of-way.

The attachments to this fact sheet seek to provide information concerning tower siting for personal wireless communications services. They include a summary of the provisions of Section 704 of the 1996 Act, the actual text of Section 704, and a technical information summary that describes the cellular, wide-area SMR and broadband PCS technologies that underlie the majority of requests for new tower sites.

Questions about the Telecommunications Act of 1996 generally may be addressed to Sheryl Wilkerson in the FCC's Office of Legislative and Intergovernmental Affairs, 202-418-1902 (e-mail: swilkers@fcc.gov). Questions about tower siting, licensing issues or technical matters may be addressed to Steve Markendorff, Deputy Chief, Commercial Wireless Division in the Wireless Telecommunications Bureau, 202-418-0620, (e-mail: smarkend@fcc.gov).

This Fact Sheet is available on our fax-on-demand system. The telephone number for fax-on demand is 202-418-2830. The Fact Sheet may also be found on the World Wide Web at http://www.fcc.gov/wtb/wirehome.html.

SUMMARY OF SECTION 704 OF THE TELECOMMUNICATIONS ACT OF 1996
The following is a summary of key provisions. The text of Section 704 is reproduced in its entirety as an attachment to this summary.

1. Local Zoning Authority Preserved
Section 704(a) of the 1996 Act amends Section 332(c) of the Communications Act ("Mobile Services") by adding a new paragraph (7). It preserves the authority of state and local governments over decisions regarding the placement, construction**,** and modification of personal wireless service facilities, except as provided in the new paragraph (7).

2. Exceptions

a. States and Localities May Not Take Discriminatory or Prohibiting Actions

Section 704(a) of the 1996 Act states that the regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof shall not unreasonably discriminate among providers of functionally equivalent services and shall not prohibit or have the effect of prohibiting the provision of personal wireless services. 47 U.S.C. §332(c)(7)(B)(i).

Review: Any person that is adversely affected by a state or local government's action or failure to act that is inconsistent with Section 332(c)(7) may seek expedited review in the courts. 47 U.S.C. §332(c)(7)(B)(v).

b. Procedures for Ruling on Requests to Place, Construct or Modify Personal Wireless Service Facilities

Section 704(a) also requires a State or local government to act upon a request for authorization to place, construct, or modify personal wireless service facilities within a reasonable time. Any decision to deny a request must be made in writing and be supported by substantial evidence contained in a written record. 47 U.S.C. §332(c)(7)(B)(ii), (iii).

c. Regulations Based On Environmental Effects of RF Emissions Preempted

Section 704(a) of the 1996 Act expressly preempts state and local government regulation of the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the FCC's regulations concerning such emissions. 47 U.S.C. §332(c)(7)(B)(iv).

Review: Parties may seek relief from the FCC if they are adversely affected by a state or local government's final action or failure to act that is inconsistent with this provision. 47 U.S.C. § 332(c)(7)(B)(v).

3. Federal Guidelines Concerning RF Emissions

Section 704(b) requires the FCC to prescribe and make effective new rules regarding the environmental effects of radio frequency emissions, which are under consideration in ET Docket 93-62, within 180 days of enactment of the 1996 Act.

NOTE: The pendency of this proceeding before the FCC does not affect the rules which currently are in effect governing the environmental effects of radio frequency emissions. Section 704(b) gives preemptive effect to these existing rules. See related attachments to the Fact Sheet.

4. Use of Federal or State Government Property

a. Federal Property

Section 704(c) of the 1996 Act requires the President (or his designee) to prescribe procedures by which the federal government may make available on a fair, reasonable and nondiscriminatory basis, property, rights-of-way and easements under their control, for the placement of new spectrum-based telecommunications services.

b. State Property

With respect to facilities siting on state property, Section 704(c) of the 1996 Act requires the FCC to provide technical support to States to encourage them to make property, rights-of-way and easements under their jurisdiction available for the placement of new spectrum-based telecommunications services.

NOTE: Information concerning technical support for tower siting which the FCC is making available to state and local governments is attached to the Fact Sheet.

5. Definitions

"Personal wireless services" include commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services. 47 U.S.C. §332(c)(7)(C)(i).

"Commercial mobile services" are defined in Section 332 of the Communications Act and the FCC's rules, and include cellular telephone services regulated under Part 22 of the FCC's rules, SMR services regulated under Part 90 of the FCC's rules, and PCS regulated under Part 24 of the FCC's rules. 47 C.F.R. §20.9.

"Unlicensed wireless services" are defined as the offering of telecommunications services using duly authorized devices which do not require individual licenses; direct-to-home satellite services are excluded from this definition. 47 U.S.C. §332(c)(7)(C)(iii).

COMPLETE TEXT OF SEC. 704 OF THE TELECOMMUNICATIONS ACT OF 1996

SEC. 704. FACILITIES SITING; RADIO FREQUENCY EMISSION STANDARDS.

(a) NATIONAL WIRELESS TELECOMMUNICATIONS SITING POLICY- Section 332(c) (47 U.S.C. 332(c)) is amended by adding at the end the following new paragraph:

`(7) PRESERVATION OF LOCAL ZONING AUTHORITY-

`(A) GENERAL AUTHORITY- Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

`(B) LIMITATIONS-

`(i) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

`(I) shall not unreasonably discriminate among providers of functionally equivalent services; and

`(II) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

`(ii) A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

`(iii) Any decision by a State or local government or place,

construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.

`(iv) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

`(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any

court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

`(C) DEFINITIONS- For purposes of this paragraph--

`(i) the term `personal wireless services' means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

`(ii) the term `personal wireless service facilities' means facilities for the provision of personal wireless services; and

`(iii) the term `unlicensed wireless service' means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v)).'.

(b) RADIO FREQUENCY EMISSIONS- Within 180 days after the enactment of this Act, the Commission shall complete action in ET Docket 93-62 to prescribe and make effective rules regarding the environmental effects of radio frequency emissions.

(c) AVAILABILITY OF PROPERTY- Within 180 days of the enactment of this Act, the President or his designee shall prescribe procedures by which Federal departments and agencies may make available on a fair, nondiscriminatory basis, property, rights-of-way, and easements under their control for the placement of new telecommunications services that are dependent, in whole or in part, upon the utilization of Federal spectrum rights for the transmission or reception of such services. These procedures may establish a presumption that requests for the use of property, rights-of-way, and easements by duly authorized providers should be granted absent unavoidable direct conflict with the department or agency's mission, or the current or planned use of the property, rights-of-way, and easements in question. Reasonable fees may be charged to providers of such telecommunications services for use of property, rights-of-way, and easements. The Commission shall provide technical support to States to encourage them to make property, rights-of-way, and easements under their jurisdiction available for such purposes.

TECHNICAL INFORMATION CONCERNING CELLULAR, SPECIALIZED MOBILE RADIO AND PERSONAL COMMUNICATIONS SERVICES

April 1996

Cellular Information

The FCC established rules and procedures for licensing cellular systems in the United States and its Possessions and Territories. These rules designated 306 Metropolitan Statistical Areas and 428 Rural Service Areas for a total of 734 cellular markets and spectrum was allocated to license 2 systems in each market. Cellular is allocated spectrum in the 824-849 and 869-894 MHz ranges. Cellular licensees are generally required to license only the tower locations that make up their outer service contour. Licensees desiring to add or modify any tower locations that are within an already approved and licensed service area do not have to submit an application for that location to be added to their cellular license, although they may need FCC approval if the antenna would constitute a major environmental action (See question 2, below) or would exceed the criteria specified in Part 17 of the FCC's Rules ("Construction, Marking and Lighting of Antenna Structures"). Part 17 includes criteria for determining when construction or placement of a tower would require prior notification to the Federal Aviation Administration (FAA). (See question 3, below.)

A cellular system operates by dividing a large geographical service area into cells and assigning the same frequencies to multiple, non-adjacent cells. This is known in the industry as frequency reuse. As a subscriber travels across the service area the call is transferred (handed-off) from one cell to another without noticeable interruption. All the cells in a cellular system are connected to a Mobile Telephone Switching Office (MTSO) by landline or microwave links. The MTSO controls the switching between the Public Switched Telephone Network (PSTN) and the cell site for all wireline-to-mobile and mobile-to-wireline calls.

Specialized Mobile Radio (SMR) Information

Specialized Mobile Radio (SMR) service licensees provide land mobile communications on a commercial (*i.e.*, for profit) or private basis. A traditional SMR system consists of one or more base station transmitters, one or more antennas and end user radio equipment which often consists of a mobile radio unit either provided by the end user or obtained from the SMR operator. The base station receives either telephone transmissions from end users or low power signals from end user mobile radios.

SMR systems operate in two distinct frequency ranges: 806-821/851-866 MHz (800 MHz) and 896-901/935-940 MHz (900 MHz). 800 MHz SMR services have been licensed by the FCC on a site-by-site basis, so that the SMR provider must approach the FCC and receive a license for each and every tower/base site. In the future the FCC will license this band on a wide-area market approach. 900 MHz SMR was originally licensed in 46 Designated Filing Areas (DFAs) comprised of only the top 50 markets in the country. The Commission is in the process of auctioning the remainder of the United States and its Possessions and Territories in the Rand McNally defined 51 Major Trading Areas.

PCS Information

Broadband PCS systems are very similar to the cellular systems but operate in a higher frequency band, in the 1850-1990 MHz range. One other difference is that the FCC used different market areas for licensing purposes. The FCC used the Rand McNally definitions for 51 Major Trading Areas (MTAs) and 493 Basic Trading Areas (BTAs). PCS was allocated spectrum for six Broadband PCS systems and 26 Narrowband systems. The six Broadband PCS systems will be licensed as follows: two Broadband PCS licenses will be issued for each of the 51 MTAs and four for each of the 493 BTAs. The 26 Narrowband systems will be licensed as follows: eleven Narrowband PCS licenses will be issued for nationwide systems, six for each of five regional areas, seven for each of the 51 MTAs and two for each of the 493 BTAs.

PCS licensees are issued a blanket license for their entire market area and are not required to submit applications to license individual cell sites unless construction of the facility would be a major environmental action or would require FAA notification. Major environmental actions are defined by the National Environmental Policy Act of 1969 that is discussed in question 2, below. Therefore, the FCC has no technical information on file concerning PCS base stations.

Frequently asked questions concerning tower siting for personal wireless services.

1. Do local zoning authorities have any authority to deny a request for tower siting?

Answer: Yes. The Telecommunications Act of 1996 specifically leaves in place the authority that local zoning authorities have over the placement of personal wireless facilities. It does prohibit the denial of facilities siting based on RF emissions if the licensee has complied with the FCC's regulations concerning RF emissions. It also requires that denials be based on a reasoned approach, and prohibits discrimination and outright bans on construction, placement and modification of personal wireless facilities.

2. What requirements do personal wireless communications licensees have to determine whether a site is in a flood plain? A historical sites must also comply with the National Environmental Policy Act of 1969 (NEPA). as well as other mandatory federal environmental statutes. The FCC's rules that implement the federal environmental statutory provisions are contained in sections 1.1301-1.1319. The FCC's environmental rules place the responsibility on each applicant to investigate all the potential environmental effects, and disclose any significant effects on the environment in an Environmental Assessment (EA), as outlined in section 1.1311, prior to constructing a tower. The applicant is required to consult section 1.1307 to determine if its proposed antenna structure will fall under any of the listed categories that may significantly affect the environment. If it does, the applicant must provide an EA prior to proceeding with the tower construction and. under section 1.1312, must await FCC approval before commencing any such construction even if FCC approval is not otherwise required for such construction. The FCC places all proposals that may significantly impact the environment on public notice for a period of 30 days, seeking any public comments on the proposed structures.

The categories set forth in section 1.1307 include:

Wilderness Area
Wildlife Preserve
Endangered Species
Historical Site
Indian Religious Site
Flood Plain
Wetlands
High Intensity White Lights in Residential Neighborhoods
Excessive Radiofrequency Radiation Exposure

3. Are there any FCC regulations that govern where towers can or cannot be placed?

Answer: The FCC mandates that personal wireless companies build out their systems so that adequate service is provided to the public. In addition, all antenna structures used for communications must be approved by the FCC in accordance with Part 17 of the FCC Rules. The FCC must determine if there is a reasonable possibility that the structure may constitute a menace to air navigation. The tower height and its proximity to an airport or flight path will be considered when making this determination. If such a determination is made the FCC will specify appropriate painting and lighting requirements. Thus, the FCC does not mandate where towers must be placed, but it may prohibit the placement of a tower in a particular location without adequate lighting and marking.

4. Does the FCC maintain any records on tower sites throughout the United States? How does the public get this information (if any)?

Answer: The FCC maintains a general tower database on the following structures: (1) any towers over 200 feet, (2) any towers over 20 feet on an existing structure (such as a building, water tower, etc.) and (3) towers that are close to airports that may cause potential hazards to air navigation. The FCC's licensing databases contain some base site information for Cellular and SMR systems. The general tower database and the Cellular and SMR data that may be on file with the FCC is available in three places:

(1) Cellular licensing information is available in the Public Reference Room of the Wireless Telecommunications Bureau's Commercial Wireless Division. The Public Reference Room is located on the fifth floor of 2025 M Street, NW, Washington, DC 20554, telephone (202)418-1350. On-line database searches of cellular licensing information along with queries of the FCC's general tower database can also be accomplished at the Public Reference Room.

(2) People who would like to obtain general tower information through an on-line public access database should call or write Interactive Systems, Inc., 1601 North Kent St., Suite 1103, Arlington, VA 22209, telephone 703-812-8270.

(3) The FCC does not duplicate these records, but has contracted with International Transcription Service, Inc. to provide this service. Requests for copies of information should be addressed to International Transcription Service, Inc. (ITS, Inc.), 2100 M St., NW, Suite 140, Washington, DC 20037, telephone 202-857-3800.

5. Why do Cellular and PCS providers require so many tower sites?

Answer: Low powered transmitters are an inherent characteristic of Cellular Radio and Broadband PCS. As these systems mature and more subscribers are added, the effective radiated power of the cell site transmitters is reduced so frequencies can be reused at closer intervals thereby increasing subscriber capacity. There are over 30 million mobile/portable cellular units and more than 22 thousand cell sites operating within the United States and its Possessions and Territories. PCS is just beginning to be offered around the country. Due to the fact that Broadband PCS is located in a higher frequency range, PCS operators will require more tower sites as they build their systems to provide coverage in their service areas as compared to existing Cellular carriers. Therefore, due to the nature of frequency reuse and the consumer demand for services, Cellular and PCS providers must build numerous base sites.

6. Can Cellular, SMR and PCS providers share tower structures?

Answer: Yes, it is technologically possible for these entities to share tower structures. However, there are limits to how many base station transmitters a single tower can hold and different tower structures have different limits. Moreover, these providers are competitors in a more and more competitive marketplace and may not be willing to share tower space with each other. Local zoning authorities may wish to retain a consulting engineer to evaluate the proposals submitted by wireless communications licensees. The consulting engineer may be able to determine if there is some flexibility as to the geographic location of the tower.

7. Is the Federal government helping to find ways to accommodate multiple licensees of personal wireless services?

Answer: Yes. The FCC has designated Steve Markendorff, Chief, Broadband Branch, Commercial Wireless Division, Wireless Telecommunications Bureau, FCC to as and respond to questions concerning tower siting issues. His telephone number is 202-418-0620. Also, President Clinton issued an Executive Memorandum on August 10, 1995 directing the Administrator of General Services (GSA), in coordination with other Government departments and agencies, to develop procedures to facilitate appropriate access to Federal property for the siting of mobile services antennas. GSA recently released "Government-Wide Procedures for Placing Commercial Antennas," 61 Fed Reg 14,100 (March 29, 1996). For further information contact James Herbert, Office of Property Acquisition and Realty Services, Public Building Service, General Services Administration, 18th & F Streets, NW, Washington, DC 20405, telephone 202-501-0376.

8. Have any studies been completed on potential hazards of locating a tower/base site close to residential communities?

Answer: In connection with its responsibilities under NEPA, the FCC considers the potential effects of radiofrequency (RF) emissions from FCC-regulated transmitters on human health and safety. Since the FCC is not the expert agency in this area, it uses standards and guidelines developed by those with the appropriate expertise. For example, in the absence of a uniform federal standard on RF exposure, the FCC has relied since 1985 on the RF exposure guidelines issued in 1982 by the American National Standards Institute (ANSI C95.1-1982). In 1991, the Institute of Electrical and Electronic Engineers (IEEE) issued guidelines designed to replace the RF ANSI exposure guidelines. These guidelines (ANSI/IEEE C95.1-1992) were adopted by ANSI. The Telecommunications Act of 1996 mandates that the FCC complete its proceeding in ET Docket 93-62, in which it is considering updating the RF exposure guidelines, no later than early August 1996. Copies of this proceeding can be obtained from the International Transcription Service, Inc. (ITS), telephone 202-857-3800. Presently, RF emission requirements are contained in Section 1.1307(b) of the FCC's rules , 47 C.F.R. §1.1307(b), for all services. PCS has service specific RF emission provisions in Section 24.52 of the FCC's rules, 47 C.F.R. § 24.52.

Additional information concerning RF emission hazards can be obtained through a variety of sources:

(1) Information concerning RF hazards can be obtained on the World Wide Web at http://www.fcc.gov/oet/faqs. RF safety questions are answered and further RF documents and information are contained under the Cellular Telephony Section.

(2) OET Bulletins 56 and 65 concerning effects and potential RF hazards can be requested through the Radiofrequency Safety Program at 202-418-2464. Additionally, any specific questions concerning RF hazards can be answered by contacting the FCC at this phone number.

The FCC maintains a Communications and Crisis Management Center which is staffed 24 hours a day, seven days a week. In the event of an emergency, such as a radiofrequency hazard threatening public safety or health, you may call 202-632-6975. The watch officer who answers at that number can contact our compliance personnel in your area and dispatch them within a matter of hours.