PLANNING COMMISSION MEETING AGENDA
Wednesday, February 22, 2017, 7:00 PM
City Municipal Center, 616 NE 4th Avenue

SPECIAL MEETING

I. CALL TO ORDER

II. ROLL CALL

III. MINUTES

A. Approval of the minutes from the December 20, 2016 Planning Commission Meeting

December 20, 2016 Planning Commission Minutes

IV. MEETING ITEMS

A. Wireless Communication Facilities
Details: Workshop regarding Wireless Communication Facilities subject to a Moratorium under Ordinance 16-015. Staff will review the current status of the Moratorium, provide an overview of testimony received to date and research conducted, and provide options for consideration and discussion by the Planning Commission.
Presenter: Phil Bourquin, Community Development Director
Recommended Action: Direction from the Planning Commission on a recommended option is requested.

1 - PowerPoint Options Presentation by Staff

2 - Ordinance No. 16-015

3 - Spokane Cell Tower FAQ's

4 - Federal Communications Commission (FCC) 14-153

5 - AWC Washington State Legislation

6 - 5G Technology

7 - Comment from Glenn Watson

8 - Additional Comment from Glenn Watson

9 - Staff Response to Glenn Watson

10 - Comment from Robert and Josephine Behar

11 - Eugene Agenda and Minutes - Update Code For Towers

12 - Spokane Ordinance 2015

13 - PCIA Summary Shot Clock Ruling

B. Election of Chair and Vice Chair
Details: The Planning Commission positions of chair and vice chair are one-year terms which are generally elected by a majority vote each year.
Recommended Action: That the Commissioners nominate and approve a chair and vice chair for the 2017 Planning Commission.

V. MISCELLANEOUS UPDATES

A. Miscellaneous Updates

VI. NEXT MEETING DATE

The next scheduled Planning Commission Meeting will be held on Tuesday, March 21, 2017, in the City Council Chambers at 7:00 p.m.

VII. ADJOURNMENT

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call the City Clerk's Office at 360.817.1591.

PLANNING COMMISSION MEETING MINUTES - DRAFT
Tuesday, December 20, 2016, 7:00 PM
City Municipal Center, 616 NE 4th Avenue

I. CALL TO ORDER

Chair Beel called the meeting to order at 7:01 p.m.

II. ROLL CALL

Present: Bryan Beel, Troy Hull, Jim Short, Lloyd Goodlett and Jaima Johnson

Excused: Frank Hood and Timothy Hein

Staff Present: Phil Bourquin, Jan Coppola, Sarah Fox, Robert Maul, David Schultz and Alicia Pacheco (intern)

Council Liaison: Bonnie Carter

III. MINUTES

A. Approval the minutes from the November 15, 2016 Planning Commission Meeting

November 15, 2016 Planning Commission Meeting Minutes

It was moved by Commissioner Short, seconded by Commissioner Goodlett to approve the minutes from the November 15, 2016 Planning Commission Meeting. The motion carried unanimously by roll call vote.

IV. MEETING ITEMS

A. Public Hearing for Minor Amendments to Camas Municipal Code at Title 16 Environment
Details: As part of a periodic code improvement project, the proposed minor amendments to Title 16 - Environment of the Camas Municipal Code (CMC) include updates to state law, corrections to typos, or to clarify sections that may have been challenging to administer since the past review cycle. This item was previously discussed during a workshop session before the Commission on November 15th. Staff provided a report to summarize the proposed CMC amendments along with two attachments of the same proposal, only illustrated differently. Attachment 1 shows the draft changes as strike-though text or underlined. Attachment 2 provides the amendments without any mark-ups.
Presenter: Sarah Fox, Senior Planner

Staff Report (File No. MC16-06)
Attachment 1 - Draft Title 16
Attachment 2 - Draft Title 16
Attachment 3 - Current Title 16
Title 16 PowerPoint Presentation by Staff

Sarah Fox reviewed the proposed amendments with the Commissioners. Discussion ensued.

The public testimony portion of the hearing was opened and closed, as no members of the public wished to speak.

It was moved by Commissioner Hull, seconded by Commissioner Johnson to forward a recommendation to City Council to approve the Minor Amendments to Title 16 of Camas Municipal Code (MC16-06) with the revisions noted during the meeting. The motion carried unanimously by roll call vote.

V. MISCELLANEOUS UPDATES

A. Miscellaneous Updates

Phil Bourquin added that elections for chair and vice chair will be held during January's meeting.

VI. NEXT MEETING DATE

The next scheduled Planning Commission Meeting will be held on Wednesday, January 18, 2017.

VII. ADJOURNMENT

Chair Beel adjourned the meeting at 7:35 p.m.

NOTE: The City of Camas welcomes and encourages the participation of all of its citizens in the public meeting process. A special effort will be made to ensure that persons with special needs have opportunities to participate. For more information, please call 360.834.6864.

City of Camas

Wireless Communication Facilities

February, 2017

Background

City Council through Ordinance 16-015 expressed a desire to:

- Review City of Camas zoning and use codes related to Wireless Communication Facilities for consistency with the vision, goals, and policies established through the “Camas 2035” Comprehensive Plan; and
- Explore best available information on wireless technology, stealth technology, and alternatives to the placement of additional Wireless Communication Facilities through the City of Camas;

Work Plan

Ordinance 16-015 established a Work Plan:

October 3, 2016 -City Council held a public hearing on Ordinance 16-015 establishing a moratorium on new Wireless Communication Facilities;

November 15, 2016 – Planning Commission public hearing to hear from citizens on regarding allowing the permitting of Wireless Communication Facilities within the City of Camas;

February 22, 2017 –Planning Commission workshop to discuss a list of options, based upon the testimony received through the November 15, 2016 public hearing and through research conducted. Recommendation from the Planning Commission on the direction is anticipated;

Camas 2035 Comprehensive Plan
(Vision/Goals/Policies)

- Vision: Vital, Stable and Livable Neighborhoods. "…Quality public facilities, services and utilities contribute to a high quality of life".[pg. 3]

- Franchise Utility Goal [pg. 5-12]
  - F-1: To Ensure that energy and communication facilities and their services are available to support development when they are needed.

- Franchise Utilities Policies [pg. 5-12]
  - F-1: Minimize the effects on adjacent properties, the environment, and the visual quality of the community of siting, developing, operating, and maintaining these facilities.
  - F-2: Coordinate to provide reliable service through partnering and agreements with utility companies.
  - F-3: Promote the conservation of energy resources through the adoption of appropriate energy codes and efficient land use patterns and transportation systems.

New/Emerging Technologies

- Demand for smart phones and other devises reliant on wireless communications (Internet of Things) continues to increase.
- Capacity to meet demand has resulted in new infrastructure development options such as:
  - Distributed antenna systems (“DAS”)/Small Cell networks located in right-of-way;
  - Development of new technologies such as 5G.
- The 2017 Washington State Legislature may consider legislation that could mandate how the City of Camas regulates small cell and 5G technologies.

Advantages of DAS and Small Cell Technologies [FCC 14-153]

- Physically much smaller;
- Can be placed on utility poles, building walls and rooftops, and other small structures either privately owned or in the public rights-of-way;
- Can be used in densely populated areas where traditional towers are not feasible or where localized wireless traffic demands would require an unrealistic number of macrocells;
- Utilize small equipment and transmit at lower signal power levels, they can be deployed in indoor environments to improve interior wireless services;
- Can address coverage needs in areas with stringent siting regulations, such as historic districts.
- Smaller and less visible. Easier to deployed with stealth measures such as concealment enclosures that blend with the structures on which they are installed;
- Comparatively cost-effective way of addressing increased demand for wireless broadband services in urban areas.

Public Testimony

November 15, 2015 Planning Commission (Summary)

- Establish clear and objective standards for effectively evaluating a significant gap in service and in evaluating visual and site impacts of new cell towers;
- Limit cell towers in residential zones to those necessary to address a significant gap in service under federal law;
- Require the significant gap analysis demonstration that no alternative sites are available within commercial or industrial zoned properties;
- Require least obtrusive designs (height, site location and architectural and landscape) and least obtrusive technologies in siting cell towers and other telecom. facilities.

Conclusions

- Changes have occurred in cell technologies and in the infrastructure options available to provide wireless coverage;
- Camas 2035 Plan desires to “Minimize the effects on adjacent properties, the environment, and the visual quality of the community of siting, developing, operating, and maintaining these facilities”.
- Public desires greater clarity in standards, further limitations on cell towers in residential areas and greater design considerations than currently provided under Camas Municipal Code, CMC 18.35.
- 2017 Washington State Legislation could impact the effectiveness of additional regulations tied to DAS or small cell technologies

Options

Staff is looking to the Planning Commission and City Council for direction. The following three (3) options are provided for discussion and consideration. Staff recommends Option 2.

1. NO ACTION. Conclude the moratorium and rely on the existing code.

2. NEW CODE. Direct Staff to prepare a draft Ordinance for consideration in a public hearing to: a) Address concerns of the community as summarized in this presentation; b) Address and promote DAS, Small Cell and 5G technologies; and c) be reviewed for consistency with FCC and other legal requirements.

3. HOLD OFF. Direct Staff to hold off on preparation of a Draft Ordinance until the 2017 Washington Legislative Session is concluded or until no legislation on small cell or DAS is pending and to incorporate any changes into a draft Ordinance. This option would likely require an extension to the moratorium that is set to expire August 7, 2017.

Next Steps

- March 6, 2017 – City Council workshop.
- May 16, 2017 – Planning Commission hearing to consider draft amendments to the Camas Municipal Code.
- June 19, 2017 – City Council hearing
- July 3, 2017 -Ordinance Adoption.

EXHIBIT 2
MC 16-05

ORDINANCE NO.16-015

AN ORDINANCE related to land use and zoning, declaring an emergency, and adopting a moratorium on the establishment of any wireless communication facilities, wireless communication support structure, monopole support structure, or lattice support structure, hereinafter collectively referred to as "Wireless Communication Facilities", within the limits of the City of Camas; and providing for an immediate effective date.

WHEREAS, Camas Municipal Code Chapter 18.35 sets forth certain regulations for the placement, development, permitting, and removal of Wireless Communication Facilities; and

WHEREAS, for the purposes of this Ordinance, wireless communication facilities, wireless communication support structure, monopole support structure, or lattice support structure, as defined pursuant to Camas Municipal Code Section 18.35.030, shall be collectively referred to herein as "Wireless Communication Facilities"; and

WHEREAS, approved Wireless Communication Facilities shall be vested for the terms as otherwise specified in the land use decision or as per the Camas Municipal Code; and

WHEREAS, Camas Municipal Code Chapter 18.35 was initially established pursuant to Ordinance 2299, on July 23, 2001; and

WHEREAS, while minor amendments to Ordinance 2299 have occurred, the City has not undertaken a comprehensive review of CMC 18.35 related to Wireless Communication Facilities; and

WHEREAS, the City of Camas has made significant changes in the Comprehensive Plan, Zoning Districts, as well as expanded both the Urban Growth Areas and City Limits multiple times since Ordinance 2299 was passed; and

WHEREAS, the City of Camas, through Ordinance 16-010, has adopted a 20-year Comprehensive Plan titled "Camas 2035"; and

WHEREAS, the City Council desires to review its zoning and use codes related to Wireless Communication Facilities for consistency with the vision, goals, and policies established through the

ORDINANCE NO. 16-015

"Camas 2035" Comprehensive Plan; and

WHEREAS, the City Council desires to explore best available information on wireless technology, stealth technology, and alternatives to the placement of additional Wireless Communication Facilities through the City of Camas; and

WHEREAS, the City Council finds that the regulatory requirements established by this Ordinance are necessary for the immediate preservation of the public peace, health, and safety, and for the immediate support of City government and its existing public institutions,

NOW THEREFORE, BE IT ORDAINED BY THE CITY OF CAMAS:

Section 1. The City Council adopts the foregoing recital clauses herein as findings in support of the adoption of the moratorium provided by this ordinance.

Section 2. Pursuant to the provisions of RCW 36.70A.390 and RCW 35.63.200, a land use authorization moratorium is hereby enacted prohibiting until August 7, 2017, within the City of Camas, the application for and the permitting, placement or development of any Wireless Communication Facilities, as defined herein.

Section 3. Work Plan. The following work plan includes target dates, but it is the intent for staff to have some flexibility in scheduling to accommodate for quorums, workloads, and notice requirement. The City Council moratorium hearing will occur October 3, 2016; a public hearing to hear from citizens on the record regarding allowing the permitting of Wireless Communication Facilities will occur on November 15, 2016 before the Planning Commission; staff will prepare of list of options based upon the testimony received and research conducted and present the options to the Planning Commission in a workshop on Wednesday, February 22, 2017 and to the City Council in a workshop on March 6, 2017; staff will draft a report and amendments available by May 5, 2017; the Planning Commission will conduct a hearing on

May 16, 2017; and the recommendations of the Planning Commission together with the record will be forwarded on to City Council for consideration in a hearing on June 19, 2017; Ordinance Adoption will occur July 3, 2017.

Section 4. Effective Date. This Ordinance is designated as a public emergency ordinance necessary for the protection of public health, public safety, public property or public peace, and shall be effective upon adoption, provided that it is passed by majority plus one of the whole membership of the City Council.

Section 5. Severability. If any clause, sentence, paragraph, section, or part of this ordinance or the application thereof to any person or circumstance shall be adjudged by any court of competent jurisdiction to be invalid, such order or judgment shall be confined in its operation to the controversy in which it was rendered and shall not effect or invalidate the remainder or any parts thereof to any person or circumstances and to this end, the provisions of each clause, sentence, paragraph, section or part of this law are hereby declared to be severable.

PASSED BY the Council and APPROVED by the Mayor this 6th day of September, 2016.

SIGNED: _____
Mayor

ATTEST: _____
Clerk

APPROVED as to form:

_____
City Attorney

Exhibit 3
MC 16-05

FACT SHEET

1. Why can't the City of Spokane prohibit cell towers in residential zones?

What local governments can and cannot require is complex. Federal law does not permit a total prohibition of cell towers in residential zones if doing so would prohibit the delivery of wireless services to that zone. The placement, construction and modification of cell towers and antennas in cities is subject to Federal statutes, laws, regulations and case law. Coupled with Federal laws are State environmental regulations and local legal requirements. The City cannot deny an application for a wireless site because of citizens' health concerns if the proposed site is in compliance with Federal Radio Frequency ("RF") emissions standards. In essence, Congress has adopted a national policy that encourages the deployment of wireless facilities and equipment, as well as the wide-spread availability of wireless services which can provide video, voice and data. As more people telecommute and work from home, the availability of broadband in residential areas becomes increasingly important. Under Federal court cases, cell phone companies have the right to close a significant gap in their own coverage. Unfortunately, the courts do not tell us what constitutes a significant gap, calling that question one that cannot be held to a particular standard. If there is a significant gap, however, the law allows the City to require that the wireless company close that gap using the least intrusive means as reasonably determined by the City which can include aesthetic considerations. The City can regulate matters such as design, location criteria, visual impact, aesthetics and zoning compliance.

2. Why is there a need for high cell towers in residential zones?

Consumers nationwide are less reliant on landline telephone service. Smartphone and tablet usage continues to result in higher demand for high-speed wireless data services. To meet that demand, providers are modifying existing sites and infrastructure and installing new facilities and equipment. Consumer usage of cell phones for video, voice and data has created a demand for coverage and capacity that has grown exponentially. Moreover, the demand for wireless service has pushed deep into residential neighborhoods. Sometimes, taller towers are necessary for customers to receive a signal and reception with good quality, and to provide fall-back coverage in areas also served by smaller cells. In other words, if the smaller cells become overloaded, then the macro site can provide redundancy. Cell phone providers typically use a combination of macro (tall-high) and micro (smaller-lower) sites to make their networks work. Cities cannot dictate technology to cell phone providers. Local governments are in the aesthetics business, not the technology business.

3. Are cell towers physically safe to be around?

Congress delegated sole authority to the FCC to set national rules and regulations to establish acceptable RF emission and safety guidelines for cell sites. The wireless carriers need to construct facilities which by law must adhere to Federal guidelines in order to promote safety.

Local governments cannot establish their own RF safety requirements, or even adopt those created by the FCC.

The FCC regulations provide a fifty (50) times safety margin between the maximum public exposure allowed, and the level where a physiological change can be measured in a person. Wireless operators commonly operate at a fraction of the maximum permitted by the FCC because to transmit with higher power will commonly cause cell site to cell site interference.

It should also be noted that ground level exposure is much less than that if someone were close to the antenna and in its transmission path. Further information can be found on the FCC's RF Safety website.

4. Why can't they eliminate large towers and utilize smaller sites instead?

Height is still an integral part of search ring signal coverage and capacity analysis. Sometimes large towers are necessary due to topography, or to provide background (fall-back) coverage in combination with "small cells" and Distributed Antenna Systems ("DAS"). The Industry has generally evolved from placing unsightly tall towers to deploying monopines and other stealthed facilities. Camouflaged facilities continue to evolve. The Industry is also moving towards small cell sites and using outdoor and indoor DAS.

5. Will any trees need to be removed to accommodate these sites?

The providers have an ongoing need for wireless sites. Tree removal will be dependent on specific locations, but generally should be avoided to the greatest degree possible. Typically, leaves will not stop signals but may reduce or slow down transmissions, resulting in some signal degradation. Greater willingness on the part of the City to make its vertical assets available potentially reduces the need for tree removal. The City will be considering what type of municipal facilities may be viable candidates to support DAS, small cells and antennas.

6. How will neighbors be notified in the future of possible cell towers and how can they participate?

The City is in the process of instituting a comprehensive software notification system this Summer. It is critical that citizen stakeholders be given the opportunity to timely weigh in on cell tower applications in residential and non-residential neighborhoods. Criteria can be developed regarding which neighbors are notified depending upon how close they will be to new cell towers. Once neighbors receive notification from the City, they can participate by e-mailing their comments to the City and take part in public meetings and hearings.

Citizen input is welcomed and encouraged during the process. It should be noted, though, that there may be a divergence of opinion on whether a particular application should be approved, denied or modified. It will then be up to the City, in accordance with applicable law, to determine whether an application meets the requisite criteria and render a decision.

7. What effect do cell tower sites have on property values?

The effect of cell tower sites on property values is an emotionally charged topic. Homeowners subjectively believe that a diminution in value is a given. Objective research seems to indicate otherwise, particularly as the distance from the cell site increases, and as time passes. Cell tower sites that are camouflaged have less effect on property values than non-stealthed, freestanding towers and poles. This ambiguity regarding property values leads to uncertainty for homeowners. While one homeowner may be concerned about aesthetics and health risks, another may welcome a cell tower because of improved coverage, capacity, network speed and improved cell service. Additionally, the effect on property values is fact specific and may vary depending upon the type of facility (cell tower, antenna site, monopine, etc.), along with its location, visual ramifications and the type of residential neighborhood. In any event, it is in residents' best aesthetic interests to minimize the number of new cell towers inside the core of residential zones by encouraging collocation among providers and expedited review processes for smaller and stealthed facilities. Further, there has been anecdotal discussion that where residences do not have good cell phone reception, this could negatively impact potential buyers' willingness to purchase homes in that area. The ability to receive and initiate phone calls, make emergency calls, and communicate with e-mails and text messages are services that people have come to expect.

Before the
Federal Communications Commission
Washington, D.C. 20554

Exhibit 4
MC 16-05

In the Matter of	)	
	)	
Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies	)	WT Docket No. 13-238
	)	
Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting	)	WC Docket No. 11-59
	)	
2012 Biennial Review of Telecommunications Regulations	)	WT Docket No. 13-32

REPORT AND ORDER

Adopted: October 17, 2014 **Released: October 21, 2014**

By the Commission: Chairman Wheeler and Commissioners Clyburn, Rosenworcel, Pai, and O'Rielly issuing separate statements.

TABLE OF CONTENTS

I. INTRODUCTION

1. We take important steps in this Report and Order to promote the deployment of wireless infrastructure, recognizing that it is the physical foundation that supports all wireless communications. We do this by eliminating unnecessary reviews, thus reducing the costs and delays associated with facility siting and construction. In particular, we update and tailor the manner in which we evaluate the impact of proposed deployments on the environment and historic properties. We also adopt rules to clarify and implement statutory requirements related to State and local government review of infrastructure siting applications, and we adopt an exemption from our environmental public notification process for towers that are in place for only short periods of time. Taken together, these steps will further facilitate the delivery of more wireless capacity in more locations to consumers throughout the United States. Our actions will expedite the deployment of equipment that does not harm the environment or historic properties, as well as recognize the limits on Federal, State, Tribal, and municipal resources available to review those cases that may adversely affect the environment or historic properties.

2. Demand for wireless capacity is booming: more consumers are accessing mobile broadband every year, driving more innovation and expanding access to public safety. But our ability to meet this demand depends on the infrastructure that supports the services. We therefore take concrete steps to facilitate the deployment of the infrastructure necessary to support surging demand, expand broadband access, support innovation and wireless opportunity, and enhance public safety—all to the benefit of consumers and the communities in which they live.

3. Our actions recognize that a technological revolution has changed the wireless network landscape. The Commission's current rules for deploying infrastructure were drafted at a time when antennas were huge and bolted to the top of enormous towers. While that kind of macrocell deployment still exists and will continue to exist, there are now a variety of complementary and alternative

technologies that are far less obtrusive. Distributed antenna system (DAS) networks and other small-cell systems use components that are a fraction of the size of macrocell deployments, and can be installed—with little or no impact—on utility poles, buildings, and other existing structures. We are revising our rules to reflect this technological progress. At the same time, however, we recognize that State, local and Tribal governments play important roles in this process, including with respect to their own land use regulation and as part of our historic preservation review process. While we eliminate review procedures that are not necessary for small-size facilities collocated on existing structures, we do so in a manner that preserves local zoning requirements and rules requiring camouflage or concealment measures. In particular, the rules we adopt today will allow local jurisdictions to retain their ability to protect aesthetic and safety interests. Accordingly, our actions are intended to encourage deployments on existing towers and structures—rather than entirely new towers—in recognition that collocations almost always result in less impact or no impact at all.

4. These measures reflect our ongoing commitment to promote wireless infrastructure deployment, with the goal of facilitating robust wireless coverage for consumers everywhere. We have undertaken three particularly notable initiatives this year to facilitate wireless infrastructure deployment in addition to the actions we take today. First, we adopted rules that substantially reformed tower lighting and marking requirements.[1] The steps we took in that proceeding eased compliance burdens for tower owners without any adverse impact on aviation and public safety. Second, we recently commenced discussions with relevant government and non-governmental stakeholders to develop a process for "clearing" existing towers that were not subject to historic preservation review prior to construction, including those commonly referred to as "twilight towers." Once complete, this effort will make thousands of additional towers available for collocation, resulting in an enormous expansion in deployment opportunities for public safety operations and commercial wireless offerings. Finally, we are working with other government stakeholders to expand on the measures we adopt today. In particular, we intend to tailor further our environmental and historic preservation reviews for small-scale wireless deployments by implementing more broadly applicable efficient procedures.[2]

5. The rules we adopt today should help spur wireless broadband deployment, in part, by facilitating the sharing of infrastructure that supports wireless communications. We create strong incentives for wireless providers to collocate on structures that already support wireless deployments, and we likewise facilitate sharing of transmission equipment by, for example, using "neutral-host" DAS that

[1] *See* 2004 and 2006 Biennial Regulatory Reviews - -Streamlining and Other Revisions of Parts 1 and 17 of the Commission's Rules Governing Construction, Marking and Lighting of Antenna Structures, WT Docket No. 10-88, Amendments to Modernize and Clarify Part 17 of the Commission's Rules Concerning Construction, Marking and Lighting of Antenna Structures, RM-11349, *Report and Order*, FCC 14-117 (rel. Aug. 8, 2014) (*Part 17 Report and Order*).

[2] We note that other efforts are also ongoing. Among these, we continue to assist the interagency Working Group established by Executive Order 13616 to facilitate broadband deployment on Federal buildings and rights-of-way. *See* Accelerating Broadband Infrastructure Deployment, Executive Order No. 13616, 77 Fed. Reg. 36903 (June 14, 2012) (Executive Order 13616). Finding that "decisions on access to Federal property and [rights-of-way] can be essential to the deployment of both wired and wireless broadband infrastructure," Executive Order 13616 created a "Broadband Deployment on Federal Property Working Group" to develop "a coordinated and consistent approach in implementing agency procedures, requirements, and policies related to access to Federal lands, buildings, and [rights-of-way], federally assisted highways, and tribal lands to advance broadband deployment." *Id.* In part, this effort is to fulfill the directive of Sections 6409(b) and (c) of the Spectrum Act, which address access to Federal property for the deployment of wireless broadband facilities, including requirements that the General Services Administration (GSA) develop application forms, master contracts, and fees for such access in consultation with the Working Group. *See* Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96 § 6409(b), (c), 126 Stat. 156 (2012) (Spectrum Act); Executive Order 13616 § 4. The Working Group is composed of representatives from seven Federal agencies that each have significant ownership of or responsibility for managing Federal lands, buildings, and rights-of-way, federally assisted highways, or Tribal lands, and also includes representatives from four other agencies, including the Commission, that "provide advice and assistance." *Id.*

can support multiple providers simultaneously. Promoting shared use in this manner advances several important policy goals while creating little or no potential for competitive harm and, indeed, promoting opportunities for increased competition. First, a "shared use" approach leverages existing resources and thus facilitates provider efforts to expand both coverage and capacity more quickly. Second, sharing wireless infrastructure—whether towers, other support structures, or transmission equipment—reduces costs and promotes access to such infrastructure, and thus may reduce a notable barrier to deployment. Finally, sharing resources—rather than relying on new builds—safeguards environmental, aesthetic, historic, and local land-use values.

6. Facilitating wireless deployment more generally advances the interests of a wide array of stakeholders, ranging from public safety entities to wireless innovators to schools and libraries. But wider and more robust deployment is particularly important for individual consumers. According to the National Center for Health Statistics and the Centers for Disease Control and Prevention (CDC), wireless service is the only telecommunications connection for an increasing percentage of Americans, especially among more vulnerable populations.[3] A CDC report covering the second half of 2013 determined that two in every five American homes (41.0%) had only wireless telephones during the second half of 2013, up from 30% in 2010. Moreover, more than half of adults in poverty live in wireless-only households.[4] The same report found that approximately 34% of households with both landline and wireless telephones use wireless telephones for all or almost all calls.

7. Consumers are also increasing their reliance on and use of mobile broadband services. According to one estimate, Americans will have 34 million mobile broadband devices by the end of 2015, an increase of nearly 50% from 2013,[5] and the volume of data crossing North American mobile networks will grow almost eight-fold between 2013 and 2018.[6] Consumers in the United States already account for approximately 45% of the 278 million Long Term Evolution (LTE) connections worldwide, and they are projected to have the biggest share of all Fourth Generation (4G) connections worldwide in the coming years.[7] This growing demand reflects the importance of broadband to our nation's economic growth, global competitiveness, and civic life.[8] As the President recognized in an Executive Order promoting the

[3] *See* "Wireless Substitution: Early Release of Estimates From the National Health Interview Survey, July-December 2013," Stephen J. Blumberg, Ph.D., and Julian V. Luke, Division of Health Interview Statistics, *available at* http://www.cdc.gov/nchs/data/nhis/earlyrelease/wireless201407.pdf.

[4] *See id.*

[5] *See* "34 Million Americans will have Mobile Broadband Devices," April 22, 2014, *available at* http://www.ctia.org/resource-library/facts-and-infographics/archive/34-million-americans-mobile-broadband-devices.

[6] *See* Alina Selyukh, Reuters, "U.S. mobile data traffic to jump nearly eight-fold by 2018: Cisco," Feb. 5, 2014, *available at* http://www.reuters.com/article/2014/02/05/us-usa-spectrum-cisco-idUSBREA140VY20140205. TIA indicates that American spending on mobile data services "rose by a third in 2012, and during the next four years it will increase by 94 percent." TIA Comments at 2. Cisco further forecasts that global mobile data traffic will increase 11-fold between 2013 and 2018—in other words, global mobile data traffic will grow at a compound annual growth rate (year-over-year) of 61% from 2013 to 2018. *See* "Cisco Visual Networking Index: Global Mobile Data Traffic Forecast Update, 2013-2018," *available at* http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.html (Cisco VNI Report 2014). *See also* "2014-2017 ICT Market Review & Forecast," *available at* http://www.tiaonline.org/resources/market-forecast (finding that "[t]he skyrocketing demand for wireless data is a key driver, fueling growth for the [Information and Communications Technology] market.").

[7] Cisco VNI Report 2014, *available at* http://www.cisco.com/c/en/us/solutions/collateral/service-provider/visual-networking-index-vni/white_paper_c11-520862.html, at 10.

[8] *See* Connect America Fund; A National Broadband Plan for Our Future; Establishing Just and Reasonable Rates for Local Exchange Carriers; High-Cost Universal Service Support; Developing a Unified Intercarrier Compensation Regime; Federal-State Joint Board on Universal Service; Lifeline and Link-Up; Universal Service Reform—Mobility Fund, WC Docket Nos. 10-90, 07-135, 05-337, 03-109, CC Docket Nos. 01-92, 96-45, GN

(continued….)

deployment of broadband infrastructure, "[b]roadband access is essential to the Nation's global competitiveness in the 21st century, driving job creation, promoting innovation, and expanding markets for American businesses," and also "afford[ing] public safety agencies the opportunity for greater levels of effectiveness and interoperability."[9]

8. As the demand for wireless capacity surges, we must take steps to ensure that the networks underlying wireless services can bear the load.[10] The record confirms that meeting America's growing demand for wireless broadband will require the deployment of large numbers of new or improved wireless facilities. AT&T alone plans to deploy more than 40,000 additional small cells, 1,000 additional DAS networks, and 10,000 additional macrocells from 2013 through 2015.[11] Verizon states that it expects to have deployed more than 3,000 small cells across the country in 2014 alone.[12] Recent data further demonstrate the impact of growing wireless demand on the need for new infrastructure. In its comments in a recent proceeding, PCIA states that in 2013 providers were expected to add up to 27,000 additional cell sites,[13] while CTIA reports that its member companies had 304,360 cell sites in service at year-end 2013, a 26% increase in five years.[14]

9. Despite the widely acknowledged need for additional wireless infrastructure, the process of deploying these facilities can be expensive, cumbersome, and time-consuming.[15] In addition to any private arrangements necessary to gain access to suitable land or structures, parties must typically obtain siting approval from the local municipality. They must also comply with the Commission's rules for environmental review, which implement our obligations under Federal statutes including the National Environmental Policy Act of 1969 (NEPA) and Section 106 of the National Historic Preservation Act of 1966 (NHPA or Section 106).[16]

(Continued from previous page)
Docket No. 09-51, WT Docket No. 10-208, *Report and Order and Further Notice of Proposed Rulemaking*, 26 FCC Rcd 17663, 17667 para. 3 (2011), *aff'd In re: FCC 11-161*, 753 F.3d 1015 (10th Cir. 2014). *See*, *generally*, Federal Communications Commission, Connecting America: The National Broadband Plan, at xi (rel. Mar. 16, 2010) (*National Broadband Plan*).

[9] *See* Executive Order 13616.

[10] *See* Alan Pearce, Ph.D., J. Richard Carlson, MBA, Michael Pagano, Ph.D, Wireless Broadband Infrastructure: A Catalyst for DGP and Job Growth 2013-2017, at 1-2 (Sept. 2013), submitted as an attachment to Letter from Jonathan M. Campbell, PCIA-The Wireless Infrastructure Association, to Marlene Dortch, Secretary, FCC, WT Docket Nos. 13-238, 13-32; WC Docket Nos. 11-59, 10-90, 07-135, 05-337, 03-109; GN Docket No. 09-51; CC Docket Nos. 01-92, 96-45 (filed Oct. 22, 2013).

[11] HetNet Forum Seminar Presentation, Small Cell Acceleration (July 29, 2013), *available at* http://www.thedasforum.org/wp-content/uploads/2013/07/HetNet-Forum-Small-Cell-Acceleration-Seminar-Presentations.pdf, at 21.

[12] Verizon Comments at 8.

[13] PCIA-The Wireless Infrastructure Association and the HetNet Forum Comments, WT Docket No. 13-135, at 8.

[14] *See* CTIA, "Annual Wireless Industry Survey," *available at* http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey.

[15] *See* Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, Amendment of Parts 1 and 17 of the Commission's Rules Regarding Public Notice Procedures for Processing Antenna Structure Registration Applications for Certain Temporary Towers, 2012 Biennial Review of Telecommunications Regulations, WT Docket Nos. 13-238, 13-32, WC Docket No. 13-122, *Notice of Proposed Rulemaking*, 28 FCC Rcd 14238, 14240 para. 3 (2013) (*Infrastructure NPRM*).

[16] *See* 42 U.S.C. §§ 4321 *et seq.*; 16 U.S.C. § 470f.

10. Although these review requirements serve important local and national interests, local and Federal review processes can slow deployment substantially, even in cases that do not present significant concerns.[17] Because these processes can significantly delay deployment, we now take action in four areas to reduce regulatory obstacles and bring efficiency to wireless facility siting and construction, as summarized below. We take these actions based on consideration of the entire record compiled in response to the *Infrastructure NPRM*.[18]

11. *Environmental and Historic Preservation Review Processes.* First, in Section III, we adopt measures to refine our environmental and historic preservation review processes under NEPA and NHPA to account for new wireless technologies, including physically small facilities like those used in DAS networks and small-cell systems that are a fraction of the size of macrocell installations.[19] In contrast to the large-scale antennas and structures that our review processes were designed to address, these smaller antennas (and their associated compact radio equipment) can operate on existing short structures such as utility poles as well as on rooftops or inside buildings. As described in detail in the Executive Summary and in Section III, we expand an existing categorical exclusion from NEPA review so that it applies not only to collocations on buildings and towers, but also to collocations on other structures like utility poles. We also adopt a new categorical exclusion from NEPA review for some kinds of deployments in utilities or communications rights-of-way. With respect to NHPA, we create new exclusions to address certain collocations on utility poles and other non-tower structures. We take these steps to assure that, as we continue to meet our responsibilities under NEPA and NHPA, we also fulfill our obligation under the Communications Act to ensure that rapid, efficient, and affordable radio communications services are available to all Americans.[20]

12. Prior to adopting or changing rules to implement NEPA, an agency is required to publish its proposed procedures in the Federal Register for comment, and the Council on Environmental Quality (CEQ) must advise whether the proposed procedures conform to NEPA and CEQ's regulations.[21] In keeping with this process, CEQ has advised that the measures we adopt in this Report and Order to clarify and modify our environmental review process conform with NEPA and CEQ regulations.[22] We have also

[17] *See* Fibertech Comments at 7 (reporting that "[m]any small cells deployments have languished for years due to lengthy and unproductive bureaucratic administrative tasks and hearings," and citing cases). Verizon reports that the NHPA review process alone takes an average of 84 days for its DAS deployments (where such review is required), even though DAS networks are desirable in large part because the components are small and unobtrusive; in one case, the NHPA review took 150 days for a single DAS installation on a single pole. Verizon Comments at 9.

[18] In response to the *Infrastructure NPRM*, we received 207 timely filed comments and 42 timely reply comments. Major commenters are listed, and the short forms by which they are cited in this Report and Order are identified, in Appendix A. In addition, we received numerous brief comments and *ex parte* submissions from a variety of interested parties, which are not listed in the Appendix but were reviewed and considered. To the extent that we cite comments in other proceedings, the citation specifies the docket.

[19] Small cells are low-powered wireless base stations that function like cells in a mobile network but provide significantly smaller coverage area than traditional macrocells. DAS networks represent another wireless alternative to macrocells, but differ from small cells in that, whereas each small-cell deployment includes its own transceiver equipment that generally serves on wireless carrier/operator, a DAS network involves the use of transceiver equipment at a central hub site to support multiple antenna locations throughout the desired coverage area and in "neutral-host" deployments can serve multiple wireless carriers/operators. We describe these technologies in detail below. *See infra*, Section III.A.

[20] 47 U.S.C. § 151.

[21] 40 C.F.R. § 1507.3(a).

[22] *See* Letter from Horst G. Greczmiel, Associate Director for NEPA Oversight, Council on Environmental Quality, to Peter B. Trachtenberg, Deputy Chief, Spectrum and Competition Policy Division, dated Oct. 17, 2014. This letter will be filed in WT Docket 13-238. The rules were first proposed in the *Infrastructure NPRM* that was published in the Federal Register on December 5, 2013. *See* Proposed Rules, Federal Communications Commission, 47 C.F.R. (continued….)

coordinated the steps we are taking to tailor and clarify our Section 106 review process with the Advisory Council on Historic Preservation (ACHP) and with Tribal Nations.[23]

13. We emphasize that additional, broader exclusions for DAS networks and other small facilities may well be appropriate. We conclude, however, that additional measures will require further consultation with CEQ, ACHP, state historic preservation officers, and Tribal Nations. With regard to our review process under Section 106, we find that broader reform is more appropriately undertaken through the development of a "program alternative" as defined under ACHP's rules.[24] Therefore, Commission staff are working with ACHP and other stakeholders to develop a program alternative that will promote additional efficiencies in the historic preservation review of DAS and small-cell deployments, and we expect that this process will conclude between 18 and 24 months after the release of this Report and Order.

14. *Temporary Towers.* In Section IV, we codify a waiver previously granted by the Commission,[25] and adopt a narrow exemption from the Commission's requirement that owners of proposed towers requiring antenna structure registration (ASR) provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption from notification requirements applies only to proposed temporary towers meeting defined criteria, including limits on the size and duration of the installation, that greatly reduce the likelihood of any significant environmental effects. Allowing licensees to deploy temporary towers meeting these criteria without first having to complete the Commission's environmental notification process will enable them to more effectively respond to emergencies, natural disasters, and other planned and unplanned short-term spikes in demand without undermining the purposes of the notification process. This exemption will "remove an administrative obstacle to the availability of broadband and other wireless services during major events and unanticipated periods of localized high demand" where expanded or substitute service is needed quickly.[26]

(Continued from previous page)
Parts 1 and 17, WT Docket Nos. 13-238, 13-32; WC Docket No. 11-59; FCC 13-122, Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, 78 Fed. Reg. 73144-02 (Dec. 5, 2013).

[23] *See* Letter from Jeffrey S. Steinberg, Geoffrey C. Blackwell, and Peter B. Trachtenberg, to Tribal Leaders, dated Aug. 28, 2014, WT Docket No. 13-238, filed Sept. 4, 2014 (Tribal Letter); Memo from Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, WT Docket No. 13-238, filed Sept. 4, 2014 (Tribal Sept. 4, 2014 Conference Call) (describing conference call with representatives of approximately 20 Tribal Nations concerning the Tribal Letter and issues in the rulemaking); Memo from Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, WT Docket No. 13-238, filed Sept. 11, 2014 (describing meetings with approximately 100 representatives from Tribal Nations across the United States at the conference of the National Association of Tribal Historic Preservation Officers, including a discussion of DAS and small cells and the ongoing proceeding); Memo from Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, WT Docket No. 13-238, filed Sept. 19, 2014 (describing Division staff meetings with Robert Thrower, Tribal Historic Preservation Officer for the Poarch Band of Creek Indians, and Jeremy McDaniel of the Catawba Indian Nation, including a discussion of DAS and small cells and the instant rulemaking proceeding). *See also Infrastructure NPRM*, 28 FCC Rcd at 14258 para. 54 & nn.104, 105 (detailing the Commission's preliminary Tribal outreach regarding Section 106 review for DAS and small cells).

[24] 36 C.F.R. § 800.14.

[25] *See* Amendment of Parts 1 and 17 of the Commission's Rules Regarding Public Notice Procedures for Processing Antenna Structure Registration Applications for Certain Temporary Towers; 2012 Biennial Review of Telecommunications Regulations, RM-11688, WT Docket No. 13-32, *Order*, 28 FCC Rcd 7758 (2013) (*Waiver Order*).

[26] *See Waiver Order*, 28 FCC Rcd at 7758 para. 1. As with the NEPA measures in Section III, CEQ's October 17, 2014 letter also advised that the environmental notification exemption we adopt in this Report and Order conforms with NEPA and CEQ's regulations.

15. *Section 6409(a) of the Spectrum Act.* In Section V, we adopt rules to implement and enforce Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act).[27] Section 6409(a) provides, in part, that "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."[28] By requiring timely approval of eligible requests, Congress intended to advance wireless broadband service for both public safety and commercial users.[29] Section 6409(a) includes a number of undefined terms, however, that bear directly on how the provision applies to infrastructure deployments, and the record confirms that there are substantial disputes on a wide range of interpretive issues under the provision. We accordingly adopt rules that clarify many of these terms and enforce their requirements, thus advancing Congress's goal of facilitating rapid deployment. These rules will serve the public interest by providing guidance to all stakeholders on their rights and responsibilities under the provision, reducing delays in the review process for wireless infrastructure modifications, and facilitating the rapid deployment of wireless infrastructure, thereby promoting advanced wireless broadband services.

16. *Section 332(c)(7).* Finally, in Section VI, we clarify issues related to Section 332(c)(7) of the Communications Act and the Commission's *2009 Declaratory Ruling*.[30] Among other things, we explain when a siting application is complete so as to trigger the presumptively reasonable timeframes for local and State review of siting applications under the *2009 Declaratory Ruling*, and how the timeframes apply to local moratoria and DAS or small-cell facilities. These clarifications will eliminate many disputes under Section 332(c)(7), provide certainty about timing related to siting applications (including the time at which applicants may seek judicial relief), and preserve State and municipal governments' roles in the siting application process.

* * *

17. Taken together, the actions we take in this Report and Order will enable more rapid deployment of wireless facilities, delivering broadband and wireless innovations to consumers across the country. At the same time, they will safeguard the environment, preserve historic properties, protect the interest of Tribal Nations in their ancestral lands and cultural legacies, and address municipalities' concerns over impacts to aesthetics and other local values.

II. EXECUTIVE SUMMARY

18. In this Section, we summarize the steps we take to facilitate wireless infrastructure deployment. First, as detailed in Section III.B, we adopt the following measures with regard to our NEPA process for review of environmental effects:

- Amend the existing NEPA categorical exclusion for antenna collocations on buildings and towers to clarify that it includes equipment associated with the antennas (such as wiring,

[27] *See* Spectrum Act § 6409(a). We note that Section 6409(a) has since been codified in the Communications Act as 47 U.S.C. § 1455(a). However, for consistency with the *Infrastructure NPRM*, we continue to refer to it as Section 6409(a).

[28] Spectrum Act § 6409(a)(1).

[29] *See* H.R. Rep. 112-399, at 136 (2012) (Conference Report). We note that much of the Conference Report describes provisions in the House or Senate bills, and is not necessarily representative of Congressional intent in passing the Spectrum Act. The portions of the Conference Report that we rely upon in this Report and Order pertain expressly to the Spectrum Act as passed.

[30] 47 U.S.C. § 332(c)(7); Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(b) to Ensure Timely Siting Review & to Preempt Under Section 253 State & Local Ordinances That Classify All Wireless Siting Proposals As Requiring A Variance, WT Docket No. 08-165, *Declaratory Ruling*, 24 FCC Rcd 13994 (2009) (*2009 Declaratory Ruling*).

cabling, cabinets, and backup-power), and that it also covers collocations in a building's interior;

- Amend the NEPA categorical exclusion for collocations to cover collocations on structures other than buildings and towers; and
- Adopt a new NEPA categorical exclusion for deployments, including deployments of new poles, in utility or communications rights-of-way that are in active use for such purposes, where the deployment does not constitute a substantial increase in size over the existing utility or communications uses.

All of these categorical exclusions are subject to Sections 1.1307(c) and (d) of the Commission's rules, which require the preparation of an Environmental Assessment (EA) for a proposed facility otherwise categorically excluded from environmental processing if the processing bureau, either on its own motion or in response to a public complaint, determines that it may have a significant environmental impact.[31]

19. As detailed in Section III.C, we adopt the following measures with regard to our Section 106 process for review of effects on historic properties:

- Adopt an exclusion from Section 106 review for collocations on utility structures, including utility poles and electric transmission towers, that meet the following conditions:
  - The deployment does not exceed a specified size limitation, detailed in Section III.C.2.a, when measured together with any other wireless deployment on the same structure;
  - The deployment will involve no new ground disturbance; and
  - The deployment is not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register of Historic Places (National Register); or (3) the subject of a pending complaint alleging adverse effect on historic properties.
- Adopt an exclusion from Section 106 review for collocations on buildings and any other non-tower structures that meet the following conditions:
  - There is an existing antenna on the building or structure;
  - The new deployment meets certain requirements related to visibility and proximity to an existing antenna;
  - The new antenna will comply with all zoning conditions and historic preservation conditions on existing antennas that directly mitigate or prevent effects, such as camouflage or concealment requirements;
  - The deployment will involve no new ground disturbance; and
  - The deployment is not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties.
- Clarify that the existing exclusions for certain collocations on buildings under the Commission's programmatic agreements extend to collocations inside buildings.

20. In Section IV, we adopt an exemption from the Commission's requirement that ASR applicants provide local and national environmental notification prior to submitting a completed ASR

[31] 47 C.F.R. § 1.1307(c), (d).

application for certain temporary antenna structures meeting criteria that make them unlikely to have significant environmental effects. Specifically, we exempt antenna structures that:

- Will be in place for 60 days or less;
- Require notice of construction to the Federal Aviation Administration (FAA);
- Do not require marking or lighting under FAA regulations;
- Will be less than 200 feet above ground level; and
- Will involve minimal or no ground excavation.

21. In Section V, we adopt rules to clarify and implement the requirements of Section 6409(a) of the Spectrum Act. Among other measures, we:

- Clarify that Section 6409(a) applies to support structures and to transmission equipment used in connection with any Commission-licensed or authorized wireless transmission;
- Define "transmission equipment" to encompass antennas and other equipment associated with and necessary to their operation, including power supply cables and backup power equipment;
- Define "tower" to include any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities;
- Clarify that the term "base station" includes structures other than towers that support or house an antenna, transceiver, or other associated equipment that constitutes part of a "base station" at the time the relevant application is filed with State or municipal authorities, even if the structure was not built for the sole or primary purpose of providing such support, but does not include structures that do not at that time support or house base station components;
- Clarify that a modification "substantially changes" the physical dimensions of a tower or base station, as measured from the dimensions of the tower or base station inclusive of any modifications approved prior to the passage of the Spectrum Act, if it meets any of the following criteria:
    - for towers outside of public rights-of-way, it increases the height by more than 20 feet or 10%, whichever is greater; for those towers in the rights-of-way and for all base stations, it increases the height of the tower or base station by more than 10% or 10 feet, whichever is greater;
    - for towers outside of public rights-of-way, it protrudes from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for those towers in the rights-of-way and for all base stations, it protrudes from the edge of the structure more than six feet;
    - it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets;
    - it entails any excavation or deployment outside the current site of the tower or base station;
    - it would defeat the existing concealment elements of the tower or base station; or
    - it does not comply with conditions associated with the prior approval of the tower or base station unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that does not exceed the corresponding "substantial change" thresholds;

- Provide that States and localities may continue to enforce and condition approval on compliance with generally applicable building, structural, electrical, and safety codes and with other laws codifying objective standards reasonably related to health and safety;
- With regard to the process for reviewing an application under Section 6409(a), provide that:
  - A State or local government may only require applicants to provide documentation that is reasonably related to determining whether the eligible facilities request meets the requirements of Section 6409(a);
  - Within 60 days from the date of filing, accounting for tolling, a State or local government shall approve an application covered by Section 6409(a); and
  - The running of the period may be tolled by mutual agreement or upon notice that an application is incomplete provided in accordance with the same deadlines and requirements applicable under Section 332(c)(7), as described below, but not by a moratorium;
- Provide that an application filed under Section 6409(a) is deemed granted if a State or local government fails to act on it within the requisite time period;
- Clarify that Section 6409(a) applies only to State and local governments acting in their role as land use regulators and does not apply to such entities acting in their proprietary capacities; and
- Provide that parties may bring disputes—including disputes related to application denials and deemed grants—in any court of competent jurisdiction. The Commission will not entertain such disputes.

22. In Section VI, we adopt clarifications of our *2009 Declaratory Ruling*, which established the presumptively reasonable time periods within which a State or local government must act on a facilities siting application under Section 332(c)(7) of the Communications Act. We take the following specific actions:

- Clarify, with regard to the Commission's determination in the *2009 Declaratory Ruling* that a State or municipality may toll the running of the shot clock if it notifies the applicant within 30 days of submission that its application is incomplete, that:
  - The timeframe begins to run when an application is first submitted, not when it is deemed complete by the reviewing government;
  - A determination of incompleteness tolls the shot clock only if the State or local government provides notice to the applicant in writing within 30 days of the application's submission, specifically delineating all missing information, and specifying the code provision, ordinance, application instruction, or otherwise publically-stated procedures that require the information to be submitted;
  - Following an applicant's submission in response to a determination of incompleteness, the State or local government may reach a subsequent determination of incompleteness based solely on the applicant's failure to supply the specific information that was requested within the first 30 days;
  - The shot clock begins running again when the applicant makes its supplemental submission; however, the shot clock may again be tolled if the State or local government notifies the applicant within 10 days that the supplemental submission did not provide the specific information identified in the original notice delineating missing information;
- Clarify that the presumptively reasonable timeframes run regardless of any applicable moratoria;

- Clarify that where DAS or small-cell facilities, including third-party facilities such as neutral-host DAS deployments, are or will be used for the provision of personal wireless services, their siting applications are subject to the *2009 Declaratory Ruling* and the presumptively reasonable timeframes it established; and
- Decline to adopt an additional remedy for State or local government failures to act within the presumptively reasonable time limits.

III. NEPA AND NHPA REVIEW OF SMALL WIRELESS FACILITIES

23. In this section, we adopt measures to update our review processes under NEPA[32] and Section 106 of NHPA,[33] with a particular emphasis on accommodating new wireless technologies that use smaller antennas and compact radio equipment to provide mobile voice and broadband service. These technologies, including distributed antenna systems (DAS), small cells, and others, can be deployed on a variety of non-traditional structures such as utility poles, as well as on rooftops and inside buildings, to enhance capacity or fill in coverage gaps. Updating our environmental and historic preservation rules will enable these innovations to flourish, delivering more broadband service to more communities, while reducing the need for potentially intrusive new construction and safeguarding the values the rules are designed to protect.

24. Our environmental and historic preservation rules have traditionally been directed toward the deployment of macrocells on towers and other tall structures.[34] Since 1974, these rules have excluded collocations of antennas from most of the requirements under our NEPA review process, recognizing the benefits to the environment and historic properties from the use of existing support structures over the construction of new structures. These exclusions have limitations, however. The collocation exclusion under NEPA, which was first established in 1974, on its face encompasses only deployments on existing towers and buildings, as these were the only support structures widely used 40 years ago, and therefore does not encompass collocations on existing utility poles, for example. Similarly, the collocation exclusions in our process for historic preservation review under Section 106 do not consider the scale of small wireless facility deployments.

25. Thus, while small wireless technologies are increasingly deployed to meet the growing demand for high mobile data speeds and ubiquitous coverage, our rules and processes under NEPA and Section 106, even as modified over time, have not reflected those technical advances. Accordingly, after review of the record, we conclude that it will serve the public interest to update our environmental and historic preservation rules in large measure to account for innovative small facilities, and we take substantial steps to advance the goal of widespread wireless deployment, including clarifying and amending our categorical exclusions. We conclude that these categorical exclusions, as codified in Note 1 and 4 of Section 1.1306 of our rules, do not have the potential for individually or cumulatively significant environmental impacts.[35] We find that the steps we take today will serve both the industry and the conservation values our review process was intended to protect. These steps will eliminate review processes and the sometimes cumbersome compliance measures that accompany such review, relieving the industry of review process requirements in cases where they are not needed. At the same time, we eliminate the need for bureaucratic review of deployments that do not require it. These steps will advance our goal of spurring efficient wireless broadband deployment while also ensuring that we continue to protect environmental and historic preservation values.

[32] *See* 42 U.S.C. §§ 4321 *et seq*.

[33] *See* 16 U.S.C. § 470f.

[34] We use the term "macrocell" to refer to a high-powered deployment, typically installed relatively high on a tower, to provide signal coverage to a large geographic area.

[35] 47 C.F.R. § 1.1306 Note 1, Note 4.

26. Specifically, and as discussed in detail below, we take the following actions in connection with our NEPA review process: (1) we amend the existing NEPA categorical exclusion for antenna collocations on buildings and towers to clarify that it includes equipment associated with the antennas (such as wiring, cabling, cabinets, and backup-power equipment), and that it also covers collocations in a building's interior, and we codify these clarifications; (2) we amend the NEPA categorical exclusion for collocations to cover collocations on structures other than buildings and towers; and (3) we adopt a new NEPA categorical exclusion for deployments, including deployments of new poles, in utility or communications rights-of-way that are in active use for such purposes, where the deployment does not constitute a substantial increase in size over the existing utility or communications uses.[36]

27. We also adopt measures to update our historic preservation review process under Section 106 of NHPA. Relying on our authority under the rules of ACHP, we adopt two limited exclusions from Section 106 review, one applicable to utility structures specifically and the other to non-tower structures in general, including buildings. First, we exclude from Section 106 review collocations on utility structures, including utility poles and electric transmission towers, that meet the following conditions: (1) the antenna and any associated equipment, when measured together with any other wireless deployments on the same structure, meet specified size limitations; and (2) the deployment will involve no new ground disturbance. Second, we exclude collocations on buildings and any other non-tower structures that meet the following conditions: (1) there is an existing antenna on the building or structure; (2) the collocation meets one of three alternative criteria for visibility, location, and size, as described in detail below; (3) the new antenna complies with all zoning conditions and historic preservation conditions on existing antennas that directly mitigate or prevent effects, such as camouflage or concealment requirements; and (4) the deployment involves no new ground disturbance. We further limit both of these collocation exclusions, however, to deployments that are not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, these two new targeted exclusions address collocations on utility structures and other non-tower structures where historic preservation review would otherwise be required under the Collocation Agreement and our existing rules only because the structures are more than 45 years old. In addition to these two new exclusions, we further clarify that the existing exclusions for certain collocations on buildings under the Commission's programmatic agreements extend to collocations inside buildings.

28. While these steps will provide significant benefits for wireless deployments, particularly DAS and small-cell deployments, we intend to take additional measures, including adopting broader exclusions from NEPA and Section 106 review. However, consistent with NEPA and NHPA, we conclude that additional measures will require further consideration and consultation. Accordingly, we do not, at this time, adopt categorical exclusions from NEPA and NHPA review that would cover all DAS

[36] We emphasize that none of these exclusions, or any other action we take in this Report and Order, would exclude any facility from the requirement under our rules to conduct an Environmental Assessment if human exposure to radiofrequency (RF) emissions will exceed specified levels. *See* 47 C.F.R. § 1.1307(b). We further note that the Commission issued a First Report and Order, Further Notice of Proposed Rule Making, and Notice of Inquiry last year that addressed several issues regarding compliance with current RF exposure criteria, and sought comment on whether to reassess the current limits. *See* Reassessment of Federal Communications Commission Radiofrequency Exposure Limits and Policies; Proposed Changes in the Commission's Rules Regarding Human Exposure to Radiofrequency Electromagnetic Fields, ET Docket Nos. 13-84, 03-137, *First Report and Order, Further Notice of Proposed Rulemaking, and Notice of Inquiry*, 28 FCC Rcd 3498 (2013) (*RF Emissions R&O, FNPRM, & NOI*). Because that proceeding remains open, we do not address comments filed in this proceeding to the extent they suggest changes to our RF exposure standards.

and small-cell deployments.[37] We recognize that there are ways to make the historic preservation review process in particular even more efficient. We find, however, that broader reform of our process is more appropriately undertaken through the development of a "program alternative" as defined under ACHP's rules, which provides greater opportunity and flexibility to tailor our process than our limited authority under ACHP's rules to adopt exclusions.[38] Therefore, in consultation with ACHP and other applicable stakeholders, Commission staff are developing a program alternative that will further facilitate review of DAS and small-cell deployments by better focusing review on those deployments that are likely to raise concerns, including on structures other than utility poles and transmission towers even if there is no existing antenna on the structure. For example, Verizon proposes that we find that no historic properties will be affected by a deployment on structures other than utility poles and transmission towers where (1) the facility meets specified volumetric limits; (2) the facility involves no new ground disturbance under the standard defined by the Nationwide Programmatic Agreement (NPA); (3) the facility requires historic preservation review solely due to the age of the structure; and (4) the structure is neither listed in the National Register nor formally determined eligible for listing by the Keeper of the National Register.[39] While we find that such an exclusion is not appropriate under the governing ACHP rule that provides us narrow authority to unilaterally adopt exclusions from Section 106 review, we intend to address this proposal in the program alternative process. We expect that this process will conclude between 18 and 24 months after the release of this Report and Order.

A. Description of DAS, Small Cells, and Other Small Wireless Technologies

29. The increasing demand for advanced wireless services and greater wireless bandwidth is driving an urgent and growing need for additional infrastructure deployment and new infrastructure technologies.[40] To meet localized needs for coverage and increased capacity in outdoor and indoor environments, many wireless providers have turned in part to DAS and small-cell technologies.[41]

30. Small cells are low-powered wireless base stations that function like cells in a mobile wireless network, typically covering targeted indoor or localized outdoor areas ranging in size from

[37] *See Infrastructure NPRM*, 28 FCC Rcd at 14254-55 para. 43 (seeking comment on whether to adopt a categorical exclusion for some or all of the components involved in DAS and small-cell deployments from NEPA review other than for compliance with RF exposure limits).

[38] As discussed below, we must comply with the rules of ACHP, which specify the process under which Federal agencies shall perform their historic preservation reviews. *See* 36 C.F.R. §§ 800.2, 800.3. Program alternatives, which allow Federal agencies to streamline their Section 106 process by tailoring the process to the agency's programs and decision-making process, substitute in whole or in part for ACHP's Section 106 regulations under Subpart B. *See* 36 C.F.R. § 800.14. Program alternatives can include alternative procedures or programmatic agreements, among other possibilities. *See* "Program Alternatives," *available at* http://www.achp.gov/progalt/.

[39] *See* Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket 13-238, filed Oct. 8, 2014 (Verizon Oct. 8, 2014 *Ex Parte*).

[40] *See* PCIA Comments at 2-3; Verizon Comments at 2.

[41] *See* Crown Castle Comments at 2 ("DAS and Small Cell networks provide an increasingly important role in facilitating the deployment of broadband infrastructure, as network operators seek to target broadband capacity to the locations where their customers use wireless broadband and to improve in-building coverage."); Implementation of Section 6002(B) of the Omnibus Budget Reconciliation Act of 1993, Annual Report and Analysis of Competitive Market Conditions With Respect to Mobile Wireless, Including Commercial Mobile Services, *Sixteenth Report*, WT Docket No. 11-186, 28 FCC Rcd 3700, 3933 para. 373 (2013) (*Sixteenth Competition Report*); J. Sharpe Smith, AGL Magazine, "Towers Will Handle Most Mobile Data Growth in Next Five Years," Mar. 11, 2013, *available at* http://www.aglmediagroup.com/tag/james-taiclet/ (noting projection by Cisco that 25% of wireless data growth through 2017 will be carried by DAS, picocells and Wi-Fi); Tammy Parker, FierceWirelessTech, "Active DAS equipment market growing 20% annually in North America," Aug. 18, 2012, *available at* http://www.fiercebroadbandwireless.com/story/active-das-equipment-market-growing-20-annually-north-america/2012-08-18.

homes and offices to stadiums, shopping malls, hospitals, and metropolitan outdoor spaces.[42] Wireless service providers often use small cells to provide connectivity to their subscribers in areas that present capacity and coverage challenges to traditional wide-area macrocell networks, such as coverage gaps created by buildings, tower siting difficulties, and challenging terrain.[43] Because these cells are significantly smaller in coverage area than traditional macrocells, networks that incorporate small-cell technology can reuse scarce wireless frequencies, thus greatly increasing spectral efficiency and data capacity within the network footprint.[44] For example, deploying ten small cells in a coverage area that can be served by a single macrocell could result in a tenfold increase in capacity while using the same quantity of spectrum.[45]

31. DAS provides another alternative to macrocells mounted on tall antenna structures.[46] A DAS network distributes RF signals from transceivers at a central hub to a specific service area with poor coverage or inadequate capacity.[47] As typically configured, a DAS network consists of: (1) a number of remote communications nodes deployed throughout the desired coverage area, each including at least one antenna for transmission and reception; (2) a high capacity signal transport medium (typically fiber optic cable) connecting each node to a central communications hub site; and (3) radio transceivers located at the hub site (rather than at each individual node as is the case for small cells) to process or control the communications signals transmitted and received through the antennas.[48] DAS deployments offer robust and broad coverage without creating the visual and physical impacts of multiple macrocells. Further, whereas small cells are usually operator-managed and support only a single wireless service provider, DAS networks can often accommodate multiple providers using different frequencies and/or wireless air interfaces.[49]

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[42] *See Sixteenth Competition Report*, 28 FCC Rcd at 3937-38 para. 384; "Small Cell Forum: What is a small cell?", *available at* http://www.smallcellforum.org/aboutsmallcells-small-cells-what-is-a-small-cell. While the industry has not always been consistent in the terms it uses for different types of small-cell technology, generally speaking, femtocells, picocells, metrocells, and microcells refer to types of small-cell technologies with coverage areas of increasing size.

[43] *See* Amendment of the Commission's Rules with Regard to Commercial Operations in the 3550-3650 MHz Band, GN Docket No. 12-354, *Notice of Proposed Rulemaking and Order*, 27 FCC Rcd 15594, 15596 para. 4, 15605 para. 30 (2012) (*3.5 GHz Service Rules NPRM*). Networks using a mix of both macrocells and small wireless technologies are sometimes referred to as "heterogeneous networks" or "HetNets." *See*, *e.g.*, Sara Landström, Anders FuruskÃr, Klas Johansson, Laetitia Falconetti, and Fredric Kronestedt, "Heterogeneous networks – increasing cellular capacity," *available at* http://www.ericsson.com/res/thecompany/docs/publications/ericsson_review/2011/heterogeneous_networks.pdf; PCIA Comments, GN Docket No. 12-354, at 3 n.6.

[44] *See 3.5 GHz Service Rules NPRM,* 27 FCC Rcd at 15596 para. 4.

[45] *Id.*

[46] *See Sixteenth Competition Report*, 28 FCC Rcd at 3906 para. 321.

[47] *See, e.g.,* "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf, at 5.

[48] *Id. See also* Ontario Energy Board, Expert Report of Charles L. Jackson, "Wireless Networks and Utility Poles," June 11, 2013, *available at* https://www.torontohydro.com/sites/electricsystem/Documents/Wireless/Expert%20Evidence%20of%20Charles%20L.%20Jackson%20June%2011,%202013.pdf, at 13 (noting that while "each small cell is a separate base station, . . . a cell with a distributed antenna system is built by connecting several antennas to a single base station").

[49] *See*, *e.g.*, "Small Cell Forum: What is a small cell?", *available at* http://www.smallcellforum.org/aboutsmallcells-small-cells-what-is-a-small-cell (noting that small cells are "operator-controlled"); "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-

(continued….)

32. Small wireless technologies like DAS and small cells have a number of advantages over traditional macrocells. Because the facilities deployed at each node are physically much smaller than macrocell antennas and associated equipment and do not require the same elevation, they can be placed on light stanchions, utility poles, building walls and rooftops, and other small structures either privately owned or in the public rights-of-way. Thus, providers can deploy the technologies in geographic areas, such as densely populated urban areas, where traditional towers are not feasible or in areas, such as stadiums, where localized wireless traffic demands would require an unrealistic number of macrocells.[50]

33. In addition, because these technologies utilize small equipment and transmit at signal power levels much lower than macrocells, they can be deployed in indoor environments to improve interior wireless services.[51] Current estimates suggest that more than 60% of wireless voice calls and 70% of wireless data usage take place inside buildings.[52] DAS and small-cell deployments not only improve interior coverage in a general sense, they can also enhance security by providing a cost-effective mechanism for public-safety communications throughout a building alongside commercial cellular services.[53] Deployments of such small facilities are also particularly useful to address capacity or coverage needs in areas with stringent siting regulations, such as historic districts. Because small cells are smaller and less visible than macrocells, providers can more easily deploy them with stealth measures such as concealment enclosures that blend with the structures on which they are installed.

34. More broadly, DAS and small-cell deployments are a comparatively cost-effective way of addressing increased demand for wireless broadband services, particularly in urban areas.[54] As a result, providers are rapidly increasing their use of these technologies, and the growth is projected to increase exponentially in the coming years. According to one estimate, more than 37 million small cells will be

(Continued from previous page)
2_4_13.pdf, at 3 (noting that in contrast to DAS, "small cell solutions are typically deployed piecemeal to provide coverage or enhance capacity in much smaller areas with a single wireless communications technology for a single wireless carrier.").

[50] *See, e.g.,* PCIA Comments at i; Verizon Comments at 2, 8; Letter from D. Zachary Champ, PCIA-The Wireless Infrastructure Association, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-59; GN Docket No. 12-354, filed Mar. 19, 2013 (PCIA Mar. 19, 2013 *Ex Parte*), Attach. (Dr. Amos J. Loveday, DAS/Small Cells & Historic Preservation: An Analysis of the Impact of Historic Preservation Rules on Distributed Antenna Systems and Small Cell Deployment, Feb. 27, 2013, at 1, 2 ("Loveday Report")); "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf, at 6. *See also* PCIA – The Wireless Infrastructure Association and the DAS Forum Comments, WC Docket No. 11-59, at 11-12, 27 (PCIA and DAS Forum *NOI* Comments).

[51] Common candidates for indoor DAS deployments include offices and corporate campuses, stadiums, universities, retail centers, health care facilities, transportation centers (*e.g.*, airports, train and subway stations) and hospitality venues (*e.g.*, hotels, convention centers). *See* Tracy Ford, BICSI News Magazine, "Installing DAS & Small Cells – What You Need to Know," *available at* http://www.thedasforum.org/wp-content/uploads/2013/04/Ford-BISCI-News-Article.pdf.

[52] *Id*. Another report estimates that more than two-thirds of all wireless communication occurs indoors. *See* ECS, "An In-Depth Look at DAS, Wi-FI, and Small Cell Growth and Trends," *available at* http://ecselectrical.net/2014/03/an-in-depth-look-at-das-wi-fi-and-small-cell-growth-and-trends/.

[53] *See* John B. Whatley, "White Paper: Considerations for an in-building distributed antenna system," *available at* http://www.rcrwireless.com/article/20120104/infrastructure-2/das/white-paper-considerations-for-an-in-building-distributed-antenna-system/. Public safety information can be broadcast across a range of frequencies that DAS networks can support. *Id.*

[54] *See* "Hetrogeneous Networks, Securing Excellent Broadband Mobile Experience, Everywhere," Ericsson White Paper, Sept. 2014, *available at* http://www.ericsson.com/res/docs/whitepapers/wp-heterogenous-networks.pdf, at 5-6.

deployed by 2017.[55] Another predicts that 16 million DAS nodes will be deployed by 2018—with the number of nodes doubling between 2013 and 2016—and that more than 50% of DAS networks will include Wi-Fi capability by 2018.[56] Indeed, one study projects that aggregate small-cell capacity will overtake macrocell capacity by 2016-2017.[57] As they are increasingly relied upon, DAS and small-cell technologies are also posing new logistical deployment challenges.[58] In particular, because individual DAS nodes and small cells cover small areas, providers must often deploy a substantial number of nodes to achieve the seamless coverage of a single macrocell.[59]

B. NEPA Categorical Exclusions

1. Regulatory Background

35. NEPA requires Federal agencies to identify and evaluate the environmental effects of proposed Federal actions and to prepare a "detailed statement" for "major Federal actions significantly affecting the quality of the human environment."[60] In particular, NEPA requires Federal agencies to take a "hard look" at "major" Federal actions that may have significant environmental consequences and to disseminate relevant information to the public.[61] The Commission satisfies its NEPA responsibility to

[55] *See* Joe Madden, "Cost Comparison: Carrier Wi-Fi, Small Cells, DAS, Repeaters," April 2013, *available at* http://www.richardsonrfpd.com/resources/RellDocuments/SYS_29/Joe_Madden_April2013.pdf, at 2. Verizon states that it plans to deploy over 3,000 small cells across the country in 2014. *See* Verizon Comments at 8. By 2015, AT&T plans to deploy over 40,000 small cells and over 1,000 DAS networks, in addition to 10,000 macrocells. *See* PCIA Comments at 3.

[56] *See* Antenna Systems & Technology, "16 Million DAS Nodes to be Deployed Through 2018," *available at* http://www.antennasonline.com/main/news/16-million-das-nodes-to-be-deployed-through-2018/ (citing a forecast report by Mobile Experts called "DAS: Absorbing Small Cells and Wi-Fi").

[57] *See* Tessco, "Cellular Coverage/Capacity . . . the Small Cell Revolution," *available at* https://www.tessco.com/yts/knowledge_center/su/cellular-coverage-capacity-the-small-cell-revolution.html. A December 2012 survey conducted by Informa found that 98% of operators think small cells are essential to the future of their networks. *Id.*

[58] *See, e.g.*, Wireless Magazine, "Small cells and DAS – A widely distributed choice," Feb. 22, 2013, *available at* http://www.wireless-mag.com/features/24320/small-cells-and-das---a-widely-distributed-choice.aspx (noting that multiple operators often need to share systems in order to please localities, and that efficient management of a shared system may require a middleman to acquire and manage sites); Vladan Jevremovic, Ph. D., "The Technological Future of Small Cells," *available at* http://www.ibwave.com/blog/the-technological-future-of-small-cells/ (noting challenges of heterogeneous networks, also known as HetNets, which integrate small-cell technologies and DAS with macrocells into a single network).

[59] *See*, *e.g.*, "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf, at 3, 4 (explaining that DAS networks can range from just two nodes to ten, fifty, or even more nodes, covering areas ranging from several blocks to entire cities); AT&T, "DAS a Winner, How AT&T's Distributed Antenna System Keeps Fans Connected," *available at* http://www.att.com/Common/about_us/files/pdf/das_football.pdf (indicating DAS deployment in a stadium typically includes hundreds of antennas). For further information regarding DAS and small cells, *see* FCC, "Augmenting Mobile Broadband in Your Community – An Overview of Distributed Antenna Systems and Small Cell Solutions," *available at* http://www.fcc.gov/events/augmenting-mobile-broadband-your-community-overview-distributed-antenna-systems-and-small-cel (describing Commission-hosted workshop providing "an overview of [DAS] and small cell technologies that augment mobile broadband and wireless services").

[60] *See* 42 U.S.C. § 4332(2)(C); 47 C.F.R. § 1.1305; National Environmental Policy Act Compliance for Proposed Tower Registrations, Effects of Communications Towers on Migratory Birds, WT Docket Nos. 08-61, 03-187, *Order on Remand*, 26 FCC Rcd 16700, 16702-03 (2011) (*Environmental Notification Order on Remand*) (citing *Robertson v. Methow Valley Citizens Council*, 490 U.S. 332, 349-50 (1989)).

[61] *Robertson,* 490 U.S. at 349-50.

identify and evaluate the environmental effects of proposed Federal actions that do not have significant impacts and therefore do not require a "detailed statement" (an Environmental Impact Statement[62]) using an environmental assessment or a categorical exclusion.[63] Federal actions include projects or programs that are entirely or partly financed, assisted, conducted, regulated, or approved by Federal agencies.[64]

36. Under Section 204 of NEPA, the Council on Environmental Quality (CEQ) is entrusted with NEPA oversight responsibility.[65] CEQ's regulations direct agencies to identify their Federal actions and place each within one of three categories.[66] The first category encompasses actions that normally have a significant environmental impact. Before undertaking these actions, the agency must prepare an Environmental Impact Statement (EIS).[67] The second category includes actions that may, but do not necessarily, have a significant environmental impact.[68] For actions in this category, an agency may conduct an Environmental Assessment (EA) in lieu of an EIS.[69] If the EA shows that a proposed action will have no significant environmental impact, then the agency issues a Finding of No Significant Impact,[70] and the proposed action can proceed. Otherwise, the agency must proceed with the EIS process. The third category—"categorical exclusions"—covers actions that, based on the agency's assessment, "do not individually or cumulatively have a significant effect on the human environment . . . and for which . . . neither an environmental assessment nor an environmental impact statement is required."[71] CEQ regulations require that an agency that chooses to establish categorical exclusions must also provide for "extraordinary circumstances" under which an action that is normally categorically excluded may have a significant environmental effect and therefore require further NEPA review in an EA or EIS.[72]

37. The Commission has generally found that its grant or approval of an application that will result in the deployment of a wireless communications facility qualifies as a Federal action, thereby subjecting the facility to NEPA procedures.[73] With respect to the first category of actions described

[62] 40 C.F.R. § 1508.11.

[63] 47 C.F.R. §§ 1.1306, 1.1307.

[64] 40 C.F.R. § 1508.18(a).

[65] *See* 42 U.S.C. § 4344.

[66] *See* 40 C.F.R. § 1507.3(b)(2).

[67] *See* 40 C.F.R. § 1501.4. An EIS is a detailed statement by the responsible Federal official on: "(i) the environmental impact of the proposed action, (ii) any adverse environmental effects which cannot be avoided should the proposal be implemented, (iii) alternatives to the proposed action, (iv) the relationship between local short-term uses of man's environment and the maintenance and enhancement of long-term productivity, and (v) any irreversible and irretrievable commitments of resources which would be involved in the proposed action should it be implemented." 42 U.S.C. § 4332(2)(C); *see also* 40 C.F.R. § 1508.11. The Commission's procedures for preparing an EIS are described in 47 C.F.R. §§ 1.1314-1.1319.

[68] *See* 40 C.F.R. §§ 1501.4(b), 1507.3(b)(2)(iii) (providing that agency procedures shall identify those typical classes of action that normally require EAs but not necessarily EISs).

[69] *See* 40 C.F.R. §§ 1501.4(b), 1507.3(b)(2)(iii). An EA is briefer than an EIS, and its purpose is to determine whether an EIS is required. Pursuant to CEQ's regulations, an EA is a document that: (1) discusses the need for a proposed action, the alternatives, and the environmental impacts of the proposed action and alternatives; (2) lists the agencies and persons consulted; and (3) provides evidence and analysis for determining whether to prepare an environmental impact statement or a finding of no significant impact (FONSI). *See* 40 C.F.R. § 1508.9. *See also* 40 C.F.R. § 1501.4(b).

[70] *See* 40 C.F.R. § 1508.13.

[71] 40 C.F.R. § 1508.4. *See* 40 C.F.R. § 1507.3(b)(2)(ii); 47 C.F.R. §§ 1.1306, 1.1307.

[72] 40 C.F.R. § 1508.4.

[73] *See Infrastructure NPRM*, 28 FCC Rcd at 14247 para. 21.

above, the Commission has found that *none* of its actions are of a type that ordinarily *will* have the potential for a significant environmental impact, and therefore that no facility deployments automatically require an EIS.[74] Sections 1.1307(a) and (b) of the Commission's rules identify the environmentally sensitive circumstances under which communications-facility deployments *may* significantly affect the environment and require preparation of an EA.[75] Section 1.1307(a) includes facilities to be located in an officially designated wilderness area, an officially designated wildlife preserve, or a flood plain. It also includes facilities that may affect threatened or endangered species or their critical habitats, or are likely to jeopardize proposed threatened or endangered species or destroy or adversely modify proposed critical habitats; that may affect districts, sites, buildings, structures or objects that are listed, or eligible for listing, in the National Register; that may affect Native American religious sites; that will involve significant change in surface features (*e.g.*, deforestation); or that will be located in residential neighborhoods and will be equipped with high intensity white lights.[76] In addition, under Section 1.1307(b) a facility may have a significant environmental impact if it would cause human exposure to RF emissions in excess of specified levels.[77] For all of these proposed facilities identified in Sections 1.1307(a) and (b), unless they are identified in the Notes to Section 1.1306 as discussed below, applicants must prepare and submit an EA that the Commission uses to determine whether the deployment would result in a significant environmental impact. Sections 1.1307(c) and (d) also require the preparation of an EA for a proposed facility otherwise categorically excluded from environmental processing under Section 1.1306 if the processing bureau, either on its own motion or in response to a public complaint, determines that it may have a significant environmental impact.[78]

38. With respect to the third category described above, Section 1.1306 of the Commission's rules specifies those actions that are categorically excluded from environmental review.[79] Under Section 1.1306, wireless facility deployments, including deployments of new wireless towers, are categorically excluded from review if they fall outside of the environmentally sensitive categories identified in Sections 1.1307(a) and (b). Further, Note 1 to Section 1.1306 (Note 1) clarifies that the requirement to file an EA under Section 1.1307(a) generally does not apply to "the mounting of antenna(s) on an existing building or antenna tower" or to the installation of wire or cable in an existing underground or aerial corridor, even if an environmentally sensitive circumstance identified in Section 1.1307(a) is present.[80] More specifically, Note 1 provides that mounting an antenna on an existing building or antenna tower is categorically excluded under NEPA unless Section 1.1307(a)(4) applies (that is, if the proposed installation may affect historic properties protected by Section 106) or if the proposed installation would result in human exposure to RF emissions in excess of health and safety guidelines cited in Section 1.1307(b). Note 1 reflects a preference first articulated by the Commission in 1974, and codified into Note 1 in 1986, that "[t]he use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged."[81]

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[74] *See* 47 C.F.R. §1.1305.

[75] *See* 47 C.F.R. § 1.1307(a), (b).

[76] *See* 47 C.F.R. § 1.1307(a).

[77] *See* 47 C.F.R. § 1.1307(b). As noted above, the Commission has initiated a proceeding on RF emissions criteria, and that proceeding is pending. *See supra,* n.36.

[78] *See* 47 C.F.R. § 1.1307(c), (d).

[79] *See* 47 C.F.R. § 1.1306(a).

[80] 47 C.F.R. § 1.1306 Note 1.

[81] *Id. See*, *e.g.*, Amendment of the Commission's Environmental Rules, *Order*, 3 FCC Rcd 4986, 4986 para. 7 (1988) (*1988 NEPA Order*) ("The Commission has long held that the mounting of antennas on existing buildings or antenna towers generally is environmentally preferable to the construction of a new facility, a preference which is reflected in note 1."); Implementation of the National Environmental Policy Act of 1969, Docket No. 19555, *Report and Order*, 49 FCC 2d 1313, 1324 para. 27 (1974) (*1974 NEPA Order*). The Note 1 categorical exclusion for (continued….)

2. Antennas Mounted on Existing Buildings and Towers

a. Clarification of "Antenna"

39. *Background.* The *Infrastructure NPRM* sought comment on whether to provide expressly that the categorical exclusion for the mounting of "antenna(s)" on buildings or towers also applies to the equipment associated with the antenna, such as transceivers, converters, and power supplies.[82] It also sought comment on whether and how, in this context, the Commission should clarify what constitutes associated equipment.[83]

40. Industry commenters argue that the categorical exclusion should be interpreted to include associated equipment.[84] Verizon argues that if the exclusion does not encompass such equipment, then our rules would require NEPA review for every collocation, and that this would vitiate the exclusion and frustrate its intended purpose.[85] Some municipal commenters express concerns about the proposed clarification, however.[86] Savannah opposes including any associated equipment under the NEPA collocation categorical exclusion, asserting that it may have a greater environmental or historic preservation impact than the antenna itself.[87] Tempe argues that the categorical exclusion should not extend to diesel generators because of their fumes, noise, and potential for spills.[88]

41. *Discussion.* Because the record confirms some uncertainty regarding the scope of the Commission's existing Note 1 categorical exclusion for the "mounting of antenna(s) on existing buildings and antenna towers," we take this opportunity to clarify the scope of the categorical exclusion.[89] We first clarify that the term "antenna" as used in Note 1 encompasses all on-site equipment associated with the

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collocations on existing buildings or towers was originally adopted in 1986. *See* Amendment of Environmental Rules in Response to New Regulations Issued by the Council on Environmental Quality, *Report and Order*, GEN Docket No. 79-163, 60 Rad. Reg. 2d 13 (1986) (*1986 NEPA Order*). It was modified in the *1988 NEPA Order* to provide that such collocations are subject to Section 1.1307(a)(4) as well as to Section 1.1307(b). *See 1988 NEPA Order*, 3 FCC Rcd at 4986 para. 7.

[82] *Infrastructure NPRM*, 28 FCC Rcd at 14254 para. 40.

[83] *See id.*

[84] *See, e.g.,* AT&T Comments at 10 (arguing that Note 1 already extends to associated equipment and therefore needs no amendment to do so); PCIA Comments at 17 (arguing as an "analogy" that associated equipment is covered by the term "antenna" as used in the programmatic agreements governing the Commission's historic preservation review process); UTC Comments at 4 (supporting amendment to the exclusion so that it "expressly covers" the associated equipment); Verizon Comments at 15-16 (arguing that Commission should change the phrase "mounting of antenna(s)" to "mounting of antenna(s) and associated equipment," or otherwise "make clear" that the Note 1 exclusion applies to associated equipment).

[85] *See* Verizon Comments at 16. *See also* AT&T Comments at 10 (arguing that limiting the categorical exclusion to antennas "would frustrate the purpose of the exemption, as it would exclude equipment, mountings, and other components needed to operate the antennas"); Towerstream Comments at 31 (arguing that application of "stringent" environmental requirements to "the other equipment necessary to operate these wireless technologies would not provide effective relief").

[86] *See, e.g.,* Letter from Edna Branch Jackson, Mayor, Savannah, Georgia, to Jane Jackson, FCC, WT Docket No. 13-238, filed April 8, 2014 (Savannah *Ex Parte*), at 2; San Antonio Reply Comments at 27; Tempe Comments at 5-7. *See also* Alexandria *et al.* Comments at 4 (arguing that if Commission were to read Section 6409(a) of the Spectrum Act to broadly preempt local review of modification requests that present environmental and historic preservation concerns, then the Commission's proposed actions on Note 1 would be inappropriate).

[87] *See* Savannah *Ex Parte* at 2; *see also* San Antonio Reply Comments at 27 (objecting to inclusion of associated equipment because "many additional equipment deployments will be swept out of the reach of NEPA" as a result).

[88] *See* Tempe Comments at 5-7.

[89] We also amend the text of Note 1 to codify the clarification. *See infra*, App. B.

antenna, including transceivers, cables, wiring, converters, power supplies, equipment cabinets and shelters, and other comparable equipment. We conclude that this is the only logically consistent interpretation of the term, as associated equipment is a standard part of such collocations, and the antennas subject to NEPA review cannot operate without it.[90] Thus, interpreting the term "antenna" as omitting associated equipment would eviscerate the categorical exclusion by requiring routine NEPA review for nearly every collocation. Such an interpretation would therefore frustrate the categorical exclusion's purpose.[91] We also note that our interpretation of "antenna" in this context is consistent with how the Commission has defined the term "antenna" in the comparable context of our process for reviewing effects of proposed deployments on historic properties. Specifically, and as discussed in detail in the next section, the Commission's Section 106 historic preservation review is governed by two programmatic agreements, and in both, the term "antenna" encompasses all associated equipment.[92]

42. Further, if associated equipment presented significant concerns, we would expect that otherwise excluded collocations that included such equipment would, at some point over the past 40 years, have been subject to environmental objections or petitions to deny. We are unaware of any such objections or petitions directed at backup generators or any other associated equipment, or of any past EAs that found any significant environmental effect from such equipment.[93] Given this long history, we find some commenters' generalized assertions of a risk of environmental effects to be unpersuasive, and we reaffirm that the collocations covered by Note 1, including the collocation of associated equipment addressed by our clarification, will not individually or cumulatively have a significant effect on the human environment.[94]

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[90] *See, e.g.,* AT&T Comments at 4, 10; Verizon Comments at 15-16.

[91] *See, e.g.,* AT&T Comments at 10; Towerstream Comments at 31; *see also* 47 C.F.R. § 1.1306 Note 1.

[92] The first agreement, the 2001 Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, provides that most collocations of antennas on existing structures are excluded from routine historic preservation review, with a few defined exceptions to address potentially problematic situations. *See* 47 C.F.R. Part 1, App. B, Nationwide Programmatic Agreement for the Collocation of Wireless Antennas (Collocation Agreement). The second, the 2005 Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process, establishes a detailed process for the review of the effects of proposed communications facilities on historic properties. *See* 47 C.F.R. Part 1, App. C, Nationwide Programmatic Agreement Regarding the Section 106 National Historic Preservation Act Review Process § II.A.1 (NPA) (defining "antenna" to include associated equipment). While the Collocation Agreement does not define the term "antenna," its use of the term indicates that it necessarily encompasses the associated equipment. 47 C.F.R. Part 1, App. B, Nationwide Programmatic Agreement for the Collocation of Wireless Antennas. For example, the Collocation Agreement specifies that a collocation of an "antenna" on a tower constitutes a "substantial increase in the size of the tower" if "[t]he mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved." Collocation Agreement § I.C(2). We note that this intuitive interpretation of "antenna" in the context of wireless facility collocations is also reflected in certain local ordinances. For example, Montgomery County, Maryland, recently adopted an amendment to its zoning ordinance to provide, *inter alia*, that an "Antenna on Existing Structure includes related equipment." Montgomery County, Maryland Zoning Ordinance Section 59.3.5.14(C)(1). *See* Ordinance No.: 17-49, Zoning Text Amendment No.: 14-04, "Concerning: Accessory Commercial Uses – Antennas," adopted July 22, 2014, effective Oct. 30, 2014, *available at* http://www.montgomerycountymd.gov/COUNCIL/Resources/Files/zta/2014/20140722_17-49.pdf.

[93] *Cf.* Nationwide Programmatic Agreement Regarding The Section 106 National Historic Preservation Act Review Process, WT Docket No. 03-128, *Report and Order*, 20 FCC Rcd 1073, 1130 para. 158 (2004) (*NPA Report and Order*) ("We are aware of no case, however, where noise from a communications facility generator has been found to have an adverse effect on a historic property."), *aff'd*, *CTIA-The Wireless Ass'n v. F.C.C.*, 466 F.3d 105 (D.C. Cir. 2006).

[94] While Alexandria *et al.* submit a declaration from Joseph Monaco asserting that "[m]inor additions to existing facilities could have significant effects even if only incremental to past disturbances," *see* Alexandria *et al.* Comments, Attach. (Monaco Declaration), at 5, we find this position is inconsistent with the Commission's finding that the mounting of antennas on existing towers and buildings will not have significant effects, and with our (continued….)

43. Against this evidence, we find unpersuasive Tempe's argument that the NEPA categorical exclusion for collocation should not encompass backup generators in particular.[95] Tempe argues that generators cause "fumes, noise, and the potential for exposure to hazardous substances if there is a leak or a spill" and therefore "should not be allowed to be installed without the appropriate oversight."[96] To the extent Tempe raises concerns about noise from testing generators,[97] we note that the Commission has previously determined that maintenance and servicing of equipment do not constitute Commission "undertakings" subject to the Section 106 historic preservation review process,[98] and that courts have generally treated Federal actions under NEPA as closely analogous to Federal undertakings under NHPA.[99] Thus, such maintenance procedures arguably do not constitute Federal actions subject to environmental review under NEPA.[100] In any case, the Wireless Telecommunications Bureau addressed all of these potential impacts in its Final Programmatic Environmental Assessment for the Antenna Structure Registration Program (PEA), and did not find any to be significant.[101] Tempe's own comments,

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experience administering the NEPA process, in which a collocation has never been identified by the Commission or the public to have caused a significant environmental effect. We further note that the proffered examples appear to confuse consideration under our NEPA process with review under local process, which we do not address here. *See*, *e.g.*, Monaco Declaration at 7 (stating that "[r]emoving local discretion from the process of siting and design of additions to existing structures could result in significant effects" with respect to an endangered species). To the extent that rare circumstances exist where "even the smallest change could result in a significant effect, based on the intrinsic sensitivity of a particular resource," Monaco Declaration at 11, we conclude that such extraordinary circumstances are appropriately addressed through Sections 1.1307(c) and (d), as necessary. Consistent with the requirement under CEQ regulations that an agency that establishes categorical exclusions must also provide for "extraordinary circumstances" under which an action that is normally categorically excluded may have a significant environmental effect and therefore require further NEPA review, we reaffirm that under Sections 1.1307(c) and (d) of our rules, if the relevant Bureau determines on its own motion or in response to a public objection that a proposed deployment that falls under this categorical exclusion may have a significant environmental impact, it will require the preparation of an EA. 47 C.F.R. § 1.1307(c), (d).

[95] We note that the National Park Service adopted a categorical exclusion for proposed tower construction in Yellowstone National Park that included the installation of a backup generator based on a determination that the action would result in "no or minor impacts." *See* National Park Service, U.S. Department of the Interior, Categorical Exclusion Form, PEPC Project Number 43426, Oct. 13, 2012, *available at* http://parkplanning.nps.gov/document.cfm?parkID=111&projectID=43426&documentID=50144.

[96] Tempe Comments at 5-6.

[97] *See* Tempe Reply Comments at 3.

[98] *NPA Report and Order*, 20 FCC Rcd at 1088 para. 39 (citing NPA § I.B. ("Many changes to tower sites . . . are in the nature of service or maintenance and are not federal undertakings. Thus, the Nationwide Agreement provides explicitly that Undertakings do not include maintenance and servicing of equipment.")).

[99] *See*, *e.g.*, *Karst Environmental Educ. and Protection, Inc. v. Environmental Protection Agency*, 475 F.3d 1291, 1295-96 (D.C. Cir. 2007); *Sac and Fox Nation of Missouri v. Norton*, 240 F.3d 1250, 1263 (10th Cir. 2001).

[100] *But see* 47 C.F.R. § 1.1311(b) (specifying that "[i]n the case of wilderness areas, wildlife preserves, or other like areas, the [EA] shall discuss the effect of any continuing pattern of human intrusion into the area (*e.g.,* necessitated by the operation and maintenance of the facilities).").

[101] *See* Final Programmatic Environmental Assessment For the Antenna Structure Registration Program, *Public Notice*, 2012 WL 871792 (WTB Mar. 13, 2012) (*PEA*), at 8 ("Several resources were determined to not be affected by or to be affected negligibly by the No Action Alternative, Alternative 1, and the three options under Alternative 2. These resources include: geology, soils, farmlands, groundwater, coastal zones/barriers, designated wilderness areas (which are already protected under FCC rules), air quality, noise, and land use."), 38 (finding that all considered options for registration of antenna structures taking into account emissions from backup generators, would have negligible impact on air quality), *id.* (finding that registered antenna structures would create no long-term differences in the frequency, magnitude, or duration of noise at the project site(s) and therefore all options "are expected to have negligible impacts on noise"), 70 (finding that potential that a spill or leak from a fuel-burning
(continued….)

moreover, confirm that backup generators are already subject to extensive local, State, and Federal regulation, suggesting that further oversight from the Commission would not meaningfully augment existing environmental safeguards. For example, as Tempe notes, local building and fire codes often regulate the deployment of generators.[102] In addition, the Environmental Protection Agency and many localities regulate emissions from and use of backup generators to alleviate environmental concerns,[103] and generators must comply with any applicable noise ordinances and laws as well.[104] In assessing environmental effect, an agency may factor in an assumption that the action is performed in compliance with other applicable regulatory requirements in the absence of a basis in the record beyond mere speculation that the action threatens violations of such requirements.[105] Tempe's comments support our conclusion that such regulations applicable to backup generators address Tempe's concerns.[106] Further,

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generator would occur is small, and the amount of fuel onsite would not be sufficient to cause widespread contamination" and that, therefore, "[s]pills or leaks would likely result in short-term negligible to minor adverse impacts on surface water resources").

[102] *See* Tempe Comments at 6-7.

[103] *See* Environmental Protection Agency, "Nonroad Diesel Engines," *available at* http://www.epa.gov/otaq/nonroad-diesel.htm (noting that Environmental Protection Agency (EPA) has "adopted a comprehensive national program to reduce emissions from non-road diesel engines by [systemically] integrating engine and fuel controls"); *see also* Diesel Technology Forum, "Diesel at Work," *available at* http://www.dieselforum.org/diesel-at-work/power-generation (noting that "[d]iesel generators are covered by a wide range of federal, state and local requirements regarding emissions performance and operating conditions").

[104] *Cf.* "City of Palo Alto, California, Staff Report 2393," *available at* http://paloaltocityca.iqm2.com/Citizens/Detail_LegiFile.aspx?Frame=&ID=2393&CssClass= (finding Palo Alto DAS installation compliant with local noise ordinance). Moreover, any noise from such generators is unlikely to have a significant effect on the environment, as they will be used only on the comparatively infrequent occasions when power has been lost or during brief periodic testing. *Cf.* Gray Tower Environmental Assessment, *available at* http://www.ntia.doc.gov/legacy/psic/MSCommNet%20PSIC%20EA%20report%20final.pdf (finding no significant long-term noise impacts from generator as "use of the generator would be limited and would only occur during equipment maintenance and testing as a backup for primary power equipment and during interruption of the primary (grid) power supply").

[105] *See*, *e.g.*, *PEA*, 2012 WL 871792, at *38 (assessing environmental impact of noise, the Wireless Telecommunications Bureau concluded that, "because tower construction is a private activity that is subject to state and local regulations, such as requirements to perform work during day-time business hours, the Bureau expects that any short-term impacts to adjacent land uses and populations would be mitigated" and further that "[c]onstruction workers also are required to comply with Occupational Safety and Health Administration noise regulations"); National Telecommunications and Information Administration, "Finding of No Significant Impact for Proposed Gray Tower," *available at* http://www.ntia.doc.gov/legacy/psic/Gray%20Tower_ME_09-01-11.pdf (approving Gray Tower EA, which found no significant impact from tower that included generator in part because "Federal regulations limit the use of backup generators to 500 hours per year"); *Lone Tree Council v. U.S. Army Corp. of Engineers*, 2007 WL 1520904 (E.D. Mich. May 24, 2007) (upholding agency's Finding of No Significant Impact, where argument that its action might involve release of pollutant in violation of Clean Water Act certification was nothing more than "speculation"). *See also Sierra Club v. Van Antwerp*, 661 F.3d 1147, 1155 (D.C. Cir. 2012) (upholding agency's FONSI, finding that agency reasonably found that past violation from similar action did not "threaten" future violations where previous violation was result of error and "not a problem of design"); *Audubon Naturalist Society of the Central Atlantic States, Inc. v. U.S. Dept. of Transp.*, 524 F.Supp.2d 642 (D.Md. 2007) (affirming Department of Transportation's reliance in its environmental assessment on EPA standards regarding emissions).

[106] *See* Tempe Comments at 6-7.

we find that cell sites with such generators will rarely if ever be grouped in sufficient proximity to present a risk of cumulative effects.[107]

44. Accordingly, we find no reason to interpret "antenna" in the Note 1 NEPA collocation categorical exclusion to omit backup generators or other kinds of backup power equipment. Rather, as discussed above, we find that the term "antenna" as used in the categorical exclusion should be interpreted to encompass the on-site equipment associated with the antenna, including backup power sources. Further, the need for such power sources at tower sites is largely undisputed, as backup power is critical for continued service in the event of natural disasters or other power disruptions—times when the need and demand for such service is often at its greatest.[108] We therefore amend Note 1 to clarify that the categorical exclusion encompasses equipment associated with the antenna, including the critical component of backup power.

45. Finally, we note once again that Sections 1.1306(b)(1)-(3) and 1.1307(c) and (d) of our rules provide for situations where environmental concerns are presented and, as called for by the requirement that categorical exclusions include consideration of extraordinary circumstances, closer scrutiny and potential additional environmental review are appropriate. Sections 1.1306(b)(1)-(3) expressly cross reference the factors in Section 1.1307 that trigger the need for an EA. Further, under Sections 1.1307(c) and (d) of our rules, even otherwise categorically excluded applications are subject to environmental review if the bureau responsible for processing the application determines on its own motion or in response to a public objection that the proposed deployment may have a significant environmental impact for which an EA must be prepared.[109] We conclude that individual cases presenting extraordinary circumstances in which collocated generators or other associated equipment may have a significant effect on the environment, including cases in which closely spaced generators may have a significant cumulative effect or where the deployment of such generators would violate local codes in a manner that raises environmental concerns, will be adequately addressed through these provisions.[110]

b. Antennas Mounted in the Interior of Buildings

46. *Background.* The *Infrastructure NPRM* also sought comment on whether the Commission should clarify that the existing NEPA categorical exclusion for mounting antennas on buildings applies not only to installations on rooftops and facades but also to installations in the interior of buildings.[111] As noted above, interior placements play an increasingly important role in providing access to wireless networks from inside buildings and other indoor environments.

47. No commenters oppose the proposed clarification, although Tempe objects to any categorical exclusion that would allow a diesel generator inside an existing building or other structure based on concerns about fumes, noise, and the potential for exposure to hazardous substances if there is a leak or a spill.[112] Industry commenters support the clarification, arguing that no special environmental

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[107] *See*, *e.g.*, American Tower Corporation, Generator Site List, *available at* http://www.americantower.com/Assets/uploads/files/Excel/Variable-related/Americantower_backup-power_site-list.xls.

[108] *See* Improving 9-1-1 Reliability; Reliability and Continuity of Communications Networks, Including Broadband Technologies, PS Docket Nos. 13-75, 11-60, *Notice of Proposed Rulemaking*, 28 FCC Rcd 3414 (2013) (seeking comment on approaches to ensure the reliability and resiliency of the communications infrastructure necessary to ensure continued availability of the Nation's 9-1-1 system, particularly during times of major disaster).

[109] *See* 47 C.F.R. § 1.1307(c), (d).

[110] *Cf. NPA Report and Order*, 20 FCC Rcd at 1130 para. 158 (finding that reliance on public complaint is best approach to address "unusual case" of a generator having an adverse impact on historic properties).

[111] *See Infrastructure NPRM*, 28 FCC Rcd at 14254 para. 41.

[112] *See* Tempe Comments at 6.

effects arise from collocations in the interior of buildings as opposed to collocations on the exterior.[113] Towerstream argues that this clarification is necessary to advance the goal of facilitating DAS and small-cell deployments that often operate inside buildings.[114] AT&T argues that, "regardless of the manner or location of antenna placements on an existing structure, collocations meet the goals of the" categorical exclusion—namely, encouraging collocations and minimizing new tower construction.[115]

48. *Discussion.* We adopt the proposal and clarify that the existing NEPA categorical exclusion for mounting antennas "on" existing buildings applies to installations in the interior of existing buildings.[116] An antenna mounted on a surface inside a building is as much "on" the building as an antenna mounted on a surface on the exterior, and we find nothing in the language of the categorical exclusion, in the adopting order, or in the current record supporting a distinction between collocations on the exterior or in the interior that would limit the scope of the categorical exclusion to exterior collocations.[117] To the contrary, it is even more likely that indoor installations will have no significant environmental effects in the environmentally sensitive areas in which proposed deployments would generally trigger the need to prepare an EA, such as wilderness areas, wildlife preserves, and flood plains.[118] Specifically, the existing Note 1 collocation categorical exclusion reflects a finding that collocations do not individually or cumulatively have a significant effect on the human environment, even if they would otherwise trigger the requirement of an EA under the criteria identified in Sections 1.1307(a)(1)-(3) and (5)-(8). We find that this conclusion applies equally or even more strongly to an antenna deployed inside a building than to one on its exterior, since the building's exterior structure would serve as a buffer against any effects.[119] In addition, we note that FirstNet, the National Telecommunications and Information Administration (NTIA), and other agencies have adopted categorical exclusions covering internal modifications and equipment additions inside buildings and structures. For example, in adopting categorical exclusions as part of its implementation of the Broadband Technology Opportunities Program, NTIA noted that excluding interior modifications and equipment additions reflects long-standing categorical exclusions and administrative records, including in particular "the legacy categorical exclusions from the U.S. Department of Agriculture, U.S. Department of Homeland Security, and the Federal Emergency Management Agency."[120] While a Federal agency cannot apply another agency's categorical exclusion to a proposed Federal action, it may substantiate a categorical exclusion of its own based on another agency's experience with a comparable categorical

[113] *See*, *e.g.*, UTC Comments at 4; WISPA Comments at 14.

[114] *See* Towerstream Comments at 31.

[115] *See* AT&T Comments 10.

[116] In the *Infrastructure NPRM*, the Commission also sought comment on whether to codify this clarification by amending Note 1. *See Infrastructure NPRM*, 28 FCC Rcd at 14255 para. 41 (seeking comment on whether to "amend the first sentence of Note 1 to clarify that the collocation exclusion applies to installations in the interior of buildings").

[117] *See, e.g.,* AT&T Comments at 10; UTC Comments at 4; WISPA Comments at 14.

[118] *See, e.g.,* ACUTA Comments at 4.

[119] For example, Section 1.1307(a)(2) normally requires an EA for facilities in wildlife preserves, 47 C.F.R. § 1.1307(a)(2), but under Note 1, this provision does not encompass collocations on buildings. We find it evident that interior deployments have, if anything, less potential to impact such environments than exterior deployments.

[120] Department of Commerce, National Telecommunications and Information Administration, National Environmental Policy Act—Categorical Exclusions covering the Broadband Technology Opportunities Program (BTOP), Docket No. 0906221081-91339-02, 74 Fed. Reg. 52456, 52458 (Oct. 13, 2009); *see also* Department of Commerce, National Telecommunications and Information Administration, First Responder Network Authority, National Environmental Policy Act Categorical Exclusions, Docket Number 131219999-4338-02, 79 Fed. Reg. 23945, 23949 (April 29, 2014) (similar).

exclusion.[121] This long-standing practice of numerous agencies that conduct comparable activities, reflecting experience that confirms the propriety of the categorical exclusion, provides further support for the conclusion that internal collocations will not individually or cumulatively have a significant effect on the human environment.[122] With respect to Tempe's concern about generators being placed inside buildings as the result of collocations, as noted above, we rely on local building, noise, and safety regulations to address these concerns, and we anticipate that such regulations will almost always require generators to be outside of any residential buildings where their use would present health or safety concerns or else place very strict requirements on any placement in the interior.[123] For all of these reasons, we find it appropriate to amend Note 1 to clarify that the Note 1 collocation categorical exclusion applies to the mounting of antennas in the interior of buildings as well as the exterior.

49. We emphasize that the NEPA categorical exclusion we address here does not encompass deployments that may significantly affect historic properties, nor does it cover the review required if exposure to RF emissions would exceed specified levels.[124] Measures to promote efficiencies in Section 106 processing, including processing of certain interior deployments, are discussed in Section III.C below.

c. Antennas Mounted on Other Structures

50. *Background.* The Commission also asked whether it should expand the Note 1 categorical exclusion, which currently extends to deployments on existing buildings or antenna towers, to deployments on other existing structures, including but not limited to utility poles, water tanks, and road signs.[125] The Commission tentatively concluded that its prior determination that collocations on antenna towers and buildings are individually and cumulatively unlikely to have significant environmental effects applies equally to collocations on other structures.[126] In addition, and in support of this conclusion, the Commission noted that the NHPA Collocation Agreement and the NPA do not distinguish between buildings and other non-tower structures in applying exclusions from Section 106 review.[127]

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[121] *See* Council On Environmental Quality, "Final Guidance for Federal Departments and Agencies on Establishing, Applying, and Revising Categorical Exclusion under the National Environmental Policy Act," 75 FR 75628, 75634 (Dec. 6, 2010).

[122] *See*, *e.g.*, First Responder Network Authority; National Environmental Policy Act Implementing Procedures and Categorical Exclusions, 79 FR 639, 640 (Jan. 6, 2014) (drawing on NTIA exclusions after finding, *inter alia*, that its projects are comparable and that, in the 100 cases where excluded projects were subject to review due to extraordinary circumstances, NTIA had made a Finding of No Significant Impact in 99 cases and was still in the process of reviewing one project).

[123] *See*, *e.g.*, University of Colorado Boulder Fire and Life-Safety Group, "A Code Review for Emergency Generators and Indoor Use of Portable Generators," *available at* http://www.colorado.edu/firelifesafety/sites/default/files/attached-files/EmergencyandIndoorGenerators.pdf; Norwall Power Systems, "Choosing a Location for Standby Home Generator Installation," *available at* http://www.norwall.com/blog/generator-information/locating-standby-home-generator-installation/; eHow, "Indoor Emergency Generator Requirements," *available at* http://www.ehow.com/list_7707300_indoor-emergency-generator-requirements.html; David Gries, E-A-R Specialty Composites, "Noise Control Solutions for Standby Power Generators," *available at* http://www.earsc.com/pdfs/StandbyGeneratorsWhitePaper.pdf.

[124] *See* 47 C.F.R. § 1.1307(b). Specifically, with regard to antennas that are deployed pursuant to the NEPA collocation categorical exclusion, Note 1 provides: "Such antennas are subject to § 1.1307(b) of this part and require EAs if their construction would result in human exposure to radiofrequency radiation in excess of the applicable health and safety guidelines cited in § 1.1307(b) of this part." 47 C.F.R. § 1.1306 Note 1. *See also supra*, n.36.

[125] *See Infrastructure NPRM*, 28 FCC Rcd at 14253-54 paras. 37-39.

[126] *Id.* at 14253 para. 38.

[127] *Id.* (citing Collocation Agreement § V, Collocation of Antennas on Buildings and Non-Tower Structures Outside of Historic Districts).

51. Industry commenters broadly support the proposal.[128] They argue that collocations by placement on existing structures other than towers and buildings are unlikely to have any greater environmental effects than collocations on towers or buildings, and that facilitating such collocations will speed deployment of broadband wireless facilities without impacting the environment.[129] Mesquite also supports the proposal, but other municipalities oppose it.[130] The municipalities in opposition (including Mendham, Phoenix, Savannah, Tempe, High Point, West Palm Beach, and Coconut Creek) argue that the categorical exclusion should not extend to collocations on water tanks in particular because of concerns about water safety.[131] Some, such as Tempe, express concern that collocations on road signs should not be categorically excluded because they could distract drivers and affect vehicular safety.[132]

52. *Discussion.* We adopt the proposal to extend the categorical exclusion for collocations on towers and buildings to collocations on other existing man-made structures.[133] After review of the record, we conclude that deployments covered by this extension will not individually or cumulatively have a significant impact on the human environment. Through this measure, we update the categorical exclusion adopted as part of Note 1 in 1986 to reflect the modern development of wireless technologies that can be collocated on a much broader range of existing structures. This measure will facilitate collocations and speed deployment of wireless broadband to consumers without significantly affecting the environment.[134]

53. In finding that it is appropriate to broaden the categorical exclusion contained in Section 1.1306 Note 1 to apply to other structures, we rely in part on the Commission's prior findings regarding the environmental effects of collocations. In implementing NEPA requirements in 1974, for example, the Commission found that mounting an antenna on an existing building or tower "has no significant aesthetic effect and is environmentally preferable to the construction of a new tower, provided there is compliance with radiation safety standards."[135] In revising its NEPA rules in 1986, the Commission found that antennas mounted on towers and buildings are among those deployments that will normally have no significant impact on the environment.[136] We note in particular that collocations will typically add only marginal if any extra height to a structure, and that in 2011, in a proceeding addressing the

[128] *See, e.g.,* AT&T Comments at 4, 9; AT&T Reply Comments at 2, 4; PCIA Comments at 17; PCIA Reply Comments at 8; Sprint Comments at 6; TIA Comments at 3; UTC Comments at 1-4; UTC Reply Comments at 2-3; Verizon Comments at 4; WISPA Comments at 12-13; WISPA Reply Comments at 11.

[129] *See, e.g.,* Sprint Comments at 6; UTC Reply Comments at 2-3; Verizon Comments at 15-16; WISPA Comments at 13.

[130] *Compare* Mesquite Comments at 1 *with* Mendham Comments at 4; Phoenix Comments at 3; Savannah *Ex Parte* at 1.

[131] *See, e.g.,* High Point Comments at 2; Tempe Comments at 5 (expressing concerns about collocations on water tanks as they are critical infrastructure); West Palm Beach Comments at 2 (stating that proposal is not objectionable in concept but should not apply to water tank collocations); *see also* Coconut Creek Comments at 2 (same); Steel in the Air Comments at 2 (same).

[132] *See* Tempe Comments at 5.

[133] We extend the categorical exclusion to other existing structures subject to the same limitations that apply to the existing categorical exclusion. Namely, the categorical exclusion does not apply to review for effects on historic properties nor to review for compliance with our RF exposure limits. Further, we retain authority under Sections 1.1307(c) and (d) of our rules to address individual cases where there may be significant environmental effects. *See* 47 C.F.R. §§ 1.1306(a), 1.1307(c), (d).

[134] *See, e.g.,* Improving Performance of Federal Permitting and Review of Infrastructure Projects, Exec. Order No. 13604, 77 Fed. Reg. 18887 (Mar. 22, 2012).

[135] *1974 NEPA Order*, 49 FCC 2d at 1324 para. 27.

[136] *See 1986 NEPA Order*, 60 Rad. Reg. 2d at 15 para. 6; *Environmental Notification Order on Remand*, 26 FCC Rcd at 16708 para. 19.

Commission's NEPA requirements with respect to migratory birds, the Commission reaffirmed that collocations on towers and buildings are unlikely to have environmental effects and thus such collocations are categorically excluded from review for impact on birds.[137] Further, given that towers and buildings are typically much taller than other man-made structures on which antennas will be collocated, we expect that there will be even less potential for significant effects on birds from collocations on such other structures.

54. In the *Infrastructure NPRM*, we tentatively concluded that the same determination applies with regard to collocations on other structures such as utility poles and water towers.[138] Numerous commenters support this determination,[139] and opponents offer no persuasive basis to distinguish the environmental effects of collocations on antenna towers and buildings from the effects of collocations on other existing structures. Indeed, in this regard, we note that buildings and towers, which are already excluded under Note 1, are typically taller than structures such as utility poles and road signs.[140] While some commenters raise concerns about possible water-tank contamination or driver distraction,[141] these concerns do not present persuasive grounds to limit the categorical exclusion. Under Sections 1.1306(a) and (b), collocations on structures such as water tanks and road signs are already categorically excluded from the obligation to file an EA unless they occur in the environmentally sensitive circumstances identified in Sections 1.1307(a) or (b) (such as in wildlife preserves or flood plains).[142] Nothing in the record leads us to find that collocations in such sensitive areas that currently require EAs present greater risks of water tank contamination or driver distraction than collocations outside such areas.[143]

55. We also find support for expanding this categorical exclusion for collocations in our approach to historic preservation review and in other agencies' approach to environmental review. We note in particular that the exclusion from Section 106 review in the Collocation Agreement is not limited to collocations on towers and buildings but also specifically includes collocations on other existing non-tower structures.[144] Further, the U.S. Fish and Wildlife Service has found collocations on existing non-

[137] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16708 para. 19 & n.57.

[138] *See Infrastructure NPRM*, 28 FCC Rcd at 14253 para. 38.

[139] *See, e.g.,* AT&T Comments at 4, 9; PCIA Comments at 17; Sprint Comments at 6; UTC Comments at 4; Verizon Comments at 15-16; WISPA Comments at 13.

[140] According to statistics published by the Florida Public Service Commission, the standard utility pole is 35 feet tall, though poles can range from 20 to 100 feet tall. *See* Florida Public Service Commission, "What's on a Utility Pole?" *available at* http://www.psc.state.fl.us/consumers/utilitypole/en/AllUtilityPoleInfo.aspx. By contrast, antenna structures, *e.g.,* towers, must be registered if the tower is taller than 200 feet above ground level or may interfere with the flight path of a nearby airport. *See* FCC, "Antenna Structure Registration (ASR) – Help," *available at* http://www.fcc.gov/help/antenna-structure-registration-asr-help.

[141] *See supra,* n.131.

[142] Under the existing rules, actions not within the categories for which EAs are required under Sections 1.1307(a) and (b) of the Commission's rules "are deemed individually and cumulatively to have no significant effect on the quality of the human environment and are categorically excluded from environmental processing . . . [e]xcept as provided in Sections 1.1307(c) and (d)." 47 C.F.R. § 1.1306(a).

[143] For similar reasons, we are also not persuaded by Springfield's argument that extending the categorical exclusion to other structures without "qualifying delimitations for how DAS facilities are defined and where they may be installed may have unacceptable impacts on historic and other sensitive neighborhoods." Springfield Comments at 4. Springfield offers no argument to explain why the NEPA categorical exclusion for collocations on utility poles should be more restrictive than the exclusion for collocations on buildings. Moreover, we note that the NEPA categorical exclusion we address here does not exclude the proposed collocation from NHPA review for effects on historic properties or historic districts.

[144] *See* Collocation Agreement § I.A (defining "collocation" covered by the Agreement as "the mounting or installation of an antenna on an existing tower, building or structure for the purpose of transmitting and/or receiving [RF] signals for communications purposes"). We note that the phrase "for the purpose of transmitting and/or

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tower structures to be environmentally desirable with regard to impacts on birds, noting that they will in virtually every circumstance have less impact than would construction of a new tower.[145]

56. As the Commission noted in the *Infrastructure NPRM*, non-tower and non-building structures are vitally important to the deployment of broadband and other services,[146] particularly via DAS and small-cell facilities.[147] As we noted above, small facility deployments are increasing dramatically, and they are typically located on utility poles or similar structures rather than on towers.[148] Further, the Note 1 categorical exclusion reflects our long-held position that collocations are environmentally desirable because they obviate the need for construction of new towers,[149] and broadening the category of excluded structures advances this policy. Considering that collocating on these structures is necessary for broadband deployment, and in light of the environmental benefits of encouraging collocation rather than the construction of new structures and our analysis above, we find that extending the categorical exclusion to other structures advances the public interest and meets our obligations under NEPA.

3. Categorical Exclusion of Deployments in Communications or Utilities Rights-of-Way

57. *Background*. In the *Infrastructure NPRM*, the Commission sought comment on whether to adopt a categorical exclusion for small facilities located in communications or utility rights-of-way.[150] Noting that the NPA excludes wireless deployments (including deployments on new structures) from routine Section 106 review when they are located in or near above-ground utility or telecommunications rights-of-way, the Commission sought comment on whether to adopt a similar categorical exclusion from routine NEPA review. Further, in the event it were to adopt such a categorical exclusion, the Commission sought comment on whether to apply any of the conditions that are applicable under the NPA rights-of-way exclusion, such as limiting it to facilities that do not constitute a substantial increase in size relative

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receiving [RF] signals for communications purposes" is intended to modify "an antenna" rather than "an existing tower, building or structure." This is evident because, if the phrase were to modify "an existing tower, building or structure," then such buildings and structures would themselves qualify as towers under the definition of tower in the Collocation Agreement, rendering "building or structure" redundant. Collocation Agreement § I.B.

[145] *See*, *e.g.*, Recommendations to Avoid Adverse Impacts to Migratory Birds, Federally Listed Species and Other Wildlife from Communications Towers and Antennae, Guidance prepared by the U.S. Fish and Wildlife Service, *available at* http://www.dgif.virginia.gov/environmental-programs/files/USFWS-tower-recommendations.pdf, at 1 ("Collocate communication antennae and other equipment on existing structures whenever possible to avoid new tower construction. Antennae have been mounted on rooftops; flagpoles; bell, cross, and clock towers; road signs; silos; and water and power line towers. Where attachment to an existing non-tower structure is not feasible, collocate antennae on existing communication towers.").

[146] *See Infrastructure NPRM*, 28 FCC Rcd at 14253 para. 38 & n.91 (citing Implementation of Section 224 of the Act; A National Broadband Plan For Our Future, WC Docket No. 07-245, GN Docket No. 09-51, *Report and Order and Order on Reconsideration*, 26 FCC Rcd 5240, 5241-42 (2011)).

[147] *Id.* at 14253 para. 38, n.92 (citing, *e.g.*, Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-59, filed May 14, 2013; Letter from Colleen Thompson, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-59, filed June 17, 2013)).

[148] *See, e.g.,* "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf, at 3.

[149] *See* 47 C.F.R. § 1.1306 Note 1 ("The use of existing buildings, towers or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged."); *1988 NEPA Order*, 3 FCC Rcd 4986, 4986 para. 7 (citing *1974 NEPA Order*, 49 FCC 2d at 1320, 1324).

[150] *See Infrastructure NPRM*, 28 FCC Rcd at 14256-57 para. 50.

to existing nearby structures in the right-of-way.[151] The Commission also sought comment on whether to expand the categorical exclusion in Section 1.1306 Note 1, which currently covers "the installation of aerial wire or cable over existing aerial corridors of prior or permitted use or the underground installation of wire or cable along existing underground corridors of prior or permitted use, established by the applicant or others."[152] The *Infrastructure NPRM* sought comment on extending the categorical exclusion to cover components of DAS or small-cell deployments, including new support structures, in such corridors.[153]

58. Industry commenters support the adoption of a categorical exclusion for installations in the rights-of-way.[154] WISPA recommends that we "adopt a categorical exclusion from routine NEPA review for all communications facilities" in communications and utilities rights-of-way, with conditions similar to the rights-of-way exclusion in the NPA.[155] AT&T similarly recommends that we adopt a rights-of-way NEPA categorical exclusion for all communications facilities, not just DAS and small-cell installations, in or within 50 feet of rights-of-way, including new support structures of comparable size to other structures in the right-of-way.[156] Some industry commenters also support a categorical exclusion for installations in existing aerial or underground corridors.[157]

59. Eugene opposes any expansion of the current NEPA categorical exclusions.[158] While not generally objecting to a rights-of-way categorical exclusion, Tempe argues that we should "limit the number of non-substantial increases in size over existing structures to only one," and that all subsequent increases in size should be subject to Section 106 review.[159] Tempe argues that "[m]ultiple incremental increases could create a negative impact."[160] Coconut Creek indicates it is not opposed to exclusions in existing aerial corridors, where infrastructure is attached to existing equipment, but expresses concern with any exclusion of above-ground deployments where there is no existing above-ground infrastructure.[161] Further, it asserts that installing new wireless infrastructure within rights-of-way may cause hazards to pedestrian and vehicular traffic, and it notes that a "substantial increase in size" criterion does not resolve this concern.[162]

60. *Discussion*. We adopt a categorical exclusion for certain wireless facilities deployed in above-ground utility and communications rights-of-way. We find that such deployments will not individually or cumulatively have a significant effect on the environment. Given that DAS and small-cell nodes are often deployed in communications and utilities rights-of-way, we conclude that the categorical

[151] *Id.*

[152] 47 C.F.R. § 1.1306 Note 1.

[153] *See Infrastructure NPRM*, 28 FCC Rcd at 14257 para. 51.

[154] *See, e.g.,* AT&T Comments at 6, 17-18; Joint Venture Comments at 4; Fibertech Comments at 10-11; PCIA Comments at 18-19; WISPA Comments at 16.

[155] *See* WISPA Comments at 16.

[156] *See* AT&T Comments at 6, 17-18.

[157] *See, e.g.,* Fibertech Comments at 10-11 (supporting a categorical exclusion for DAS and small-cell installations along "existing aerial and underground corridors (*e.g.*, public rights-of-way and utility easements)"); PCIA Comments at 18-19; WISPA Comments at 16. *See also* AT&T Comments at 17.

[158] *See* Eugene Comments at 28-29.

[159] Tempe Comments at 9.

[160] *Id.*

[161] *See* Coconut Creek Comments at 3.

[162] *Id*.

exclusion will significantly advance the deployment of such facilities in a manner that safeguards environmental values.[163]

61. Specifically, this categorical exclusion, which we incorporate into our rules as Note 4 to Section 1.1306, covers construction of wireless facilities, including deployments on new or replacement poles, only if: (1) the facility will be located in a right-of-way that is designated by a Federal, State, local, or Tribal government for communications towers, above-ground utility transmission or distribution lines, or any associated structures and equipment; (2) the right-of-way is in active use for such designated purposes; and (3) the facility will not constitute a substantial increase in size over existing support structures that are located in the right-of-way within the vicinity of the proposed construction.[164]

62. Although the Commission sought comment, in the *Infrastructure NPRM*, on whether to adopt a categorical exclusion that covered facilities also located within fifty feet of a communications or utility right-of-way, similar to the exclusion from Section 106 review in Section III.E. of the NPA,[165] we limit our NEPA categorical exclusion to facilities deployed within existing communications and utility rights-of-way. Industry commenters that support applying the categorical exclusion to deployments within fifty feet of a right-of-way do not explain why the conclusion that deployments in the right-of-way will not have a significant effect on the human environment also apply outside of a right-of-way.[166] Such ground would not necessarily be in active use for the designated purposes, and there could well be a greater potential outside the right-of-way for visual impact or new or significant ground disturbance that might have the potential for significant environmental effects. Finally, the record supports the conclusion that a categorical exclusion limited to deployments within the rights-of-way will address most of the deployments that would be covered by a categorical exclusion that also encompassed deployments nearby. Sprint, for example, emphasizes that "many DAS and small cells will be attached to existing structures and installed *within utility rights-of-way corridors*."[167]

63. For purposes of this categorical exclusion, we define a substantial increase in size in similar fashion to how it is defined in the Collocation Agreement.[168] Thus, a deployment would result in a substantial increase in size if it would: (1) exceed the height of existing support structures that are

[163] For example, the categorical exclusion addresses Crown Castle's concern that the existing rules, which require EAs for facilities located in 100-year flood plains, could result in the preparation of an EA for each new utility pole installed in a 100-year flood plain to support the deployment of a DAS or small cell network, despite the facts that: (i) the utility poles will be located within the previously disturbed public right-of-way; (ii) the same utility poles would not require such environmental review if installed for another public utility purpose; and (iii) the placement of utility poles within the right-of-way will not significantly impact the 100-year floodplain. According to Crown Castle, "much of the area along the Gulf Coast and other coastal regions falls within 100-year flood plains," and deployment of DAS or small cell networks in coastal rural areas with little or no existing coverage could therefore require individual EAs for hundreds of new utility poles in the right-of-way. *See* Crown Castle Comments at 3-4. *See also* "the DAS forum: Distributed Antenna Systems (DAS) And Small Cell Technologies Distinguished," *available at* http://www.thedasforum.org/wp-content/uploads/2013/02/DAS-And-Small-Cell-Technologies-Distinguished-2_4_13.pdf, at 6. We note that facilities subject to this categorical exclusion are still required to undergo review for compliance with our RF exposure limits, and for effects on historic properties to the extent the deployment is not excluded under the Collocation Agreement, the NPA, or the Section 106 exclusions adopted in this Report and Order.

[164] *See* NPA § III.E. The NPA imposes two additional conditions, that: (1) the facility would not be located within the boundaries of a historic property, and (2) the applicant has successfully completed the process established in the NPA for Tribal and Native Hawaiian Organization participation. These conditions are relevant to Section 106 review, not NEPA review, and there is no need to include them here.

[165] *See Infrastructure NPRM*, 28 FCC Rcd at 14256-57 para. 50.

[166] *See*, *e.g.*, AT&T Comments at 6, 17-18.

[167] Sprint Comments at 5 (emphasis added).

[168] *See* Collocation Agreement § I.C.

located in the right-of-way within the vicinity of the proposed construction by more than 10% or twenty feet, whichever is greater; (2) involve the installation of more than four new equipment cabinets or more than one new equipment shelter; (3) add an appurtenance to the body of the structure that would protrude from the edge of the structure more than twenty feet, or more than the width of the structure at the level of the appurtenance, whichever is greater (except that the deployment may exceed this size limit if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable); or (4) involve excavation outside the current site, defined as the area that is within the boundaries of the leased or owned property surrounding the deployment or that is in proximity to the structure and within the boundaries of the utility easement on which the facility is to be deployed, whichever is more restrictive.

64. We note that we have found a similar test appropriate in other contexts, including under our environmental rules. In particular, the first three criteria that we specify above to define the scope of the NEPA rights-of-way categorical exclusion also define the scope of the rights-of-way exclusion from historic preservation review under the NPA.[169] Similarly, for purposes of Antenna Structure Registration, we do not require environmental notice for a proposed tower replacement if, among other criteria, the deployment will not cause a substantial increase in size under the first three criteria of the Collocation Agreement, and there will be no construction or excavation more than 30 feet beyond the existing antenna structure property.[170] Further, given that the industry now has almost a decade of experience applying this substantial increase test to construction in the rights-of-way under the NPA exclusion, and in light of the efficiencies to be gained from using a similar test here, we find the Collocation Agreement test, as modified here, to be appropriate in this context.

65. We conclude that facilities subject to this categorical exclusion will not have a significant effect on the environment either individually or cumulatively, and that the categorical exclusion is therefore appropriate. In the *NPA Report and Order*, the Commission found that excluding construction in utilities or communications rights-of-way from historic preservation review was warranted because, "[w]here such structures will be located near existing similar poles, . . . the likelihood of an incremental adverse impact on historic properties is minimal."[171] We find that the potential incremental impacts on the environment are similarly minimal. Indeed, deploying these facilities should rarely involve more than minimal new ground disturbance, given that constructing the existing facilities likely disturbed the ground already and given the limitations on the size of any new poles. Moreover, any new pole will also cause minimal visual effect because by definition comparable structures must already exist in the vicinity of the new deployment in that right-of-way, and new poles covered by this categorical exclusion will not be substantially larger.[172] Further, because such corridors are already employed for utility or

[169] *See* NPA § III.E. We note that the *NPA Report and Order*, 20 FCC Rcd at 1098 paras. 63-64, in establishing a substantial increase in size test for the partial exclusion from Section 106 review for deployments in the rights-of-way, omitted the fourth prong of the Collocation Agreement's test without explanation. The fourth prong provides that a substantial increase in size occurs when the mounting of an antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower or the utility easement and any access or utility easements currently related to the site. *See* Collocation Agreement § I.C.4. Notwithstanding the omission of any excavation criteria from the rights-of-way exclusion in the NPA, we find that it is appropriate to include a modified limitation on excavation for purposes of the NEPA rights-of-way categorical exclusion. Our modified criterion reflects the fact that deployments in the rights-of-way will generally be deployed not on "leased or owned property" but on an easement that constitutes the designated right-of-way, and our conclusion that excavations that are in that right-of-way and in proximity to the structure, where the right-of-way is already in active use for utility or communications purposes, will not have a significant effect on the human environment.

[170] *See* 47 C.F.R. § 17.4(c)(1)(iv); *see also* NPA § III.B (applying same test for exclusion of replacement towers from Section 106 review).

[171] *NPA Report and Order*, 20 FCC Rcd at 1098 para. 63.

[172] *See, e.g.,* AT&T Comments at 6, 17-18; Crown Castle Comments at 3-4.

communications uses, and the new deployments will be comparable in size to such existing uses, these additional uses are unlikely to trigger new NEPA concerns. Any such concerns would have already been addressed when such corridors were established, and the size of the deployments we categorically exclude will not be substantial enough to raise the prospect of cumulative effects.

66. We also find support for these conclusions in the categorical exclusions adopted by other agencies, including FirstNet. In establishing its own categorical exclusions, FirstNet noted as part of its Administrative Record that its anticipated activities in constructing a nationwide public safety broadband network would primarily include "the installation of cables, cell towers, antenna collocations, buildings, and power units," for example in connection with "Aerial Plant/Facilities," "Towers," "Collocations," "Power Units," and "Wireless Telecommunications Facilit[ies.]"[173] It defined a "Wireless Telecommunications Facility" as "[a]n installation that sends and/or receives radio frequency signals, including directional, omni-directional, and parabolic antennas, structures, or towers (no more than 199 feet tall with no guy wires), to support receiving and/or transmitting devices, cabinets, equipment rooms, accessory equipment, and other structures, and the land or structure on which they are all situated."[174] To address its NEPA obligations in connection with these activities, FirstNet adopted a number of categorical exclusions, including a categorical exclusion for "[c]onstruction of wireless telecommunications facilities involving no more than five acres (2 hectares) of physical disturbance at any single site."[175] In adopting this categorical exclusion, FirstNet found that it was "supported by long-standing categorical exclusions and administrative records. In particular, these include categorical exclusions from the U.S. Department of Commerce, U.S. Department of Agriculture, and U.S. Department of Energy."[176]

67. We find that FirstNet's anticipated activities encompass the construction of wireless facilities and support structures in the rights-of-way, and are therefore comparable to the wireless facility deployments we address here. Further, we note that the categorical exclusions adopted by FirstNet are broader in scope than the categorical exclusion we adopt for facilities deployed within existing rights-of-way.[177] We further note that several other agencies have found it appropriate to categorically exclude other activities in existing rights-of-way unrelated to telecommunications.[178]

68. We find that the categorical exclusion addresses some concerns raised by municipalities, and we find that other concerns they raise are not relevant to the environmental review process. First, we note that the categorical exclusion we adopt addresses Coconut Creek's objection to above-ground deployments in areas with no above-ground infrastructure because we limit it to rights-of-way in active use for above-ground utility structures or communications towers. Second, concerns about hazards to vehicular or pedestrian traffic are logically inapplicable.[179] As we noted above in connection with

[173] *See* Department of Commerce, National Telecommunications and Information Administration, First Responder Network Authority, National Environmental Policy Act Categorical Exclusions, Docket Number 131219999-4338-02, 79 Fed. Reg. 23945, 23946-47 (April 29, 2014) (*FirstNet Categorical Exclusions*).

[174] *Id.*

[175] *Id.* at 23947.

[176] *Id.* at 23949.

[177] *Id. See also* 7 C.F.R. § 1794.22(a)(2) (U.S. Department of Agriculture, Rural Utilities Services (RUS) categorical exclusion of construction of buried and aerial telecommunications lines, cables, and related facilities).

[178] *See*, *e.g.*, Environmental Impact and Related Procedures, 79 Fed. Reg. 2107 (Jan. 13, 2014) (establishing Federal Highway Administration and Federal Transit Administration categorical exclusion for transportation projects within existing operational rights-of-way); 36 C.F.R. § 1010.7(a)(36) (Presidio Trust categorical exclusion for "[i]nstallation of underground utilities in previously disturbed areas having stable soils, or in an existing utility right-of-way"). While these categorical exclusions do not apply to communications facilities, they reflect and are consistent with the conclusion that ground-disturbing construction in a right-of-way that is in active use will generally not have a significant effect on the human environment.

[179] *See* Coconut Creek Comments at 3.

deployments on structures other than communications towers and buildings, such concerns do not currently warrant the submission of an EA. Rather, EAs are routinely required for deployments in communications or utility rights-of-way only if they meet one of the criteria specified in Section 1.1307(a) or (b).[180] Deployments in the communications or utility rights-of-way have never been identified in our rules as an environmentally sensitive category; indeed, the use of such rights-of-way for antenna deployments is environmentally desirable as compared to deployments in other areas.[181] Finally, we find it unnecessary to adopt Tempe's proposed limitation, whether it is properly understood as a proposal to categorically exclude only one non-substantial increase at a particular site or in the same general vicinity, as such limitation has proven unnecessary in the context of historic preservation review. Having concluded that wireless facility deployments in communications or utility rights-of-way have no potentially significant environmental effects individually or cumulatively, we find no basis to limit the number of times such a categorical exclusion is used either at a particular site or in the same general vicinity. Indeed, the categorical exclusion encourages an environmentally responsible approach to deployment given that, as Notes 1 and 4 make clear, the use of existing corridors "is an environmentally desirable alternative to the construction of new facilities."[182] And, apart from environmental considerations, it would be contrary to the public interest to unnecessarily limit the application of this categorical exclusion.

69. We note that this categorical exclusion is separate from and in addition to the current categorical exclusion in Note 1 for installation of wire and cable along existing aerial and underground corridors.[183] To the extent that commenters propose extending the Note 1 aerial and underground corridor categorical exclusion to include components of telecommunications systems other than wires and cables, we decline to do so.[184] We find that the new Note 4 categorical exclusion we adopt for deployments in communications or utilities rights-of-way will provide substantial and appropriate relief,[185] and that the record in this proceeding does not justify a further expansion of the Note 1 categorical exclusion.[186] Further, the existing Note 1 categorical exclusion for wires and cables in underground and aerial corridors is broader than the categorical exclusion for installations on existing buildings or antenna towers because it is not limited by Section 1.1307(a)(4) (Section 106 review) or 1.1307(b) (RF emissions), while collocations on existing buildings or towers are subject to these provisions.[187] We note that even parties advocating an extension of the categorical exclusion for installation of wire and cable to additional telecommunications components concede that the extension should not apply to review of RF emissions

[180] *See* 47 C.F.R. § 1.1307(a), (b).

[181] *See* 47 C.F.R. § 1.1306 Note 1 ("The use of existing . . . corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged.").

[182] *Id*.

[183] *Id*.

[184] *See, e.g.,* Fibertech Comments at 10-11 (supporting a categorical exclusion for DAS and small cell installations along existing aerial and underground corridors (*e.g.,* public rights-of-way and utility easements)); Joint Venture Comments at 4 (public rights-of-way); PCIA Comments at 18-19.

[185] Indeed, one commenter proposes an extension of the aerial and underground corridors categorical exclusion in a manner that would create essentially the NEPA categorical exclusion we adopt today. *See* AT&T Comments at 6 (proposing extension to categorically exempt all facilities in or within 50 feet of a right-of-way, including new support structures of comparable size to other structures in the right-of-way).

[186] Fibertech treats the term "aerial or underground corridors" as encompassing "public rights-of-way." Fibertech Comments at i, 10-11. While such corridors will often run along public rights-of-way, the terms are not synonymous, as aerial or underground corridors run horizontally only in an elevated or underground space, while rights-of-way are not so limited. While one can deploy cable in an underground or aerial corridor, it is apparent that a pole could not be so deployed.

[187] *See* 47 C.F.R. § 1.1306 Note 1.

exposure, as the existing categorical exclusion does.[188] This distinction underscores that the existing categorical exclusion of cables and wires in aerial and underground corridors is based on an analysis that does not directly apply to other communications facilities.

C. NHPA Exclusions

1. Regulatory Background

70. Section 106 of NHPA requires Federal agencies to take into account the effects of their "undertaking[s]" on historic properties included or eligible for inclusion in the National Register of Historic Places (National Register).[189] NHPA does not require the Commission to engage in any particular preservation activities; rather, Section 106 requires that the Commission consult the applicable State Historic Preservation Officer (SHPO) or Tribal Historic Preservation Officer (THPO) and ACHP, and consider the impacts of its proposed undertakings.[190] Similar to a "Federal action" in the NEPA context, an "undertaking" for purposes of Section 106 includes, among other things, projects, activities, or programs that "requir[e] a Federal permit, license, or approval."[191] The Commission has generally interpreted the scope of its Federal undertakings under NHPA as coextensive with its Federal actions under NEPA.[192]

71. NHPA charges ACHP with promulgating rules to govern the Section 106 process.[193] ACHP's rules generally specify the process under which Federal agencies perform their historic preservation reviews.[194] Section 800.3 of ACHP's rules, entitled "Initiation of the section 106 process," provides that the agency official shall first "determine whether the proposed Federal action is an undertaking . . . and, if so, whether it is a type of activity that has the potential to cause effects on historic properties."[195] Section 800.3(a)(1) specifies that "[i]f the undertaking is a type of activity that does not have the potential to cause effects on historic properties, assuming such historic properties were present, the agency official has no further obligations under section 106 or this part."[196] Agencies rely upon this regulatory process to establish that certain types of activities are excluded from Section 106 review.[197]

72. This is not the only mechanism under ACHP's rules for establishing deviations from ACHP's routine Section 106 procedures, however. Section 800.14 of ACHP's rules provides for several types of "program alternatives" by which Federal agencies, in consultation with ACHP and other stakeholders in the historic preservation process, may develop alternative Section 106 procedures tailored

[188] *See*, *e.g.*, AAR Comments at 13; Fibertech Comments at 11.

[189] 16 U.S.C. § 470f.

[190] *See, e.g., Davis v. Latschar*, 202 F.3d 359, 370 (D.C. Cir. 2000).

[191] 16 U.S.C. § 470w(7).

[192] *See*, *e.g.*, *NPA Report and Order*, 20 FCC Rcd at 1083-84 paras. 25-28. Courts also generally treat similarly "Federal actions" under NEPA and "Federal undertakings" under NHPA. *See*, *e.g.*, *Karst Environmental Educ. and Protection, Inc. v. Environmental Protection Agency*, 475 F.3d 1291, 1295-96 (D.C. Cir. 2007); *Sac and Fox Nation of Missouri v. Norton*, 240 F.3d 1250, 1263 (10th Cir. 2001).

[193] *See* 16 U.S.C. § 470s ("The Council is authorized to promulgate such rules and regulations as it deems necessary to govern the implementation of section 470f of this title in its entirety.").

[194] *See* 36 C.F.R. Part 800.

[195] 36 C.F.R. § 800.3(a).

[196] 36 C.F.R. § 800.3(a)(1).

[197] *See*, *e.g.*, *Save Our Heritage, Inc. v. F.A.A.*, 269 F.3d 49 (1st Cir. 2001).

to their particular programs and undertakings.[198] For example, an agency, ACHP, and the relevant SHPO/THPO or, if nationwide, the National Conference of State Historic Preservation Officers (NCSHPO) may "negotiate a programmatic agreement to govern the implementation of a particular program or the resolution of adverse effects from certain complex project situations or multiple undertakings."[199] Compliance with the procedures set forth in an approved programmatic agreement satisfies the Federal agency's Section 106 responsibilities for individual undertakings covered by the agreement.[200]

73. To fulfill its responsibilities under Section 106, the Commission has incorporated the requirements of NHPA into its environmental rules.[201] Specifically, if a proposed facility has the potential to affect properties listed in or eligible for listing in the National Register, Section 1.1307(a)(4) requires the applicant to submit an EA prior to construction.[202] Section 1.1307(a)(4) directs licensees and applicants, when determining whether a proposed action may affect historic properties, to follow the procedures in ACHP's rules as modified by the Collocation Agreement and the NPA, two programmatic agreements that took effect in 2001 and 2005, respectively.[203]

74. The Collocation Agreement addresses historic preservation review for collocations on existing towers, buildings, and other non-tower structures.[204] Under the Collocation Agreement, most antenna collocations on existing structures are excluded from routine historic preservation review, with a few defined exceptions to address potentially problematic situations. Thus, in addition to excluding collocations on towers, with certain limitations,[205] the Collocation Agreement excludes collocations on buildings or other non-tower structures outside of historic districts from routine Section 106 review unless: (1) the structure is inside the boundary of a historic district, or it is within 250 feet of the boundary of a historic district and the antenna is visible from ground level within the historic district; (2) the structure is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; (3) the structure is over 45 years old; or (4) the proposed collocation is the subject of a pending complaint alleging adverse effect on historic properties.[206]

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[198] 36 C.F.R. § 800.14; *see also* "Program Alternatives," *available at* http://www.achp.gov/progalt/. Specifically, Section 800.14 authorizes development of alternatives to the review procedures set forth in 36 C.F.R. Part 800, Subpart B.

[199] 36 C.F.R. § 800.14(b).

[200] *See* 36 C.F.R. § 800.14(b)(2)(iii).

[201] *See* 47 C.F.R. § 1.1307(a)(4) (providing that applicants must submit an EA for proposed facilities that may affect historic properties listed in or eligible to be listed in the National Register of Historic Places (National Register) and must follow ACHP's Section 106 procedures as modified and supplemented by the Collocation Agreement and the NPA to ascertain whether their proposed facilities may affect historic properties).

[202] *Id*. For a full discussion of our historic preservation rules and processes, *see* FCC, "Tower and Antenna Siting," *available at* http://wireless.fcc.gov/siting/npa/npa.html.

[203] *See* 47 C.F.R. § 1.1307(a)(4).

[204] *See* Collocation Agreement; Wireless Telecommunications Bureau Announces Execution of Programmatic Agreement with Respect to Collocating Wireless Antennas on Existing Structures, *Public Notice*, 16 FCC Rcd 5574 (WTB 2001). The Collocation Agreement was codified under Section 1.1307(a)(4) as of the effective date of the NPA. *See NPA Report and Order*, 20 FCC Rcd at 1134 paras. 168-169.

[205] *See* Collocation Agreement §§ III.A, IV.A.

[206] *Id.* at § V ("Collocation Of Antennas On Buildings And Non-Tower Structures Outside Of Historic Districts").

75. The NPA establishes detailed procedures that are better tailored than ACHP's general rules for reviewing the effects caused by communications towers.[207] In particular, the NPA establishes a process for pre-construction consultation and initial review by the relevant SHPO or THPO and, if necessary, subsequent Commission review of the proposed tower.[208] The NPA also outlines procedures for Tribal participation, public participation, identifying and evaluating historic properties within the area of potential effects, and assessing effects on historic properties.

2. New Exclusions

76. *Background.* As noted above, the Collocation Agreement, while excluding most collocations from Section 106 review, provides that collocations on existing buildings and other non-tower structures that are over 45 years old are not excluded.[209] This is the case even if the building or non-tower structure itself has not been listed (or determined eligible for listing) on the National Register and is not located in or near a historic district; the age of the structure alone is sufficient to trigger review.

77. In addition to seeking comment on whether the Commission should add an exclusion from Section 106 review for DAS and small cells generally, the *Infrastructure NPRM* sought comment on whether to expand the existing categorical exclusion for collocations to cover collocations on structures subject to review solely because of the structure's age—that is, to deployments that are more than 45 years old but that are not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties.[210] The *Infrastructure NPRM* noted that, because utility poles are maintained for long periods of time, many eventually fall out of the exclusion due to the 45-year limitation.[211] It sought comment on whether to clarify or otherwise provide that the exclusion covers collocations on utility poles over 45 years of age. It further sought comment on excluding collocations on other categories of non-tower structures, such as street lamps or water towers, from the 45-year trigger for review. The Commission also asked whether, alternatively, it should conclude that deployments of small wireless facilities such as DAS or small cells do not qualify as Federal undertakings under NHPA.

78. Industry commenters support the exclusion of collocations on utility poles over 45 years old where the age of the pole is the only reason for review.[212] WISPA states that there is no evidence that utility poles possess any historic value or that collocations on such structures could result in adverse effects to any historic value.[213] Verizon argues that we should apply such an exclusion to collocations on both utility poles and other utility structures, including electric transmission structures.[214] Verizon asserts

[207] *See* NPA; *NPA Report and Order*, 20 FCC Rcd at 1079 para. 15, 1080-81 para. 19. For an overview of the history of and processes established by the NPA, *see* "Tower and Antenna Siting," *available at* http://wireless.fcc.gov/siting/npa/intro.html.

[208] *See NPA Report and Order*, 20 FCC Rcd at 1127-30 paras. 149-57.

[209] *See* Collocation Agreement § V.A.1.

[210] *See Infrastructure NPRM*, 28 FCC Rcd at 14260-63 paras. 60-67.

[211] It also noted PCIA's assertion that the percentage of utility poles that are 45 years or older is significant and growing and that, as a consequence, collocations of small wireless facilities on utility poles will increasingly be subject to review. *See Infrastructure NPRM*, 28 FCC Rcd at 14260 para. 60 (citing PCIA Mar. 19, 2013 *Ex Parte*, Attach. (Dr. Amos J. Loveday, "DAS/Small Cells & Historic Preservation: An Analysis of the Impact of Historic Preservation Rules on Distributed Antenna Systems and Small Cell Deployment," Feb. 27, 2013, at 3 (Loveday Report)).

[212] *See, e.g.,* AT&T Comments at 12; PCIA Comments at 21-22; UTC Comments at 8; WISPA Comments at iv, 17-18.

[213] *See* WISPA Comments at 18.

[214] *See* Verizon Comments at 13.

that a structure originally designed to host telegraph, telephone, or power equipment is likely to have changed over time in any event (*e.g.*, as utilities add equipment with the advent of new technologies), and that these changes do not harm its historic characteristics, if any.[215]

79. Some SHPOs do not oppose the exclusion and note that the addition of DAS facilities and small cells to existing poles would not cause an adverse effect on historic properties, unless a pole is a contributing element to the eligibility of a historic property.[216] Other localities and SHPOs state that the exclusion is unnecessary as a practical matter because utility poles are generally not deemed historic.[217] The Colorado SHPO, on the other hand, urges caution and argues that a blanket exemption for collocations on "utility poles" could sweep in other structures that may be more problematic from a historic preservation perspective, such as water tanks or clock towers.[218] Some Tribal Nations support exclusion from Section 106 review of certain installations with no potential to affect historic properties, including those of cultural and religious significance to Tribal Nations.[219] One Tribal Nation argues, however, that DAS systems may have an adverse visual effect on culturally important landscapes and historic properties in the vicinity, and that their cumulative effects "may be significantly greater than anticipated."[220]

80. In addition to supporting an exclusion for collocations on utility structures over 45 years old, Verizon also proposes an exclusion for collocations on any building or other structure over 45 years old if: (1) the antenna will be added in the same location as other antennas previously deployed; (2) the height of the new antenna will not exceed the height of the existing antennas by more than three feet, or the new antenna will not be visible from the ground regardless of the height increase; and (3) the new antenna will comply with any requirements placed on the existing antennas by the State or local zoning authority or as a result of any previous historic preservation review process.[221] In a subsequently filed *ex parte* letter, Verizon further clarifies its proposal by suggesting how to determine whether the new antenna is in the "same location" as an existing antenna.[222]

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[215] *See* Verizon Comments at 14.

[216] *See., e.g.,* AHPP Comments at 2 (asserting that placement of DAS on utility poles will not cause adverse effects even in historic districts except where the pole is a contributing element to a historic property or district); CAOHP Comments at 2 (recommending exemption of collocations on utility poles over 45 years of age from Section 106 review).

[217] *See, e.g.,* OHPO Comments at 1.

[218] COSHPO Comments at 2.

[219] *See* Letter from Cynthia Stacy, Peoria Tribe of Indians of Oklahoma, WT Docket No. 13-238, filed Sept. 5, 2014, at 1 (supporting the proposal "to exclude certain additional installations from Section 106 review depending on the location and the size of the equipment at issue and the need for any new excavation" and indicating that changes targeted at installations with no potential to affect historic properties will "help to streamline consultation so that our limited time and resources can be wisely spent."); Letter from Franklin Dancy, Tribal Council of the Morongo Band of Mission Indians, WT Docket No. 13-238, filed Aug. 29, 2014, at 1 (indicating no concerns with proposed Section 106 changes in light of its view that "any impact that could potentially occur from telecommunications projects involving the replacement and/or collocation or addition of new equipment/antennas on existing facilities has already occurred and no further impacts will occur" but arguing that it should retain the right to review projects "that extend beyond or otherwise exceed a previously impacted project site or that could be considered a new project").

[220] *See* Letter from Kassandra Rippee, Coquille Indian Tribe, WT Docket No. 13-238, filed Oct. 10, 2014, at 1.

[221] *See* Verizon Comments at 18.

[222] *See* Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed July 14, 2014 (Verizon July 14, 2014 *Ex Parte*), at 1-2. Verizon suggests that we define the same location as follows. For rooftop antennas, the new antenna must also be mounted on the roof, and the center point of the new antenna must be no more than 10 feet from the center point of the outermost existing antenna(s). For antennas mounted on the facade or facades of a building, the new antenna must be mounted on the same facade or facades, (continued….)

81. Verizon asserts that its proposal would remove obstacles to wireless broadband facility siting without adversely affecting any historic property. According to Verizon, even if the structure itself is historic, the effect of adding antennas of a similar size to equipment that already exists at the same location on the structure will not be different than the effects, if any, already created by the existing facilities. Similarly, it adds, if the facilities to be added are visible from a nearby historic district, they would not have an additional visual effect on the historic district beyond any effects created by the existing antennas.[223]

82. AT&T, Sprint, and PCIA support Verizon's proposal.[224] AT&T states that adopting this limited exclusion would remove unnecessary obstacles to wireless broadband facility siting without adversely affecting any historic property. AT&T also states that this proposal would afford significant relief because the vast majority of AT&T's LTE deployments involve adding antennas to structures that already support wireless facilities.[225]

83. As an alternative to adopting an exclusion in this rulemaking, PCIA asks us to determine that DAS and small-cell deployments are not "undertakings."[226] PCIA states that the Federal government does not assist in funding DAS and small-cell deployments, issue licenses or approvals for them, or provide other assistance related to them.[227] Notwithstanding these arguments, PCIA asserts that excluding these facilities from review would be less time-consuming and complex than finding them not to be undertakings.[228] AT&T agrees with PCIA that an exclusion from review is the preferable course over a finding that such facility deployments are not undertakings.[229] UTC argues that the Commission may find that small-cell and DAS deployments are not undertakings because they "are less intrusive than traditional macro sites" and based on other unspecified differences from macrocells.[230] Localities and SHPOs oppose a determination that DAS and small-cell deployments are not undertakings, based on FCC

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with a center point no more than 10 feet from the center point of the existing antenna(s). Alternatively, new antennas may be mounted anywhere on the same roof or facade(s), as the case may be, so long as they are not significantly more visible from ground level. Under Verizon's proposal, satisfying either alternative would satisfy the same location criterion. *See id*.

[223] *See* Verizon Comments at 18-19.

[224] *See* AT&T Reply Comments at 8; CTIA Reply Comments at 11-12; PCIA Reply Comments at ii, 12-13; Sprint Reply Comments at 4.

[225] *See* AT&T Reply Comments at 8-9.

[226] PCIA Comments at i, 15-17.

[227] *See* PCIA Comments at 16.

[228] *See id.*

[229] *See* AT&T Comments at 13-14 (asserting that adoption of an exclusion under Section 800.3(a)(1) is more efficient and timely than a finding that covered deployments are not undertakings).

[230] *See* UTC Comments at 8-9.

precedent as well as the assertion that such installations can affect historic properties.[231] NCSHPO notes the Commission's history of finding that the installation of an antenna is an undertaking.[232]

84. *Discussion.* As an initial matter, we find no basis to hold categorically that small wireless facilities such as DAS and small cells are not Commission undertakings. As the Commission discussed in the *Infrastructure NPRM*, Section 319 of the Communications Act gives us authority to regulate and require preconstruction approval for the construction of any facility for which a license is required, which in turn extends to any "apparatus for the transmission of energy, or communications, or signals by radio."[233] Further, while the Commission has generally waived the requirement of preconstruction approval for geographic-area licensees, as permitted by Section 319(d), the Commission has also retained authority under Section 1.1312 of the Commission's rules to review the environmental effects of all "facilities," including their effects on historic properties.[234] The Commission has found, given this retained approval authority, that macrocell deployments, including both new tower sites and collocations, are appropriately classified as Federal undertakings, a conclusion affirmed by the United States Court of Appeals for the District of Columbia.[235] While PCIA argues that small facilities could be distinguished, it does not identify any characteristic of such deployments that logically removes them from the analysis applicable to other facilities.[236] Others argue in conclusory fashion that the size of these facilities is a distinguishing factor without explaining how smaller facilities deployments cease to be undertakings simply because of their size.[237] We note, however, that ACHP's rules clearly contemplate that the determination of whether a proposed Federal action is an undertaking is separate from the determination of whether that action is the type that could have effects on historic properties.[238] Thus, the extent of any potential effects is not relevant to determining whether any agency action constitutes a

[231] *See, e.g.,* AHPP Comments at 1 (arguing that installation of DAS and small-cell facilities is an undertaking); CAOHP Comments at 1 (asserting that "[t]he deployment of a DAS or other small cell system is an Undertaking pursuant to 36 CFR part 800.16(y)" (emphasis in original)); Des Moines Comments at 4-5; Minneapolis Comments at 14 (arguing that DAS and small cells are "undertakings" that "have the potential to cause effects on historic properties"); OHPO Comments at 2 (arguing that a finding that DAS and small-cell deployments are not undertakings would be contrary to longstanding FCC precedent, and the advancement of technology does not change the fact that the installation of cell equipment may affect historic properties).

[232] *See* NCSHPO Comments at 1 (arguing that, given the Commission's past acceptance that installations of antennas, cell towers, and other types of facilities using various technologies are undertakings, and given the number of variables to consider depending on the method of installation, it is impossible to support a determination that DAS installations are not undertakings).

[233] 47 U.S.C. §§ 301, 319. We note that DAS nodes and small cells transmit the signals of Commission licensees in technically the same manner as traditional macrocells.

[234] 47 C.F.R. § 1.1312.

[235] *See NPA Report and Order*, 20 FCC Rcd at 1083 para. 24 (finding that "our existing policies treating tower construction as an undertaking under the NHPA reflect a permissible interpretation of the Commission's authority under Section 319(d) of the Act to issue construction permits for radio towers"); *CTIA—The Wireless Ass'n*, 466 F.3d at 114-15. *See also* NPA § I.C (providing that "[t]his Agreement does apply to collocations that are not exempt from Section 106 review under the Collocation Agreement").

[236] *See* PCIA Comments at 15-17.

[237] *See, e.g.,* UTC Comments at 8-9.

[238] *See* 36 C.F.R. § 800.3(a) (providing that agency official first determines whether the activity is an undertaking and "if so, whether it is a type of activity that has the potential to cause effects on historic properties"); 36 C.F.R. § 800.16(y) ("Undertaking means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of a Federal agency, including those carried out by or on behalf of a Federal agency; those carried out with Federal financial assistance; and those requiring a Federal permit, license or approval.").

Federal undertaking.[239] Based on the record before us, we accordingly decline to find that DAS and small-cell deployments are not undertakings for purposes of Section 106 review.[240]

85. Having determined that DAS and small cell deployments constitute Federal undertakings subject to Section 106, we consider our authority based on Section 800.3(a)(1) of ACHP's rules to exclude such small facility deployments from Section 106 review. It is clear under the terms of Section 800.3(a)(1) that a Federal agency may determine that an undertaking is a type of activity that does not have the potential to cause effects to historic properties, assuming historic properties were present, in which case, "the agency has no further obligations under section 106 or this part [36 Part 800, Subpart B]."

86. The commenters that propose a general exclusion for DAS and small cell deployments assert that under any circumstances, such deployments have the potential for at most minimal effects, but they do not provide evidence to support such a broad conclusion.[241] Moreover, several commenters, including several SHPOs, express concerns that such deployments do have the potential for effects in some cases.[242] Accordingly, we cannot find on this record that DAS and small-cell facilities qualify for a general exclusion, and we therefore conclude, after consideration of the record, that any broad exclusion of such facilities must be implemented at this time through the development of a "program alternative" as defined under ACHP's rules.[243] We are committed, however, to making deployment processes as efficient as possible without undermining the values that Section 106 protects. As noted above, Commission staff are working on a program alternative that, through consultation with stakeholders, will ensure thorough consideration of all applicable interests, and will culminate in a system that eliminates additional bureaucratic processes for small facilities to the greatest extent possible consistent with the purpose and requirements of Section 106.

87. We further conclude, however, that it is in the public interest to immediately adopt targeted exclusions from our Section 106 review process that will apply to small facilities (and in some instances larger antennas) in many circumstances and thereby substantially advance the goal of facilities deployment. As noted above, we may exclude activities from Section 106 review upon determining that they have no potential to cause effects to historic properties, assuming such properties are present.[244] As discussed in detail below, we find two targeted circumstances that meet this test, one applicable to utility

[239] *See* 16 U.S.C. § 470w(7)(C) (defining undertaking to include a project or activity under the jurisdiction of a Federal agency "requiring a Federal permit license, or approval").

[240] *See, e.g., supra*, nn.231, 232.

[241] *See, e.g.,* Crown Castle Comments at 3; Fibertech Comments at 25; PCIA Comments at 7, 9-10; Sprint Comments at 6; UTC Comments at 5; Verizon Comments at 13.

[242] *See, e.g.,* AHPP Comments at 1-2; COSHPO Comments at 1-2; NCSHPO Comments at 1.

[243] Similarly, we do not, at this time, take action on certain other proposals on which the Commission sought comment in the *Infrastructure NPRM*, including whether to expand the current Section 106 exclusion for poles in communications or utilities rights-of-way to encompass such rights-of-way even where they are designated historic districts, and whether to provide an exclusion for replacements of some or all non-tower structures. *See Infrastructure NPRM*, 28 FCC Rcd at 14261-62 paras. 62-63. We also note that the *Infrastructure NPRM* sought comment on whether the Commission should develop a process that would enable more efficient review under Section 106, such as by defining circumstances in which individual communication nodes (*e.g.*, the separate antenna nodes of a single DAS deployment) can be grouped together and reviewed as a single undertaking. *Id.* at 14262 para. 64. Various parties have indicated support for this proposal, *see*, *e.g.*, AHPP Comments at 1; Mendham Comments at 4; Minneapolis Comments at 14, but none has suggested how to implement it. We will consider these options further in the context of our efforts to develop a program alternative.

[244] 36 C.F.R. § 800.3(a)(1); *see*, *e.g.*, *Save Our Heritage, Inc. v. F.A.A.*, 269 F.3d 49, 62 (1st Cir. 2001); *Preservation Society of Charleston v. U.S. Army Corp. of Engineers*, 2013 WL 6488282, at *4 (D.S.C. Sept. 18, 2013).

structures and the other to buildings and any other non-tower structures. Pursuant to these findings we establish two exclusions.

88. First, we exclude collocations on existing utility structures, including utility poles and electric transmission towers, to the extent they are not already excluded in the Collocation Agreement, if: (1) the collocated antenna and associated equipment, when measured together with any other wireless deployment on the same structure, meet specified size limitations; and (2) the collocation will involve no new ground disturbance. Second, we exclude collocations on a building or other non-tower structure, to the extent they are not already excluded in the Collocation Agreement, if: (1) there is an existing antenna on the building or other structure; (2) certain requirements of proximity to the existing antenna are met, depending on the visibility and size of the new deployment; (3) the new antenna will comply with all zoning conditions and historic preservation conditions on existing antennas that directly mitigate or prevent effects, such as camouflage or concealment requirements; and (4) the deployment will involve no new ground disturbance. With respect to both of these categories—utility structures and other non-tower structures—we extend the exclusion only to deployments that are not (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, these exclusions address collocations on utility structures and other non-tower structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old. Our action here is consistent with our determination in the NPA to apply a categorical exclusion based upon a structure's proximity to a property listed in or eligible to be listed in the National Register rather than whether a structure is over 45 years old regardless of eligibility.[245] In our analysis below, consistent with Section 800.3(a)(1), we find collocations meeting the conditions stated above have no potential to affect historic properties even if such properties are present. We nevertheless find it appropriate to limit the adopted exclusions as described above. Given the sensitivities articulated in the record, particularly those from NCSHPO and other individual commenting SHPOs, regarding deployments in historic districts or on historic properties, we conclude that any broader exclusions require additional consultation and consideration, and are more appropriately addressed and developed through the program alternative process that Commission staff have already begun.[246]

89. While these exclusions will expedite small wireless facilities deployments in many cases, we reiterate that the measures discussed below are only initial steps. These measures will tailor and substantially improve our Section 106 review process for small wireless facilities. We note again that there is room for additional improvement in this area, and we are committed to relieving all stakeholders of unnecessary and nonproductive obligations. Therefore, Commission staff have engaged in discussions about broader reforms, and we expect that an ACHP-approved program alternative for Section 106 review will be concluded between 18 and 24 months after the release of this Report and Order.

a. Collocations on Utility Structures

90. Pursuant to Section 800.3(a)(1) of ACHP's rules, we find that antennas mounted on existing utility structures have no potential for effects on historic properties, assuming such properties are present, where the deployment meets the following conditions: (1) the antenna and any associated equipment, when measured together with any other wireless deployments on the same structure, meets specified size limitations; and (2) the deployment will involve no new ground disturbance.

[245] *See* NPA.III.D; *NPA Report and Order,* 20 FCC Rcd at 1094 para. 56 (reasoning that the exclusion's applicability should depend on whether the property or a property within 500 feet is listed in or eligible to be listed in the National Register rather than the age of the property or of nearby properties regardless of eligibility).

[246] *See*, *e.g.*, AHPP Comments at 1-2; CASHPO Comments at 2; COSHPO Comments at 1-2; NCSHPO Comments at 1. *See also* DC Comments at 24-26 (opposing general exclusion of DAS and small cell deployments but indicating that "the DC State Historic Preservation Office . . . would not need to review installations on sites that have not been listed in or determined eligible for listing in the National Register").

Notwithstanding this finding of no potential for effects even assuming historic properties are present, we limit this exclusion (as described above) in light of the particular sensitivities related to historic properties and districts. Accordingly, this exclusion does not apply to deployments that are (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, this new targeted exclusion addresses collocations on utility structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old.

91. For purposes of this exclusion, we define utility structures as utility poles or electric transmission towers in active use by a "utility" as defined in Section 224 of the Communications Act, but not including light poles, lamp posts, and other structures whose primary purpose is to provide public lighting. Utility structures are, by their nature, designed to hold a variety of electrical, communications, or other equipment, and they already hold such equipment. Their inherent characteristic thus incorporates the support of attachments, and their uses have continued to evolve with changes in technology since they were first used in the mid-19th century for distribution of telegraph services.[247] Indeed, we note that other, often larger facilities are added to utility structures without review. For example, deployments of equipment supporting unlicensed wireless operations like Wi-Fi access occur without our Section 106 review in any case, as do installations of non-communication facilities such as municipal traffic management equipment[248] or power equipment such as electric distribution transformers.[249] The addition of DAS or small cell facilities to these structures is therefore fully consistent with their existing use.[250]

92. While the potential for effects from any deployments on utility structures is therefore remote at most, we conclude that the additional conditions described above support a finding that there is no such potential at all, assuming the presence of historic properties. First, we limit the size of equipment covered by this exclusion. In doing so, we draw on a PCIA proposal, which includes separate specific volumetric limits for antennas and for enclosures of associated equipment, but we modify the definition in certain respects to meet the standard in ACHP's rules that the undertaking must have no potential for effects.[251] Specifically, we provide that the deployment may include covered antenna enclosures no more

[247] The first utility poles were erected in the mid-19th century in the United States for telegraph lines. *See* History Wired, "History of the Telegraph," *available at* http://historywired.si.edu/detail.cfm?ID=324. The kinds of equipment placed on poles have adapted and evolved with the evolution of technology to include electrical and all manner of communications equipment.

[248] *See* NPA § II.A.1 (providing that the antennas subject to the NPA "do[] not include . . . devices authorized under Part 15 of the Commission's rules."). *See also* Dayton Daily News, "Local cities using advanced traffic signals to cut wait times," July 31, 2014, *available at* http://www.mydaytondailynews.com/news/news/local/local-cities-using-advanced-traffic-signals-to-cut/ngrxG/ (reporting that City of Moraine is using cameras mounted on utility poles to track traffic and adjust signal times); AT&T Reply Comments at 7 ("DAS and small cells have no more of an impact on historic property than any of the many other attachments placed on poles, including traffic cameras, wireless transmitters, and other devices installed by many local governments"); PCIA Comments at 11.

[249] *See* Wikipedia, "Distribution Transformer," http://en.wikipedia.org/wiki/Distribution_transformer (describing utility pole-mounted transformers).

[250] *See* Fibertech Comments at 25 (noting the "practical reality that small cells are the same size or smaller than other types of infrastructure deployed in the public rights-of-ways").

[251] As noted in the *Infrastructure NPRM*, PCIA proposed excluding small facilities from review if they meet the following criteria:

> 1) Equipment Volume. An equipment enclosure shall be no larger than seventeen (17) cubic feet in volume.
>
> 2) Antenna Volume. Each antenna associated with the installation shall be in an antenna enclosure of no more than three (3) cubic feet in volume. Each antenna that has exposed elements shall fit within an imaginary enclosure of no more than three (3) cubic feet.

(continued….)

than three cubic feet in volume per enclosure, or exposed antennas that fit within an imaginary enclosure of no more than three cubic feet in volume per imaginary enclosure, up to an aggregate maximum of six cubic feet. We further provide that all equipment enclosures (or imaginary enclosures) associated with the collocation on any single structure, including all associated equipment but not including separate antennas or enclosures for antennas, must be limited cumulatively to seventeen cubic feet in volume. Further, collocations under this rule will be limited to collocations that cause no new ground disturbance.

93. Because we find that multiple collocations on a utility structure could have a cumulative impact, we further apply the size limits defined above on a cumulative basis taking into account all pre-existing collocations. Specifically, if there is a pre-existing wireless deployment on the structure, and any of this pre-existing equipment would remain after the collocation, then the volume limits apply to the cumulative volume of such pre-existing equipment and the new collocated equipment. Thus, for the new equipment to come under our exclusion, the sum of the volume of all pre-existing associated equipment that remains after the collocation and the new equipment must be no greater than seventeen cubic feet, and the sum of the volume of all collocated antennas, including pre-existing antennas that remain after the collocation, must be no greater than six cubic feet. We further provide that the cumulative limit of seventeen cubic feet for wireless equipment applies to all equipment on the ground associated with an antenna on the structure as well as associated equipment physically on the structure. Thus, application of the limit is the same regardless of whether equipment associated with a particular deployment is deployed on the ground next to a structure or on the structure itself.[252] Consistent with a proposal by PCIA, however, we find that certain equipment should be omitted from the calculation of the equipment volume, including: (1) vertical cable runs for the connection of power and other services, the volume of which may be impractical to calculate and which should in any case have no effect on historic properties, consistent with our established exclusion of cable in pre-existing aerial or underground corridors; (2) ancillary equipment installed by other entities that is outside of the applicant's ownership or control, such as a power meter installed by the electric utility in connection with the wireless deployment, and (3) comparable equipment from pre-existing wireless deployments on the structure.[253]

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> 3) Infrastructure Volume. Associated electric meter, concealment, telecom demarcation box, ground-based enclosures, battery back-up power systems, grounding equipment, power transfer switch, and cut-off switch may be located outside the primary equipment enclosure(s) and are not included in the calculation of Equipment Volume.
>
> Volume is a measure of the exterior displacement, not the interior volume of the enclosures. Any equipment that is concealed from public view in or behind an otherwise approved structure or concealment, is not included in the volume calculations.

See Infrastructure NPRM, 28 FCC Rcd at 14256 para. 49, n.99. *See also* PCIA Comments at 7-9. A number of industry commenters also support this definition, or a close variation of it. *See*, *e.g.*, AT&T Comments at 15-16; Cox Reply Comments at 2-3; Crown Castle Comments at 5-6 (proposing a limit of 5 cubic feet for antennas because "Crown Castle currently deploys antennas in its DAS and Small Cell networks that are significantly larger than three cubic feet in volume in order to accommodate multiple carriers"); Verizon Comments at 10-11; WISPA Comments at 15-16 (proposing a limit of six cubic feet for antennas).

[252] While some commenters oppose an exclusion based solely on PCIA's volumetric definition, we find that our exclusion addresses their concerns. For example, Tempe and the CA Local Governments express concern that PCIA's definition would allow an unlimited number of ground-mounted cabinets. *See* CA Local Governments Reply Comments at 6; Tempe Comments at 8. Our approach provides that any associated ground equipment must also come within the volumetric limit for equipment enclosures, however, and therefore does not allow for unlimited ground-based equipment. Further, because we apply the size limit on a cumulative basis, our exclusion directly addresses concerns that the PCIA definition would allow multiple collocations that cumulatively exceed the volumetric limits. *See* CA Local Governments Reply Comments at 6; Tempe Comments at 8.

[253] *See* Letter from Jonathan M. Campbell, PCIA-The Wireless Infrastructure Association, to Marlene H. Dortch, Secretary, FCC, filed Oct. 10, 2014 (PCIA Oct. 10, 2014 *Ex Parte*), at 2; *see also* Letter from Brian M. Josef, CTIA- (continued….)

94. To meet the standard under Section 800.3(a)(1), we further impose a requirement of no new ground disturbance, consistent for the most part with the NPA standard. Under the NPA standard, no new ground disturbance occurs so long as the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet.[254] We find, however, that footings and anchorings should be included in this context to ensure no potential for effects. Therefore, our finding is limited to cases where there is no ground disturbance or the depth and width of previous disturbance exceeds the proposed construction depth and width, including the depth and width of any proposed footings or other anchoring mechanisms, by at least two feet.[255]

95. Adoption of this exclusion will provide significant efficiencies in the Section 106 process for DAS and small-cell deployments. Many DAS and small-cell installations involve collocations on utility structures.[256] According to one estimate, there were 120 million utility poles in service in the United States in 2005,[257] the overwhelming majority of which are made of wood.[258] The North American Wood Pole Council states that a properly maintained wood pole will have a service life of 75 years or more.[259] PCIA estimates that approximately 12% of wooden poles—between 19 and 22 million poles—are 45 years or older, with the number growing as pole preservation technology improves. PCIA also estimates that excluding collocations on these wooden poles would increase the estimated number of excluded collocation structures by a factor of 10—which would dramatically advance wireless infrastructure deployment without impacting historic preservation values.[260]

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The Wireless Association, to Marlene H. Dortch, Secretary, FCC, filed Oct. 10, 2014 (CTIA Oct. 10, 2014 *Ex Parte*), at 2.

[254] *See* NPA §§ III.C, VI.D.2.c.i.

[255] Some Tribal Nations have indicated that exclusions of small facilities from Section 106 review might be reasonable if there is no excavation but that any ground disturbance would be cause for concern. *See* Spectrum and Competition Policy Division, Wireless Telecommunications Bureau, Ex-parte summary, WT Docket 13-238 (filed Sept. 4, 2014). We find that the restrictions we place on both of our new Section 106 exclusions are sufficient to address this concern and ensure that there is no potential for effects on historic properties of Tribal religious or cultural significance. As discussed in detail in this Report and Order, these restrictions include a strict requirement for both exclusions of no new ground disturbance and restrictions on the size and placement of equipment. Furthermore, both exclusions are limited to collocations (and therefore do not include new or replacement support structures).

[256] Tracy Ford, "FCC Utility Poles rules to Help Broadband, DAS Deployments," May 25, 2010, *available at* http://www.rcrwireless.com/article/20100525/tower/fcc-utility-poles-rules-to-help-broadband-das-deployments/; Kevin White, Small Cells: Small, but Valuable Addition to 4G LTE Network, May 21, 2013, *available at* http://www.verizonwireless.com/news/article/2013/05/4G-LTE-network-small-cells.html.

[257] *See* Environmental Literacy Council, "Wood Utility Pole Life Cycle," *available at* http://enviroliteracy.org/article.php/1311.html. The American Iron and Steel Institute estimates that there are 185 million utility poles across North America. *See* Steel Works, "Utility Poles," *available at* http://www.steel.org/en/SMDISteel_org/Web%20Root/Content/Overview/Utility%20Poles.aspx. According to the North American Wood Pole Council, there are about 130 million wood utility poles in use across North America. *See* North American Wood Pole Council, "Frequently Asked Questions," *available at* http://www.woodpoles.org/FAQ-America.html.

[258] The American Iron and Steel Institute estimates that since 1998, close to one million steel distribution poles have been installed and are now being used by over 600 of 3100 U.S. electric utilities. *See* Steel Works, "Utility Poles," *available at* http://www.steel.org/en/The%20New%20Steel/Utility%20Poles/Utility%20Poles.aspx. We note that our exclusion is not limited to wood poles, and encompasses collocations on these steel utility poles as well.

[259] *See* North American Wood Pole Council, "Frequently Asked Questions," *available at* http://www.woodpoles.org/FAQ-America.html.

[260] *See* Loveday Report at 3.

b. Collocations on Buildings and Other Non-tower Structures

96. As discussed above, Section 800.3(a)(1) of ACHP rules authorizes an exclusion only where the undertaking does not have the potential to cause effects on historic properties, assuming such historic properties are present.[261] While we conclude that this standard allows for an exclusion applicable to many collocations on buildings and other structures that already house collocations, we find insufficient support in the record to adopt Verizon's proposed exclusion in its entirety. While Verizon states that adding an antenna to a building within the scope of its proposal would not have an effect that differs from those caused by existing antennas, we must also consider the cumulative effects of additional deployments on the integrity of a historic property to the extent that they add incompatible visual elements.[262] Further, while Verizon relies heavily on the requirement that any new deployment must meet the same conditions as the existing deployment, we cannot assume that conditions placed on a previous deployment are always sufficient to prevent any effects, particularly in the event of multiple additional deployments. Indeed, it is often the case that mitigating conditions are designed to offset effects rather than eliminate or reduce them entirely. We conclude, however, that with certain modifications to Verizon's proposal, deployments covered by the test would have no potential for effects.

97. Specifically, we find that collocations on buildings or other non-tower structures over 45 years old will have no potential for effects on historic properties if: (1) there is an existing antenna on the building or structure; (2) one of the following criteria is met: (a) the new antenna will not be visible from any adjacent streets or surrounding public spaces and will be added in the same vicinity as a pre-existing antenna; (b) the new antenna will be visible from adjacent streets or surrounding public spaces, provided that (i) it will replace a pre-existing antenna, (ii) the new antenna will be located in the same vicinity as the pre-existing antenna, (iii) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (iv) the new antenna will not be more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and (v) no new equipment cabinets will be visible from the adjacent streets or surrounding public spaces; or (c) the new antenna will be visible from adjacent streets or surrounding public spaces, provided that (i) it will be located in the same vicinity as a pre-existing antenna, (ii) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (iii) the pre-existing antenna was not deployed pursuant to the exclusion based on this finding, (iv) the new antenna will not be more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and (v) no new equipment cabinets will be visible from the adjacent streets or surrounding public spaces; (3) the new antenna will comply with all zoning conditions and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage or concealment requirements; and (4) the deployment of the new antenna will involve no new ground disturbance. Notwithstanding our finding of no potential for effects even assuming historic properties are present, we limit this exclusion in light of many parties' particular sensitivities related to historic properties and districts. Accordingly, as with the exclusion for collocations on utility poles, this exclusion does not apply to deployments that are (1) inside the boundary of a historic district, or within 250 feet of the boundary of a historic district; (2) located on a structure that is a designated National Historic Landmark or is listed in or eligible for listing in the National Register; or (3) the subject of a pending complaint alleging adverse effect on historic properties. In other words, this new targeted exclusion addresses collocations on non-tower structures where historic preservation review would otherwise be required under existing rules only because the structures are more than 45 years old.

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[261] *See* 36 C.F.R. § 800.3(a)(1).

[262] *See* 36 C.F.R. § 800.5(a)(1). Integrity is the ability of a property to convey its significance, based on its location, design, setting, materials, workmanship, feeling, and association. Adverse effects can be direct or indirect and can include introduction of incompatible visual, atmospheric, or audible elements. *See* Advisory Council on Historic Preservation, A Citizen's Guide to Section 106 Review, *available at* http://www.achp.gov/docs/CitizenGuide.pdf, at 7.

98. Consistent with the Verizon proposal, we require that there must already be an antenna on the building or other structure and that the new antenna be in the same vicinity as the pre-existing antenna. For this purpose, a non-visible new antenna is in the "same vicinity" as a pre-existing antenna if it will be collocated on the same rooftop, façade or other surface, and a visible new antenna is in the "same vicinity" as a pre-existing antenna if it is on the same rooftop, façade, or other surface and the centerpoint of the new antenna is within 10 feet of the centerpoint of the pre-existing antenna. Combined with the other criteria discussed below, this requirement is designed to assure that a new antenna will not have any incremental effect on historic properties, assuming they exist, as there will be no additional incompatible elements.

99. In addition to Verizon's proposed requirement that the deployment be in the same vicinity as an existing antenna, we also adopt a condition of no-visibility from adjoining streets or any surrounding public spaces,[263] with two narrow exceptions. For the general case, our no-effects finding will apply only to a new antenna that is not visible from any adjacent streets or surrounding public spaces and is added in the same vicinity as a pre-existing antenna.[264]

100. We make a narrow exception to the no-visibility requirement where the new antenna would replace an existing antenna in the same vicinity and where the addition of the new antenna would not constitute a substantial increase in size over the replaced antenna. In this situation, no additional incompatible visual element is being added, as one antenna is a substitution for the other. We permit an insubstantial increase in size in this situation.[265] For purposes of this criterion, the replacement facility would represent a substantial increase in size if it is more than three feet larger in height or width (including all protuberances) than the existing facility, or if it involves any new equipment cabinets that are visible from the street or adjacent public spaces. We decline to adopt the NPA definition of "substantial increase," which allows greater increases in height or width in some cases, because it applies to towers, not to antenna deployments, and it is therefore overbroad with respect to the replacement of an

[263] In adopting this standard, we are informed by the record, *see*, *e.g.*, AHPP Comments at 1 (supporting exclusion of collocations on non-tower structures in an area not visible from the ground), and also in part by General Services Administration (GSA) Preservation Note 41, entitled "Administrative Guide for Submitting Antenna Projects for External Review," *available at* http://www.gsa.gov/portal/content/104184?utm_source=PBS&utm_medium=print-radio&utm_term=technicalpreservationnote&utm_campaign=shortcuts. The Preservation Notes are a series of technical briefs prepared by the GSA National Capital Region Historic Preservation staff as a resource on preservation project design, contracting, construction, and historic property management issues. Preservation Note 41 recommends that an agency may recommend a finding of no effect where the antenna will not be visible from the surrounding public space or streets and the antenna will not harm original historic materials or their replacements-in-kind. We note that, in addition to the measures ensuring that there are no incremental visual effects from covered facilities, our finding of no effects in this case is also implicitly based on a requirement, as the GSA Note recommends, that the deployment will not harm original historic materials. Even assuming a building is historic, however, as required by Section 800.3(a)(1), this "no harm" criterion would be satisfied by ensuring that any anchoring on the building was not performed on the historic materials of the property or their replacements-in-kind. *See id.* It is therefore unnecessary to expressly impose a "no harm" condition in this case, as the exclusion we adopt does not apply to historic properties. Necessarily, any anchoring of deployments subject to the exclusion will not be in any historic materials of the property. We also note that, under the criteria we adopt, the deployment will occur only where another antenna has already been reviewed under Section 106 and approved for deployment in the same vicinity, and any conditions imposed on that prior deployment to minimize or eliminate historic impact, including specifications of where, how, or under what conditions to construct, are part of our "no effect" finding and would apply as a condition of the exclusion.

[264] Line-of-sight evaluations as referenced by the General Services Administration's Preservation Note 41 may be used to determine visibility. *See* GSA, "NCR Preservation Note Series," *available at* http://www.gsa.gov/portal/content/104184?utm_source=PBS&utm_medium=print-radio&utm_term=technicalpreservationnote&utm_campaign=shortcuts.

[265] By comparison, under the NPA, a replacement for a tower that results in an insubstantial increase in size is excluded from Section 106 review. *See* NPA § III.B.

existing antenna. We further note that no one has objected to Verizon's proposed limit on increases of three feet in this context. Also, since we are required to ensure no potential for effects on historic properties assuming such properties are present, we find it appropriate to adopt a more stringent test than in the context of a program alternative.[266] For these reasons, any increase in the number of equipment cabinets that are visible from the street or adjacent public spaces in connection with a replacement antenna constitutes a substantial increase in size. In combination with the requirements that the new antenna be within 10 feet of the replaced antenna and that the pre-existing antenna be visible from any ground perspective that would afford a view of the new antenna, these requirements ensure that the replacement deployment will not have an additional visual effect.

101. Under our second partial exception to the no-visibility requirement, the new antenna may be in addition to, rather than a replacement of, a pre-existing antenna, but must meet the other requirements applicable to replacement antennas noted above. In addition, we require that the pre-existing antenna itself not have been deployed pursuant to this exception. While this exception will allow an additional visual element to be added, the element is again limited to a comparably-sized antenna in the same viewshed (and again does not include any new visible associated equipment). Further, because the pre-existing antenna may not itself have been deployed pursuant to this no-effects finding, deployments cannot be daisy-chained across the structure, which might present a potential for cumulative effects.

102. Consistent with the Verizon proposal, we require that the new antenna comply with all zoning and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage, concealment, or painting requirements. We do not extend that requirement to conditions that have no direct relationship to the facility's effect or how the facility is deployed, such as a condition that requires the facility owner to pay for historic site information signs or other conditions intended to offset harms rather than prevent them. Our goal is to assure that any new deployments have no effects on historic properties. Payments or other forms of mitigation applied to antennas previously deployed on the building or structure that were intended to compensate for any adverse effect on historic properties caused by those antennas but were not intended to prevent that effect from occurring do not advance our goal of assuring no effects from such collocations. Accordingly, we do not require that the new antenna comply with such conditions.

103. As with the exclusion we adopt above for collocations on utility structures, we impose a strict requirement of no new ground disturbance. Thus, the exclusion will permit ground disturbance only where the depth and width of previous disturbance exceeds the proposed construction depth and width (including footings and other anchoring mechanisms) by at least two feet.

3. Antennas Mounted in the Interior of Buildings

104. The Collocation Agreement provides that "[a]n antenna may be mounted on a building" without Section 106 review except under certain circumstances, *e.g.*, the building is a historic property or over 45 years of age.[267] In Section III.B.2.b. of this Report and Order, we clarify that the NEPA categorical exclusion codified in Note 1 for "antenna(s) mounted on an existing building" applies to

[266] ACHP promulgated its program alternative regulation, 36 C.F.R. § 800.14, pursuant to Section 214 of NHPA, 16 U.S.C. § 470v, which authorizes ACHP to exempt Federal undertakings from any provision of NHPA "when such exemption is determined consistent with the purposes of this Act, taking into consideration the magnitude of the exempted undertaking or program and the likelihood of impairment of historic properties." *See also NPA Report and Order,* 20 FCC Rcd at 1081-82 para. 21 (interpreting these provisions to mean that, in formulating exemptions and prescribing Section 106 processes in a program alternative, ACHP and the action agency need not ensure that every possible effect on historic properties is considered under all circumstances but should be guided by a standard of reasonableness that takes into account both the likelihood that adverse effects will not be considered in all instances and the overall benefits to be obtained from streamlining measures).

[267] Collocation Agreement § V.A.

collocations in the interior of buildings.[268] Because of the growing use of and reliance on small wireless facility deployments in the interior of buildings to improve coverage, we take this opportunity to similarly remove any uncertainty with regard to the Section 106 requirements related to interior collocations.

105. We therefore clarify that Section V of the Collocation Agreement covers collocations in buildings' interiors. Given the limited scope of the exclusion of collocations on buildings under the Collocation Agreement (*e.g.*, the building may not itself be listed in or eligible for listing in the National Register or in or near a historic district), there is no reason to distinguish interior collocations from exterior collocations for purposes of assessing impacts on historic properties.

IV. ENVIRONMENTAL NOTIFICATION EXEMPTION FOR REGISTRATION OF TEMPORARY TOWERS

106. In this section, consistent with a waiver previously granted by the Commission, we adopt a narrow exemption from the Commission's requirement that owners of proposed towers requiring antenna structure registration (ASR) provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption applies only to proposed temporary towers meeting defined criteria that reduce the likelihood of any significant environmental effects. Specifically, the exemption applies only to antenna structures that (1) will be in place for 60 days or less; (2) require notice of construction to the FAA; (3) do not require marking or lighting under FAA regulations; (4) will be less than 200 feet above ground level; and (5) will involve minimal or no ground excavation. We emphasize that this exemption only relieves applicants of the need to complete the process of public notice; it is not a categorical exclusion, and therefore does not relieve applicants of the obligation under our NEPA rules to file an EA in the circumstances identified by our rules. Further, the exemption from notice requirements does not apply to proposed deployments where an EA is in fact required under our rules. Rather, all EAs will continue to be put out on public notice in accordance with existing process to provide the public opportunity for engagement.[269]

107. We find that allowing licensees to deploy temporary towers meeting these criteria without first having to complete the Commission's environmental notification process or seek a site-specific waiver of that process will enable them to more effectively respond to emergencies, natural disasters, and other planned and unplanned short-term spikes in demand without undermining the purposes of the notification process. Thus, this exemption will "remove an administrative obstacle to the availability of broadband and other wireless services during major events and unanticipated periods of localized high demand"[270] where expanded or substitute service is needed quickly.[271]

A. Background

108. Under its rules, the FAA requires notification of the construction or alteration of any antenna structure that exceeds 200 feet in height above ground level, or where certain other conditions are met, including where the structure is located in a flight path near an airport and exceeds a height

[268] *See supra,* Section III.B.2.b.

[269] To the extent a party constructs a tower that does not require antenna structure registration, but does require an EA under our rules, that party typically registers the tower by filing an FCC Form 854 as a vehicle for submitting the EA. *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16707 para. 18. All EAs that are filed with Form 854 go through environmental notice under our environmental notification procedures. *See id.* at 16723 para. 57. Applications submitted through the Universal Licensing System (ULS) that are not also filed on Form 854 and that contain EAs are placed on public notice for 30 days by the appropriate processing division. *See* Weekly Status Public Notices in the Universal Licensing System (ULS), *available at* http://www.fcc.gov/help/weekly-status-public-notices-universal-licensing-system-uls.

[270] CTIA Comments at 6 (*quoting Infrastructure NPRM*, 28 FCC Rcd at 14263-64 para. 68).

[271] *See Waiver Order*, 28 FCC Rcd 7758 para. 1.

determined using a formula based on its distance from the runway.[272] The owner of a proposed antenna structure must file notice with the FAA on FAA Form 7460-1, and that agency in turn determines whether the construction or alteration is subject to lighting or marking specifications prescribed in the current version of an FAA Advisory Circular entitled "Obstruction Marking and Lighting."[273] The FAA sends an acknowledgment to the antenna structure owner describing how the structure should be marked and lighted, which constitutes an FAA study and determination of "no hazard to air navigation."[274] This means that the FAA has determined that the structure will not pose a hazard to aircraft provided that the structure is marked and/or lighted consistent with its recommendations.

109. If pre-construction notice to the FAA is required,[275] the Commission's rules also require the tower owner to register the antenna structure in the Commission's ASR system, prior to construction or alteration as the case may be.[276] As part of such registration, the applicant must submit the FAA's study and "no hazard" determination, including any associated marking and lighting specifications.[277] If the Commission accepts the application, it registers the structure, issuing an ASR form that typically incorporates the FAA's "no hazard" marking and/or lighting specifications.[278]

110. The Commission has found that ASR application processing constitutes an action that triggers the Commission's review responsibilities under NEPA and Section 106 of NHPA.[279] Among

[272] *See* 14 C.F.R. § 77.13; 47 C.F.R. § 17.7.

[273] Federal Aviation Administration, "Advisory Circular: Obstruction Marking and Lighting," FAA AC 70/7460-1K (2007), *available at* http://www.faa.gov/documentLibrary/media/Advisory_Circular/AC%2070%207460-1K.pdf (FAA Obstruction Marking and Lighting Circular).

[274] *See Part 17 Report and Order*, FCC 14-117, at para. 3.

[275] *See* 14 C.F.R. § 77.13; 47 C.F.R. § 17.7.

[276] *See* 47 C.F.R. § 17.4. As defined in the Commission's rules, "antenna structures" include "the radiating and/or receive system, its supporting structures and any appurtenances mounted thereon." 47 C.F.R. § 17.2. We note that the Commission has recently changed its Part 17 rules. *See Part 17 Report and Order*, FCC 14-117. Under these changes, which will be effective October 24, 2014, *see* 79 Fed. Reg. 56968 (Sept. 24, 2014), an "antenna structure" is defined as "a structure that is constructed or used to transmit radio energy, or that is constructed or used for the primary purpose of supporting antennas to transmit and/or receive radio energy, and any antennas and other appurtenances mounted thereon, from the time construction of the supporting structure begins until such time as the supporting structure is dismantled." *Id.* In this section, we use the terms "antenna structures" and "towers" interchangeably.

[277] 47 C.F.R. § 17.4(b). The registration process is generally completed online at the Commission's ASR Online System website, *available at* http://wireless.fcc.gov/antenna/. This website provides comprehensive information about the registration process and the applicable rules.

[278] The Wireless Telecommunications Bureau recently released a Public Notice announcing enhancements to the Commission's ASR System to allow ASR registrants electronic access to their current official authorizations in "Active" status, and that the electronic version of an authorization stored in the ASR System will be deemed as the official Commission document. *See* "Wireless Telecommunications Bureau Announces Enhancements to the Commission's Universal Licensing System and Antenna Structure Registration System for Providing Access to Official Electronic Authorizations and Seeks Comment on Final Procedures," WT Docket No. 14-161, *Public Notice*, DA 14-1478, at 2 (WTB rel. Oct. 10, 2014).

[279] *See* Streamlining the Commission's Antenna Structure Clearance Procedure; Revision of Part 17 of the Commission's Rules Concerning Construction, Marking, and Lighting of Antenna Structures, WT Docket No. 95-5, *Report and Order*, 11 FCC Rcd 4272, 4289 para. 41 (1995) (*Antenna Structure Clearance R&O*) (finding that the registration of an antenna structure is subject to NEPA). *Accord*, *NPA Report and Order*, 20 FCC Rcd at 1084 para. 27 (explaining that the Commission's treatment of tower registrations as Federal undertakings within the meaning of Section 106 of the National Historic Preservation Act, 16 U.S.C. § 470f, is a permissible interpretation in light of the preconstruction approval process that it has implemented to assure that communications towers are not a risk to air safety under Section 303(q) of the Communications Act).

other obligations, NEPA requires agencies to facilitate public involvement in agency decisions that may affect the environment.[280] To fulfill this responsibility, the Commission requires owners of proposed towers, including temporary towers, that must be registered in the ASR system to provide local and national notice prior to submitting a completed ASR application.[281] Typically, the ASR notice process takes approximately 40 days,[282] as applicants must provide public notice, allow 30 days for the filing of any requests for further environmental review, and then wait for the Commission to clear the tower for construction.

111. The public notification requirements are subject to certain exemptions, such as an exemption for replacement towers meeting certain criteria.[283] In addition, the Commission has provided that applicants may request site-specific waivers of the notification requirement in emergency situations, such as where a tower needs to be deployed quickly to restore lost communications.[284] Such requests must be made and approved pre-construction, and the Commission has further provided that the reviewing bureau should ordinarily require in such cases that the applicant provide public notice within a short period after authorization or construction, unless the bureau concludes in a particular case that notice would be impracticable or not in the public interest.[285]

112. On December 21, 2012, CTIA filed a Petition for Expedited Rulemaking asking the Commission to add a new exemption from the public notice requirements for temporary towers that (1) will be in use for 60 days or less, (2) require the filing of a Form 7460-1 with the FAA, (3) do not require marking or lighting pursuant to FAA regulations, and (4) will be less than 200 feet in height (Temporary Towers Petition).[286] CTIA also asked the Commission for an interim waiver of its environmental notification rules for the same class of temporary towers pending the outcome of the rulemaking.[287]

113. On May 15, 2013, in the *Environmental Notification Waiver Order*, the Commission granted an interim waiver of the ASR environmental notification requirements for substantially all of the class of temporary towers that CTIA identified, with the additional criterion that the construction entail no or only minimal ground disturbance.[288] The Commission provided that the interim waiver would remain in effect pending the completion of a rulemaking to address the issues raised in the petition.[289]

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[280] *See* 40 C.F.R. § 1506.6(a) (requiring agencies to make "diligent efforts to involve the public in preparing and implementing their NEPA procedures"); *see also* 40 C.F.R. § 1500.2(d) ("Federal agencies shall to the fullest extent possible . . . [e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment.").

[281] *See Environmental Notification Order on Remand*, 26 FCC Rcd 16700; *see also* "Wireless Telecommunications Bureau Provides Guidance on the Implementation of the Environmental Notification Process for the Registration of Antenna Structures," *Public Notice*, 27 FCC Rcd 5082 (WTB 2012) (*ASR Guidance PN*).

[282] *See ASR Guidance PN*, 27 FCC Rcd at 5082.

[283] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16720-21 para. 53. *See also* 47 C.F.R. § 17.14. Other exemptions address, for example, objects shielded by existing permanent structures, structures that are 20 feet or less in height, airport landing aids, and meteorological devices.

[284] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16717 n.117.

[285] *Id.*

[286] *See* Petition of CTIA—The Wireless Association for Expedited Rulemaking and Blanket Waiver Regarding Public Notice Procedures for Temporary Towers, RM-11688, filed Dec. 21, 2012 (Temporary Towers Petition), at 1.

[287] *Id.* at 11-12.

[288] *Id.* More specifically, the Commission provided that the interim waiver would not apply to a temporary tower that requires excavation unless the ground was previously disturbed to a depth that exceeds the proposed construction depth by at least 2 feet. *See Waiver Order*, 28 FCC Rcd at 7763 para. 12.

[289] *Id.* at 7763 para. 13.

114. In the *Infrastructure NPRM*, the Commission proposed to adopt a permanent exemption from the ASR pre-construction environmental notification requirements consistent with the interim exemption granted in the *Waiver Order*.[290] It noted that, according to commenters, situations frequently arise where there is insufficient time to complete the notification process before a temporary tower must be deployed to meet near-term demand, including (1) newsworthy events that occur without any prior notice and require immediate deployments, such as natural disasters; (2) other events that occur with less than 30 days advance notice, such as certain political events and parades for sports teams; (3) events for which the timing and general location are known in advance, but where the specific locations for temporary towers are unknown until days before the event, such as state fairs and major sporting events; and (4) situations in which unexpected difficulties with permanent structures require the deployment of temporary towers while permanent facilities are repaired.[291] Therefore, it found that absent an exemption, application of the ASR notice process to these temporary towers would apparently prevent service providers from meeting important short-term coverage and capacity needs, and sought comment on its analysis.[292]

115. The Commission further sought comment on how it should define the scope of the exemption, and whether the criteria set out in the *Waiver Order* were sufficient and appropriate for this purpose.[293] The Commission further proposed not to require post-construction environmental notice for towers that qualify for the new exemption.[294] While noting that the Commission ordinarily requires post-construction notification in those cases where pre-construction notice is waived due to an emergency situation, the Commission observed that post-construction public notice for towers deployed for the short periods of time addressed by the exemption would seem to serve little purpose.[295]

116. The Commission also proposed, however, to continue to require owners of towers eligible for the exemption to comply with the Commission's other NEPA requirements, including the obligations to certify environmental compliance on a completed ASR application and to file an EA in appropriate cases.[296] It further proposed that if an applicant determines that it needs to complete an EA for a temporary tower otherwise eligible for the exemption, or if the relevant bureau makes this determination pursuant to Section 1.1307(c) or (d) of the Commission's rules, the tower would not be exempt from public notice requirements.[297] Thus, for example, if a proposed temporary tower would have significant environmental effects on migratory birds, the tower owner would not be able to claim the exemption from the Commission's environmental notification process that we adopt today.

117. The Commission also sought comment on whether to provide for an extension if an applicant determines, subsequent to registering a tower under the temporary towers notification exemption, that the tower will or may be needed beyond the maximum period for the exemption.[298] In particular, it sought comment on whether the Commission should establish a process for extending the period the tower may remain in place without environmental notice.[299]

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[290] *See Infrastructure NPRM*, 28 FCC Rcd at 14263-64 para. 68.

[291] *Id.* at 14268 para. 80.

[292] *Id.*

[293] *Id.* at 14267 para. 78.

[294] *Id.* at 14270 para. 85.

[295] *Id.*

[296] *Id.* at 14270-71 para. 86.

[297] *Id.*

[298] *Id.* at 14271 para. 88.

[299] *Id.*

118. The vast majority of parties that commented on this issue support the adoption of an exemption from the environmental notification process for temporary towers.[300] Most of the supporting commenters also agree that the Commission should rely on the criteria from the *Waiver Order* to define the scope of the exemption,[301] while some propose different or additional criteria.[302]

119. A few parties raise objections. Orange County recommends the Commission not exempt temporary towers from "antenna registration and notification requirements," asserting that temporary towers may have the same environmental effects as permanent towers.[303] Lee County states that the Commission should not exempt temporary towers "from review."[304] Tempe argues that temporary towers should not be included as part of any "environmental exemption" because such towers may include generators that could have significant environmental effects.[305]

B. Discussion

120. For the reasons set forth below, and essentially as proposed in the *Infrastructure NPRM*, we adopt a permanent exemption from our ASR environmental notification requirements for temporary towers that meet the criteria set forth in the *Waiver Order*. Specifically, we exempt proposed new antenna structures that do not require EAs from the ASR public notice requirements if they: (1) will be in place for no more than 60 days; (2) require notice of construction to the FAA; (3) do not require marking or lighting under FAA regulations; (4) will be less than 200 feet in height; and (5) will either involve no excavation or involve excavation only where the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet.

121. We recognize that one of our responsibilities under NEPA is to facilitate public involvement in agency decisions that may affect the environment. CEQ regulations direct that agencies shall "make diligent efforts to involve the public in preparing and implementing their NEPA procedures" and "solicit appropriate information from the public."[306] At the same time, an agency has "'wide discretion in fashioning its own procedures' to implement its environmental obligations,"[307] and "considerable discretion [under CEQ regulations] to decide the extent to which such public involvement

[300] *See*, *e.g.*, AT&T Comments at 6-7; CalWA Comments at 2; CCA Reply Comments at 12; CTIA Comments at 4-6; Coconut Creek Comments at 4; Joint Venture Comments at 4-5; Mesquite Comments at 1-2; PCIA Comments at 59-60; Springfield Comments at 7-8; Sprint Comments at 6-7; Steel in the Air Comments at 4; TIA Comments at 4; UTC Comments at 9-10; Verizon Comments at 24-25; West Palm Beach Comments at 4.

[301] *See*, *e.g.*, AT&T Comments at 19; Steel in the Air Comments at 4.

[302] For example, Springfield and Mesquite argue that the maximum tower height eligible for the exemption should be reduced. *See* Springfield Comments at 8; Mesquite Comments at 2. Sprint argues that the exemption should apply to temporary towers in place for up to six months rather than 60 days. *See* Sprint Comments at 7. Mendham argues that applicants claiming the exemption should be required to provide notice to the municipality and county where the temporary tower is to be located. *See* Mendham Comments at 5.

[303] Orange Reply Comments at 4-5.

[304] Lee Comments at 1-2.

[305] *See* Tempe Comments at 10. *See also* Savannah *Ex Parte* at 4 (arguing that the flight hazard from towers over 100 feet in height is greater locally than in most of the nation and that the proposed exemption would "needlessly increase the risk to our public, and to our pilots in particular.").

[306] 40 C.F.R. § 1506.6(a), (d); *see also* 40 C.F.R. § 1500.2(d) ("Federal agencies shall to the fullest extent possible . . . [e]ncourage and facilitate public involvement in decisions which affect the quality of the human environment."); *American Bird Conservancy v. FCC*, 516 F.3d 1027, 1035 (D.C. Cir. 2008).

[307] *Environmental Notification Order on Remand*, 26 FCC Rcd at 16717 para. 45 (quoting *American Bird Conservancy*, 516 F.3d at 1035).

is 'practicable.'"[308] As discussed below, we find that establishing the proposed exemption is consistent with our obligations under NEPA and CEQ regulations, and will serve the public interest.[309]

122. As the Commission observed in the *Infrastructure NPRM*, the ASR notice process takes approximately 40 days and can take as long as two months.[310] The record confirms that absent the exemption, situations would arise where there is insufficient time to complete this process before a temporary tower must be deployed to meet near-term demand.[311] The record, as well as our own experience in administering the environmental notice rule, shows that a substantial number of temporary towers that would qualify for the exemption require registration.[312] We find that, absent an exemption, application of the ASR notice process to these temporary towers will interfere with the ability of service providers to meet important short term coverage and capacity needs.

123. At the same time, the benefits of environmental notice are limited in the case of temporary towers meeting these criteria. The purpose of environmental notice is to facilitate public discourse regarding towers that may have a significant environmental impact.[313] We find that towers meeting the specified criteria are highly unlikely to have significant environmental effects due to their short duration, limited height, absence of marking or lighting, and minimal to no excavation.[314] As the Commission explained in the *Waiver Order*, our experience in administering the ASR public notice process confirms that antenna structures meeting the waiver criteria rarely if ever generate public comment regarding potentially significant environmental effects or are determined to require further environmental processing.[315] In particular, since the *Waiver Order* has been in place, we have seen no evidence that a temporary tower exempted from notification by the waiver has had or may have had a significant environmental effect.[316] We find that the limited benefits of notice in these cases do not outweigh the potential detriment to the public interest of prohibiting the deployment of towers in circumstances in which the notification process cannot be completed quickly enough to address short-term deployment needs. Further, having concluded that pre-construction environmental notification is categorically unnecessary in the situations addressed here, we find it would be inefficient to require the

[308] *Brodsky v. U.S. Nuclear Regulatory Comm'n*, 704 F.3d 113, 121 (2d Cir. 2013) (noting that the reviewing court properly considers "whether the lack of public input prevented the agency from weighing all the factors essential to exercising its judgment [under NEPA] in a reasonable manner" if the issuance of a FONSI without public comment is challenged) (internal quotations omitted); *TOMAC, Taxpayers of Mich. Against Casinos v. Norton,* 433 F.3d 852, 861 (D.C. Cir. 2006)*;* 40 C.F.R. § 1501.4(b).

[309] *Cf.* Amendment of Environmental Rules in Response to New Regulations Issues by the Council on Environmental Quality, GEN Docket No. 79-163, *Report and Order*, 60 Rad. Reg. 2d (P&F) 13 para. 17 (1986) (finding that for "temporary proposals that are encompassed within § 1.1307," the Commission "may assess the environmental factors and grant the authorization without awaiting public comment if it finds no likelihood of a long-term, significant environmental impact").

[310] *See ASR Guidance PN*, 27 FCC Rcd at 5082.

[311] *See, e.g.,* Temporary Towers Petition at 5-6; AT&T Comments, RM-11688, at 5-6; CTIA Reply Comments, RM-11688, at 3-4; NTCH Comments, RM-11688, at 1; PCIA Comments, RM-11688, at 2-4; Verizon Comments, RM-11688, at 3-4, 7-8.

[312] For example, we received at least six requests for relief under the *Waiver Order* in a three month period, indicating that there may be 20 or more registrations a year that meet the criteria for the exemption. *See also Infrastructure NPRM*, 28 FCC Rcd at 14268 para. 80 & n.174.

[313] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16719 para. 50; 47 C.F.R. § 1.1307(c).

[314] *See, e.g.,* AT&T Comments at 18. We therefore disagree with Orange County that the potential for impacts from eligible temporary structures is the same as from permanent structures. *See* Orange Reply Comments at 4.

[315] *See Waiver Order*, 28 FCC Rcd at 7762-63 para. 11.

[316] *See, e.g.,* AT&T Comments at 7. Thus, we have had no reason to consider requiring an EA for any of these structures.

filing and adjudication of individual waiver requests for these temporary towers. Accordingly, we conclude that adoption of the exemption is warranted.

124. We also adopt the proposal to require no post-construction environmental notice for temporary towers that qualify for the exemption. Ordinarily, when pre-construction notice is waived due to an emergency situation, we require environmental notification shortly after construction because such a deployment may be for a lengthy or indefinite period of time. We find, however, that requiring post-construction notification for towers intended to be in place for the limited duration covered by the exemption is not in the public interest as the exempted period is likely to be over or nearly over by the time the notice period ends. Additionally, we note again that we have rarely seen temporary antenna structures generate public comment regarding potentially significant environmental effects.[317] We further note that of the many commenters supporting an exemption, none opposed our proposal to exempt qualifying temporary towers from post-construction environmental notification.

125. We find that the objections to the proposed exemption raised by Lee County, Tempe, and Orange County are misplaced. They express concerns that a temporary towers exemption would eliminate local review (including local environmental review) and antenna structure registration requirements. The exemption we adopt today, however, does neither of these things. First, the temporary towers measure does not exempt any deployment from any otherwise applicable requirement under our rules to provide notice to the FAA, to obtain an FAA "no-hazard" determination, or to complete antenna structure registration.[318] Nor does the exemption impact any local requirements. Further, we provide, as proposed in the *Infrastructure NPRM*, that towers eligible for the notification exemption are still required to comply with the Commission's other NEPA requirements, including filing an EA in any of the environmentally sensitive circumstances identified by our rules.[319] We further provide that if an applicant determines that it needs to complete an EA for a temporary tower otherwise eligible for the exemption, or if the relevant bureau makes this determination pursuant to Section 1.1307(c) or (d) of the Commission's rules, the application will not be exempt from the environmental notice requirement. No commenter objects to these proposals, which are consistent with limitations the Commission imposed in connection with the existing exemption from the notification process for replacement towers.[320] In short, today's exemption, to the extent it applies, only relieves an applicant of the obligation to go through the Commission's ASR public notice process, and only in cases where an EA is not required.[321]

126. Some parties, while supporting a temporary towers exemption, argue that we should establish criteria different from those the Commission relied upon in adopting the interim waiver. Some assert, for example, that the maximum tower height should be something less than 200 feet above ground level.[322] Mesquite asserts the maximum tower height should be 120 feet above ground level.[323]

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[317] *See Infrastructure NPRM*, 28 FCC Rcd at 14270 para. 85.

[318] In raising its concern, Orange County notes that it "operates . . . a large regional airport that has recently expanded through construction of a third terminal." Orange Reply Comments at 4. We find the exemption poses no threat to air safety. As noted, deployments remain subject to all applicable requirements to notify the FAA and register the structure in the ASR system. If the Commission or the FAA requires either painting or lighting, *i.e.*, because of a potential threat to aviation, the exemption does not apply.

[319] *See* 47 C.F.R. §§ 1.1301-1.1319.

[320] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16720-21 para. 53 (providing that where an EA is required to be filed for a replacement tower, such a tower is not exempted from the environmental notification process).

[321] *See Waiver Order,* 28 FCC Rcd at 7763 para. 11 ("Further, the interim waiver does not relieve ASR applicants from having to comply with the Commission's other NEPA rules, including the obligation to certify environmental compliance on a completed ASR application. Under those rules, if an applicant determines that it needs to complete an EA, environmental notification will be required.").

[322] *See, e.g.,* Mesquite Comments at 2; Springfield Comments at 8.

Springfield argues that, generally, most temporary towers are only 100 feet tall and that, currently, the tallest available temporary tower model is 150 feet tall.[324]

127. We conclude that making the exemption available for towers less than 200 feet above ground level is appropriate and adequate to ensure that the exemption serves the public interest both by minimizing potential significant environmental effects and by enabling wireless providers to more effectively respond to large or unforeseen spikes in demand for service. CTIA indicates that carriers deploy temporary towers more than 150 feet tall to replace damaged towers of similar height, and that having to use shorter towers to stand in for damaged towers may reduce coverage and thereby limit the availability of service during emergencies.[325] We agree with CTIA that reducing the maximum tower height could undermine the intended purpose of the exemption. Further, the proposed limit of less than 200 feet will allow appropriate flexibility for taller temporary models, as they become available.

128. Sprint recommends adopting a time limit longer than 60 days for operation of the exempted towers. Sprint argues that at least six months is necessary for temporary towers that stand in for damaged permanent towers.[326] We conclude, however, that 60 days is an appropriate time limit for the deployment of towers under this exemption. This time limit, as noted above, has substantial support in the record, and we find that 60 days strikes the proper balance between making this exemption a useful and effective tool for facilitating urgently needed short term communications deployments and facilitating public involvement in Commission decisions that may affect the environment. As discussed, the brief duration of the covered deployments renders post-construction notification unnecessary in the public interest because the deployment will be removed by the time a post-construction notice period is complete or shortly thereafter. As the intended deployment period grows, however, the applicability of that reasoning erodes. For emergency deployments that may last up to six months or even longer, post-construction notice will generally be warranted, as the Commission has indicated previously.[327] Thus, we find that the existing procedure—*i.e.*, site-specific waivers that are generally conditioned on post-construction notice—remains appropriate for emergency towers that will be deployed for longer periods than those covered by the narrow exemption we establish today.

129. Commenters differ on whether and on what terms the Commission should provide that an applicant that deploys a tower pursuant to this exemption may subsequently obtain an extension of the time limit for deployment. AT&T suggests that a single 60-day extension, upon a timely request accompanied by a showing of compelling justification, is appropriate.[328] CTIA similarly proposes that, "[t]o ensure the integrity of the 60-day limit, a carrier should only be permitted to keep a tower deployed for more than 60 days pursuant to the exemption" if it (1) submits an extension request at least 10 days prior to the expiration of the initial 60-day period, and (2) provides a "compelling justification in support of keeping the temporary tower deployed for up to an additional 60 days."[329] Steel in the Air and West Palm Beach, on the other hand, assert that if a tower is needed for more than 60 days, then "the existing rules should apply" and post-construction notification should be required.[330] Minneapolis expresses concern about the exemption being misused as a loophole to provide long-term service or as a bridge to

(Continued from previous page)

[323] *See* Mesquite Comments at 2.

[324] *See* Springfield Comments at 8.

[325] *See* CTIA Reply Comments at 4.

[326] *See* Sprint Comments at 7.

[327] *See Environmental Notification Order on Remand*, 26 FCC Rcd at 16717 n.117.

[328] *See* AT&T Comments at 20.

[329] CTIA Comments at 9.

[330] Steel in the Air Comments at 4; West Palm Beach Comments at 4.

the eventual establishment of a permanent facility, and says that extensions should not be allowed routinely.[331]

130. While flexibility is important when compelling cases arise, we recognize that permitting long-term or multiple extensions could invite or allow misuse of the exemption. Therefore, we will permit a single extension of up to 60 days, and only upon a showing that the need to keep the exempted temporary tower in place beyond the initial 60 days is due to changed circumstances or information that emerged after the exempted temporary tower was deployed.

131. Some parties argue that concerns about potential misuse of the exemption justify additional enforcement measures. Mendham asks the Commission to define the consequences that would apply when an applicant uses the exemption for a non-qualifying tower or fails to remove a tower before the exemption expires.[332] Springfield asks the Commission to regulate the number of times an exempt temporary tower may be deployed within a single service area in order to prevent abuse of the exemption by consecutive deployments.[333] CTIA and PCIA, however, oppose such measures.[334]

132. We decline to define consequences or to adopt special enforcement mechanisms for misuse of the exemption we adopt today, as we find the Commission's general enforcement mechanisms sufficient. We agree with Springfield, however, that we should adopt a measure to prevent the use of consecutive deployments under the exemption to effectively exceed the time limit.[335] We therefore require that at least 30 days must pass following the removal of one exempted temporary tower before the same applicant may rely on the exemption for another temporary tower covering substantially the same service area. While AT&T argues that the Commission should not adopt measures to prevent "speculative abuses,"[336] we conclude that this narrow limitation on the consecutive use of the exemption will help to ensure that it applies only to deployments of brief duration, as intended. Further, we are not persuaded by CTIA's argument that such a restriction would interfere with a carrier's flexibility to respond to unforeseen events.[337] The restriction places no limit on the number of exempt towers that can be deployed at any one time to cover a larger combined service area. We also note that our rule provides for extensions of the 60-day period in appropriate cases, which should further ensure that applicants have sufficient flexibility to respond to unforeseen events.

133. We further clarify that under appropriate conditions, such as natural disasters or national emergencies, the relevant bureau may grant waivers of this limitation applicable to defined geographic regions and periods. In addition, a party subject to this limitation at a particular site may still request a site-specific waiver of the notice requirements for a subsequent temporary deployment at that site.

134. To implement the new temporary towers exemption, Commission staff will modify FCC Form 854 to provide a checkbox for applicants to indicate that they are claiming the exemption and to require such applicants to provide documentation that supports such claim. We note that the modification of the form is subject to approval by the Office of Management and Budget (OMB). To ensure clarity, we provide that the exemption will take effect only when the Wireless Telecommunications Bureau issues a Public Notice announcing OMB's approval. We further provide that, until the new exemption is effective, the interim waiver of notification requirements for temporary towers remains available.

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[331] *See* Minneapolis Comments at 15.

[332] *See* Mendham Comments at 5.

[333] *See* Springfield Comments at 8-9.

[334] *See* CTIA Reply Comments at 3-4; PCIA Reply Comments at 33.

[335] *See* Springfield Comments at 7-8.

[336] PCIA Reply Comments at 33.

[337] *See* CTIA Reply Comments at 3-4.

V. IMPLEMENTATION OF SECTION 6409(A)

135. In this section, we adopt rules to implement and enforce Section 6409(a) of the Spectrum Act.[338] Section 6409(a) provides, in pertinent part, that "[n]otwithstanding [47 U.S.C. § 332(c)(7)] or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."[339] Ambiguities in many of the terms in this provision and its accompanying definition of "eligible facilities request" are likely to generate disputes about its proper application, which could in turn undermine the goal of Title VI of the Spectrum Act of advancing wireless broadband service for both public safety and commercial users.[340] We therefore conclude that it will serve the public interest to establish rules clarifying the requirements of Section 6409(a) and implementing and enforcing this provision.[341] The rules we adopt today will provide guidance to all stakeholders on their rights and responsibilities under the provision, facilitate the review process for wireless infrastructure modifications, and accelerate wireless broadband deployment consistent with our statutory responsibilities.

A. Background

136. Congress adopted Section 6409 in 2012 as a provision of Title VI of the Middle Class Tax Relief and Job Creation Act, which is more commonly known as the Spectrum Act.[342] The Spectrum Act required the Commission to allocate specific additional bands of spectrum for commercial use (including the H Block and the AWS-3 band) and to auction and grant new licenses for this spectrum by February 2015.[343] The Spectrum Act also authorized the Commission to conduct an incentive auction of broadcast television spectrum in order to make additional spectrum available for commercial broadband service.[344] Finally, the Spectrum Act established the First Responder Network Authority (FirstNet) to oversee the construction and operation of a nationwide public safety wireless broadband network (PSBN) and provided dedicated spectrum and other resources for this purpose, including funding from the proceeds of the auctions that the Spectrum Act required and authorized.[345] Congress specifically directed FirstNet to "encourag[e]… leverag[ing] to the maximum extent economically desirable, existing

[338] *See* Spectrum Act § 6409(a).

[339] Spectrum Act § 6409(a)(1).

[340] Conference Report at 136.

[341] *See Infrastructure NPRM*, 28 FCC Rcd at 14274 para. 95

[342] *See*, *generally*, Spectrum Act, Title VI.

[343] *See* Spectrum Act § 6401. The H Block auction closed in February 2014, and the Commission issued licenses for construction and operation over H Block spectrum in April 2014. Auction of H Block Licenses in the 1915-1920 MHz and 1995-2000 MHz Band Closes; Winning Bidder Announced for Auction 96, *Public Notice*, 29 FCC Rcd 2044 (WTB 2014); Wireless Telecommunications Bureau Grants H Block (1915-1920 MHz and 1995-2000 MHz) Licenses, Auction No. 96, *Public Notice*, 29 FCC Rcd 4782 (WTB 2014). The AWS-3 auction is scheduled for November 2014. Auction of Advanced Wireless Services (AWS-3) Licenses Scheduled for November 13, 2014; Notice and Filing Requirements, Reserve Prices, Minimum Opening Bids, Upfront Payments and Other Procedures for Auction 97, *Public Notice*, 29 FCC Rcd 8386 (WTB 2014).

[344] *See* Spectrum Act §§ 6402, 6403. *See also* Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, Docket No. 12-268, *Notice of Proposed Rulemaking*, 27 FCC Rcd 12357 (2012); Expanding the Economic and Innovation Opportunities of Spectrum Through Incentive Auctions, GN Docket No. 12-268, *Report and Order*, 29 FCC Rcd 6567 (2014) (*Incentive Auction Report and Order*).

[345] *See* Spectrum Act §§ 6201, 6202, 6206. *See also* Implementing Public Safety Broadband Provisions of the Middle Class Tax Relief and Job Creation Act of 2012; Implementing a Nationwide, Broadband, Interoperable Public Safety Network in the 700 MHz Band; Service Rules for the 698-746, 747-762 and 777-792 MHz Bands, PS Docket No. 12-94, PS Docket No. 06-229, WT Docket No. 06-150, *Notice of Proposed Rulemaking*, 28 FCC Rcd 2715 (2013).

commercial wireless infrastructure to speed deployment of the network."[346] And it authorized the Commission to "take any action necessary to assist [FirstNet] in effectuating its duties and responsibilities" under the Spectrum Act.[347]

137. In the context of these goals, Congress included Section 6409, which contributes to the twin goals of commercial and public safety wireless broadband deployment through several measures that promote the deployment of the network facilities needed to provide broadband wireless services. These measures include Section 6409(a), entitled "Facility Modifications," which has three provisions. As noted above, Subsection (a)(1) provides that "[n]otwithstanding section 704 of the Telecommunications Act of 1996 [codified as 47 U.S.C. § 332(c)(7)] or any other provision of law, a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."[348] Subsection (a)(2) defines the term "eligible facilities request" as any request for modification of an existing wireless tower or base station that involves (a) collocation of new transmission equipment; (b) removal of transmission equipment; or (c) replacement of transmission equipment.[349] Subsection (a)(3) provides that "[n]othing in paragraph (a) shall be construed to relieve the Commission from the requirements of the National Historic Preservation Act or the National Environmental Policy Act of 1969."[350] Aside from the definition of "eligible facilities request," Section 6409(a) does not define any of its terms. Similarly, neither the definitional section of the Spectrum Act nor that of the Communications Act contains definitions of the Section 6409(a) terms.[351]

138. After the adoption of the Spectrum Act, Commission staff received inquiries from service providers, facilities owners, and State and local governments seeking guidance as to how Section 6409(a) should be applied, leading the Wireless Telecommunications Bureau to issue a Public Notice in January of 2013 (*Section 6409(a) PN*).[352] Although the *Section 6409(a) PN* provided interpretive guidance on certain questions, the Bureau left other issues unaddressed, and parties also raised questions and concerns regarding the *Section 6409(a) PN* guidance itself.[353] Therefore, in the *Infrastructure NPRM*, the Commission sought comment on whether to address the provision more conclusively and comprehensively.[354] The Commission found that it would serve the public interest to seek comment on implementing rules to define terms that the provision left undefined, and to fill in other interstices that may serve to delay the intended benefits of Section 6409(a). The Commission anticipated that, in the absence of definitive guidance, the uncertainties under Section 6409(a) might lead to protracted and costly litigation, adversely affect the timely deployment of the PSBN, and undermine the Spectrum Act's goal of advancing broadband deployment.[355] In addition, the Commission expressed its belief that the various stakeholders, including State and local governments, FirstNet, Commission licensees, and tower companies, would benefit from having settled interpretations on which they could rely in determining

[346] Spectrum Act § 6206(b)(1)(C).

[347] Spectrum Act § 6213.

[348] *Id.* § 6409(a)(1).

[349] *Id.* § 6409(a)(2).

[350] *Id.* § 6409(a)(3).

[351] *See Infrastructure NPRM,* 28 FCC Rcd at 14272-73 para. 92 (citing Spectrum Act § 6001; 47 U.S.C. § 153).

[352] *See* Wireless Telecommunications Bureau Offers Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, *Public Notice*, 28 FCC Rcd 1 (WTB 2013) (*Section 6409(a) PN*). *See also Infrastructure NPRM,* 28 FCC Rcd at 14273 para. 93.

[353] *See id.* at 14275 para. 96.

[354] *See id.*

[355] *See id.*

how to comply with the new law. It therefore sought comment on the interpretation of various terms, and on other implementing issues under the provision. The Commission also sought comment on any reasons it should limit or decline to take regulatory action to clarify Section 6409(a) in this proceeding.[356]

139. In response to the *Infrastructure NPRM*, a broad range of parties from within the communications industry, including carriers, cable companies, tower companies and other infrastructure providers, wireless equipment providers, and industry associations representing, among others, utilities, broadcasters, and wireless Internet service providers, submitted comments arguing that the Commission should adopt rules clarifying the terms of Section 6409(a) to reduce uncertainty and litigation and to facilitate deployment of broadband services.[357] These commenters assert that some jurisdictions have adopted varying and often narrow interpretations of the provision, and that failure to adopt such rules will likely result in an inconsistent patchwork of requirements and undermine the efficiencies the provision was crafted to create.[358] They contend that Commission action is necessary to eliminate ambiguities that have caused delay or denial of applications for broadband facilities deployment.[359]

140. Most municipality commenters, however, oppose adoption of rules and recommend instead that the Commission encourage the wireless industry and local governments to collaborate on development of best practices.[360] They argue that it is not necessary to adopt rules at this time because there is no evidence of a widespread problem in deployment of modified facilities covered by Section 6409(a).[361] They also contend that local governments and the wireless industry work well together on siting issues in most cases, and where problems arise, they can be and are addressed on a case-by-case basis.[362] They argue that additional informal guidance would address the concerns raised in the *Infrastructure NPRM* more productively than adopting rules, particularly if the supplemental guidance encouraged cooperative efforts between interested parties and the development of best practices.[363] Some localities, however, support adoption of rules, arguing that a clear statement from the Commission would resolve the divergent views of industry and regulatory authorities.[364]

141. Some industry associations have affirmatively committed to working "with municipal government representatives . . . on developing materials and gathering information that will foster a greater understanding of Section 6409(a) and facilitate timely and consistent wireless facility

[356] *See id*.

[357] *See*, *e.g.,* AT&T Comments at 21; AT&T Reply Comments at 12-13; CTIA Reply Comments at 5; PCIA Comments at 24-25; Sprint Comments at 7-8; Verizon Comments at 26-27.

[358] *See, e.g.,* AT&T Comments at 7; PCIA Comments at 24-25; Verizon Comments at 26-27.

[359] *See, e.g.,* AT&T Comments at 7; Verizon Comments at 26-27 (providing examples of narrow interpretation of the provision by States and local jurisdictions); *see also* Coconut Creek Comments at 5 (arguing that it is appropriate for the Commission to adopt rules interpreting the Congressional intent behind Section 6409(a) because of the divergent views already taken by industry and local government in the absence of clarity).

[360] *See, e.g.,* Alexandria *et al.* Comments at 5-13; CA Local Governments Comments at 1; CCUA *et al*. Comments at 4-5; DC Comments at 7; Fairfax Comments at 6-7; IAC Comments at 2; Long Beach Comments at 1; NATOA *et al.* Comments at 7-11; NJSLM Comments at 2.

[361] *See, e.g.,* CCUA *et al.* Comments at 4, 17-18; *see also* CA Local Governments Comments at 1; DC Comments at 6 (arguing that there is no record of State and local governments being unresponsive to requests for collocations or reasonable modification of existing towers); Fairfax Comments at 6-7 (asserting that in the last five years, Fairfax County has approved 99.8% of all collocation applications).

[362] *See, e.g.,* CCUA *et al.* Comments at 4-5.

[363] *See, e.g.,* Alexandria *et al.* Comments at 13-22; CCUA *et al.* Comments at 4-5.

[364] *See, e.g.,* Coconut Creek Comments at 5; MDIT Comments at 2; West Palm Beach Comments at 5.

modifications."[365] In particular, CTIA and PCIA pledge to start working with representative national associations shortly after release of this Report and Order to assist resource-constrained municipalities "during the transition and implementation of any rules the FCC may adopt pertaining to the application review process pursuant to Section 6409(a)."[366] They also have committed to distributing best practices to resource-constrained jurisdictions, holding webinars regarding the application process for resource-constrained jurisdictions, and "[p]roviding assistance in drafting a model ordinance and application for reviewing eligible facilities requests under Section 6409(a)."[367] Finally, they have committed to "[c]reating a Checklist that local government officials can use to help streamline review processes."[368]

B. Discussion

142. After reviewing the voluminous record in this proceeding, we decide to adopt rules clarifying the requirements of Section 6409(a), and implementing and enforcing these requirements, in order to prevent delay and confusion in such implementation. As the Commission noted in the *Infrastructure NPRM*, collocation on existing structures is often the most efficient and economical solution for mobile wireless service providers that need new cell sites to expand their existing coverage area, increase their capacity, or deploy new advanced services.[369] We agree with industry commenters that clarifying the terms in Section 6409 will eliminate ambiguities in interpretation and thus facilitate the zoning process for collocations and other modifications to existing towers and base stations.[370] Although these issues could be addressed over time through judicial decisions, we conclude that addressing them now in a comprehensive and uniform manner will ensure that the numerous and significant disagreements over the provision do not delay its intended benefits.

143. The record demonstrates very substantial differences in the views advanced by local government and wireless industry commenters on a wide range of interpretive issues under the provision. While many localities recommend that the Commission defer to best practices to be developed on a collaborative basis,[371] we find that there has been little progress in that effort since enactment of Section 6409(a) well over two years ago. And while we generally encourage the development of voluntary best practices, we are also concerned that voluntary best practices, on their own, may not effectively resolve many of the interpretive disputes or ensure uniform application of the law in this instance.[372] In light of these disputes, we take this opportunity to provide additional certainty to parties.

144. *Authority.* We find that we have authority under Section 6003 of the Spectrum Act to adopt rules to clarify the terms in Section 6409(a) and to establish procedures for effectuating its

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[365] Letter from Jonathan M. Campbell, PCIA-The Wireless Infrastructure Association, and Brian M. Josef, CTIA-The Wireless Association, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed Oct. 16, 2014 (PCIA and CTIA Oct. 16, 2014 *Ex Parte*). *See* 47 C.F.R. §§ 1.1204(a)(10), 1.1203(a)(1).

[366] PCIA and CTIA Oct. 16, 2014 *Ex Parte* at 1.

[367] *Id.* at 2.

[368] *Id.*

[369] *See Infrastructure NPRM*, 28 FCC Rcd at 14274 para. 95 (citing *Sixteenth Competition Report*, 28 FCC Rcd at 3909 para. 331). PCIA estimates that the average cost to build a new tower is between $250,000 and $300,000, whereas the average deployment cost for a collocation is between $25,000 and $30,000. *See* PCIA Comments, WT Docket 11-186, at 7.

[370] *See, e.g.*, AT&T Comments at 7; Joint Venture Comments at 5; PCIA Comments at 24-25; San Diego PDS Comments at 2; Sprint Comments at 7-8; Verizon Comments at 26-27.

[371] *See, e.g.,* Alexandria *et al.* Comments at 11; CA Local Governments Comments at 1; CCUA *et al*. Comments at 4-5; DC Comments at 7; Fairfax Comments at 6-7; IAC Comments at 2; NATOA *et al.* Comments at 7-11; NJSLM Comments at 2.

[372] *See, e.g.,* PCIA Comments at 25-26. *See also* AT&T Reply Comments at 12-13.

requirements.[373] Section 6003 requires the Commission to "implement and enforce this title as if this title is a part of the Communications Act of 1934,"[374] bringing its interpretation directly within several provisions granting the Commission broad authority to promulgate rules implementing that Act.[375] As noted above, we also have broad authority to "take any action necessary to assist [FirstNet] in effectuating its duties and responsibilities" to construct and operate a nationwide public safety broadband network.[376] The rules we adopt reflect the authority conferred by these provisions, as they will facilitate and expedite infrastructure deployment in qualifying cases and thus advance wireless broadband deployment by commercial entities as well as FirstNet.

1. Definition of Terms in Section 6409(a)

145. Section 6409(a) includes a number of undefined terms that bear directly on how the provision applies to infrastructure deployments. Below, we address the meaning of "wireless tower or base station," "transmission equipment," "collocation," and "substantially changes the physical dimensions."

a. Scope of Covered Services

146. *Background.* We first address the scope of wireless services to which the provision applies through the definitions of both "transmission equipment" and "wireless tower or base station." In the *Infrastructure NPRM*, the Commission observed that Section 6409(a) refers to "transmission equipment" without referencing any particular service, and similarly refers generally to a "wireless" tower or base station, rather than specifying towers and base stations used for particular services.[377] The Commission therefore proposed to find that Section 6409(a) applies to equipment used in connection with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast, and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.[378] The Commission further proposed to define a "wireless" tower or base station to include one used for any such purpose (*i.e.*, to cover the same scope of services as "transmission equipment").[379]

147. Wireless and broadcast industry commenters generally support this proposed interpretation.[380] For example, NAB argues that an interpretation of Section 6409(a) encompassing broadcast service, towers, and equipment is fundamentally consistent with Congress's intent to improve the facilities application process; it contends further that this interpretation will make broadcast towers more readily available for collocation, especially for public safety communications equipment.[381] UTC similarly argues that "[b]ecause of the ubiquity of utility and CII ('critical infrastructure industries')

[373] *See* Spectrum Act § 6003.

[374] Spectrum Act § 6003.

[375] *See* 47 U.S.C. §§ 154(i), 201(b), 303(r).

[376] Spectrum Act § 6213, *codified at* 47 U.S.C. § 1433.

[377] *Infrastructure NPRM,* 28 FCC Rcd at 14277 para. 103.

[378] *See id.* at 14277 para. 104.

[379] *Id.*

[380] *See, e.g.,* AT&T Comments at 23; CCA Reply Comments at 4-5; Cox Reply Comments at 5; CTIA Reply Comments at 7; ExteNet Comments at 4; Fibertech Comments at 19; NCTA Reply Comments at 3; PCIA Comments at 29-30; Sprint Comments at 8-9; TIA Comments at 5; T-Mobile Reply Comments at 5-6; UTC Comments at 12; Verizon Comments at 27.

[381] *See* NAB Reply Comments at 3-4.

communications networks, operators of small cell and DAS networks can use collocation on these facilities to . . . bring advanced communications capabilities throughout the United States."[382]

148. Municipal commenters generally favor a narrower scope of covered services.[383] Several urge the Commission to interpret the term "wireless" in Section 6409(a) to cover only "personal wireless services" consistent with Section 332(c)(7).[384] In a joint submission of proposed definitions (Local Government Definitions),[385] several municipal commenters urge us to find that the provision covers "personal wireless services" and "wireless 'public safety services.'"[386] Some municipal commenters object in particular to the inclusion of broadcast services, arguing that treating "broadcast" as a "wireless" service conflicts with the usage of those terms in the Spectrum Act and in other Commission orders.[387]

149. *Discussion.* After considering the arguments in the record, we conclude that Section 6409(a) applies both to towers and base stations and to transmission equipment used in connection with any Commission-authorized wireless communications service. We find strong support in the record for this interpretation.[388] With respect to towers and base stations, we conclude that this interpretation is warranted given Congress's selection of the broader term "wireless" in Section 6409(a) rather than the narrow term "personal wireless service" it previously used in Section 332(c)(7), as well as Congress's express intent that the provisions of the Spectrum Act "advance wireless broadband service," promoting "billions of dollars in private investment," and further the deployment of FirstNet.[389] We find that interpreting "wireless" in the narrow manner that some municipal commenters suggest would substantially undermine the goal of advancing the deployment of broadband facilities and services,[390] and that interpreting Section 6409(a) to facilitate collocation opportunities on a broad range of suitable structures will far better contribute to meeting these goals, and is particularly important to further the deployment of FirstNet. As noted above, the Spectrum Act directs the FirstNet authority, in carrying out its duty to deploy and operate a nationwide public safety broadband network, to "enter into agreements to utilize, to the maximum extent economically desirable, existing . . . commercial or other communications

[382] UTC Comments at 3.

[383] *See, e.g.*, Alexandria *et al*. Comments at 26; Coconut Creek Comments at 6; San Antonio Comments at 16; Springfield Comments at 14-15; West Palm Beach Comments at 6.

[384] *See, e.g.,* Alexandria *et al.* Comments at 26 (arguing that in using the term "wireless," Congress "was concerned with the sorts of services that are the subject of Section 332(c)(7)" and not, for example, broadcast towers).

[385] *See* Letter from Gerard Lederer, Best Best & Krieger LLP, to Marlene Dortch, Secretary, FCC, WT Docket No. 13-238, filed July 21, 2014 (Local Governments July 21, 2014 *Ex Parte*), Attach. B; Letter from Kenneth S. Fellman, Kissinger & Fellman, P.C., to Marlene Dortch, Secretary, FCC, WT Docket No. 13-238, filed July 17, 2014 (CCUA *et al.* July 17, 2014 *Ex Parte*), Attach. A. Because these two sets of definitions are identical, and because their proponents confirmed as much, we refer to them collectively as the "Local Government Definitions."

[386] *See* Local Government Definitions. The Local Government Definitions propose to define "public safety services" in the manner that term is defined in Section 1401(27) of the Spectrum Act, but they do not propose how to define "wireless."

[387] *See, e.g.,* Alexandria *et al*. Comments at 26; San Antonio Comments at 16.

[388] *See*, *e.g.*, AT&T Comments at 23; CCA Reply Comments at 4-5; Cox Reply Comments at 3-4; NAB Reply Comments at 6; PCIA Comments at 29; Sprint Comments at 8-9.

[389] *See* Conference Report at 136 (discussing the purposes of the public safety and spectrum provisions of the Conference substitute, stating that "[t]hese provisions also deliver on one of the last outstanding recommendations of the 9/11 Commission by creating a nationwide interoperable broadband communications network for first responders.").

[390] As some commenters note, Section 332(c)(7) defines "personal wireless services" as "commercial mobile [radio] services, unlicensed wireless [telecommunications] services, and common carrier wireless exchange access services." 47 U.S.C. § 332(c)(7).

infrastructure; and . . . Federal, State, tribal, or local infrastructure."[391] For all of these reasons, we find it appropriate to interpret Section 6409(a) as applying to collocations on infrastructure that supports equipment used for all Commission-licensed or authorized wireless transmissions.

150. We are not persuaded that Congress's use of the term "base station" implies that the provision applies only to mobile service.[392] As noted in the *Infrastructure NPRM*, our rules define "base station" as a feature of a mobile communications network, and the term has commonly been used in that context.[393] It is important, however, to interpret "base station" in the context of Congress's intention to advance wireless broadband service generally, including both mobile and fixed broadband services.[394] We note, for example, that the Spectrum Act directs the Commission to license the new commercial wireless services employing H Block, AWS-3, and repurposed television broadcast spectrum under "flexible-use service rules"—*i.e.*, for fixed as well as mobile use.[395] Moreover, in the context of wireless broadband service generally, the term "base station" describes fixed stations that provide fixed wireless service to users as well as those that provide mobile wireless service.[396] Indeed, this is particularly true with regard to Long Term Evolution (LTE), in which base stations can support both fixed and mobile service.[397] Accordingly, we find that, in the context of Section 6409(a), the term "base station" encompasses both mobile and fixed services.

[391] Spectrum Act § 6206(c)(3). We further note Congress's direction to FirstNet that, in issuing requests for proposals to private sector entities for the purposes of building and operating the public safety network, FirstNet should "encourage[e] that such requests leverage, to the maximum extent economically desirable, existing commercial wireless infrastructure to speed deployment of the network." *Id.* at § 6206(b)(1)(C).

[392] *See, e.g.,* IAC Comments at 5 (citing Intergovernmental Advisory Committee to the Federal Communications Commission: Advisory Recommendation Number 2013-9, "Response to Wireless Telecommunications Bureau's Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012," dated July 31, 2013 ("IAC Recommendation"), at 3). The IAC Recommendation has been filed in WC Docket No. 11-59 (Aug. 2, 2013) and is also available at http://www.fcc.gov/encyclopedia/intergovernmental-advisory-committee-comments.).

[393] *Infrastructure NPRM,* 28 FCC Rcd at 14278 para. 107 (citing 47 C.F.R. § 90.7, which defines "base station" in Part 90 of the Commission's rules as a "station at a specified site authorized to communicate with mobile stations."); 47 C.F.R. §§ 2.1(c), 24.5 (defining "base station" as "[a] land station in the land mobile service.").

[394] *See* WISPA Reply Comments at 7.

[395] Spectrum Act §§ 6401(b)(1)(B), 6403 (codified at 47 U.S.C. §§ 1451(b)(1)(B), 1452).

[396] *See, e.g.*, Amendment of Part 27 of the Commission's Rules to Govern the Operation of Wireless Communications Services in the 2.3 GHz Band, WT Docket No. 07-293, *Report and Order and Second Report and Order*, 25 FCC Rcd 11710, n.92 (2010) (stating that, "[i]n fixed WiMAX networks, both the base stations and subscriber stations are stationary during use"); Unlicensed Operation in the TV Broadcast Bands, ET Docket No. 04-186, Additional Spectrum For Unlicensed Devices Below 900 MHz and in the 3 GHz Band, ET Docket No. 02-380, *Second Report and Order and Memorandum Opinion and Order*, 23 FCC Rcd 16807, 16846 para. 104 (2009) (adopting rules to allow unlicensed wireless broadband services, and noting that "[a] fixed system will consist of a permanently located base station transmitting to one or more fixed devices or to personal/portable end user devices"); Pacific Wireless, "Fixed Wireless Broadband," *available at* http://www.pacificwireless.com.au/fixed-wireless-broadband.html (noting that "[i]n all wireless networks, base stations do not move—i.e. they are in a fixed location—but in a mobile broadband network, the [Subscriber Unit] can move").

[397] *See*, *e.g.*, "PLDT Rolls-Out 5,000 New 4G LTE Base Stations," *available at* http://www.policychargingcontrol.com/1824-pldt-rolls-out-5-000-new-lte-base-stations (noting one service provider has "deployed nearly 2,000 fixed wireless LTE base stations to serve high-speed wireless broadband services to homes"); "LTE to Bring Fixed-Wireless Broadband to Rural Australia," *available at* http://www.ericsson.com/news/1520376 (noting that "[f]ixed-wireless networks are used to connect stationary points – in this case LTE base stations to several households or businesses").

151. We are also not persuaded that we should exclude "broadcast" from the scope of Section 6409(a), both with respect to "wireless" towers and base stations and with respect to transmission equipment. While we acknowledge that the term "wireless providers" appears in other sections of the Spectrum Act that do not encompass broadcast services,[398] we do not agree that use of the word "wireless" in Section 6409's reference to a "tower or base station" can be understood without reference to context.[399] We therefore interpret the term "wireless" as used in Section 6409(a) in light of the purpose of this provision in particular and the larger purposes of the Spectrum Act as a whole. We find that Congress intended the provision to facilitate collocation in order to advance the deployment of commercial and public safety broadband services, including the deployment of the FirstNet network. We agree with NAB that including broadcast towers significantly advances this purpose by "supporting the approximately 25,000 broadcast towers as collocation platforms."[400] We note that a variety of industry and municipal commenters likewise support the inclusion of broadcast towers for similar reasons.[401] Finally, we observe that this approach is consistent with the Collocation Agreement and the NPA, both of which define "tower" to include broadcast towers. These agreements address "wireless" communications facilities and collocation for any "communications" purposes. They extend to any "tower" built for the sole or primary purpose of supporting any "FCC-licensed" facilities.[402] We find these references particularly persuasive in ascertaining congressional intent, since Section 6409(a) expressly references the Commission's continuing obligations to comply with NEPA and NHPA, which form the basis for these agreements.[403]

[398] *See, e.g.*, Spectrum Act § 6203 ("Public Safety Interoperability Board"). This section provides that "4 members [of the board] shall be representatives of wireless providers," of whom two members must represent "national wireless providers," one must represent "regional wireless providers," and one must represent "rural wireless providers." We agree that the phrase "wireless providers" in the context of this separate Subtitle B of the Spectrum Act, in establishing a board charged with developing recommended minimum technical interoperability requirements for the nationwide public safety broadband network, was not intended to include providers of broadcast services. *See also* San Antonio Comments at 16, n.19. San Antonio argues that the Commission has used the terms "wireless" and "broadcast" to refer to two different categories of service, citing the Commission's decisions that distinguish between "wireless" and "broadcast" licensees. The Commission decisions cited by San Antonio are in the context of establishing different regulatory requirements for wireless services and broadcast services, and do not address the context of facilitating access to infrastructure. As discussed further below, for example, the Collocation Agreement uses the term "wireless" broadly to refer to the use of "wireless antenna" for any "communications" purpose, including broadcast. *See* Collocation Agreement (entitled "National Programmatic Agreement for the Collocation of Wireless Antennas") § I.A (encompassing all antennas for the "purpose of transmitting and/or receiving radio frequency signals for communications purposes").

[399] As the Supreme Court has cautioned, "[m]ost words have different shades of meaning and consequently may be variously construed, not only when they occur in different statutes, but when used more than once in the same statute or even in the same section." *Environmental Defense v. Duke Energy Corp.,* 549 U.S. 561, 574 (2007). Thus, the same word in the same statute "may take on distinct characters from association with distinct statutory objects calling for different implementation strategies." *Id.*

[400] NAB Reply Comments at 3-4 (stating that anecdotal evidence suggests that as many as 85% of the approximately 25,000 existing broadcast towers are being used for collocation today).

[401] *See, e.g.,* Coconut Creek Comments at 6; NAB Reply Comments at 3; NCTA Reply Comments at 2-3; Springfield Comments at 15; West Palm Beach Comments at 5.

[402] 47 C.F.R. Part 1 App. B (Collocation Agreement) (introductory clause and part I definitions of "collocation" and "tower"). Under the NPA, "tower" is defined as "[a]ny structure built for the sole or primary purpose of supporting Commission-licensed or authorized Antennas, including the on-site fencing, equipment, switches, wiring, cabling, power sources, shelters, or cabinets associated with that Tower but not installed as part of an Antenna as defined herein." 47 C.F.R. Part 1 App. C § II.A.14 (NPA).

[403] *See* Spectrum Act § 6409(c).

152. We further conclude that a broad interpretation of "transmission equipment" is similarly appropriate in light of the purposes of Section 6409(a) in particular and the Spectrum Act more generally.[404] The statute's Conference Report expresses Congress's intention to advance wireless broadband service generally,[405] and as PCIA states, a broad definition of this term will ensure coverage for all wireless broadband services, including future services not yet contemplated.[406] Defining "transmission equipment" broadly will therefore facilitate the deployment of wireless broadband networks and will "minimize the need to continually redefine the term as technology and applications evolve."[407] We also note that a broad definition reflects Congress's definition of a comparable term in the context of directly related provisions in the same statute; in Section 6408, the immediately preceding provision addressing uses of adjacent spectrum, Congress defined the term "transmission system" broadly to include "any telecommunications, broadcast, satellite, commercial mobile service, or other communications system that employs radio spectrum."[408]

153. We disagree with commenters who contend that including broadcast equipment within covered transmission equipment does not advance the goals of the Spectrum Act.[409] While broadcast equipment does not itself transmit wireless broadband signals, its efficient collocation pursuant to Section 6409(a) will expedite and minimize the costs of the relocation of broadcast television licensees that are reassigned to new channels in order to clear the spectrum that will be offered for broadband services through the incentive auction, as mandated by the Spectrum Act.[410] Accordingly, we conclude that inclusion of broadcast service equipment in the scope of transmission equipment covered by the provision furthers the goals of the legislation and will contribute in particular to the success of the post-incentive auction transition of television broadcast stations to their new channels. In any event, we note that the language of Section 6409(a) is broader than that used in Section 332(c)(7), and it is therefore reasonable to construe it in a manner that does not differentiate among various Commission-regulated services, particularly in the context of mandating approval of facilities that do not result in any substantial increase in physical dimensions.

154. We further reject arguments that Congress intended these terms to be restricted to equipment used in connection with personal wireless services and public safety services.[411] The Communications Act and the Spectrum Act already define those narrower terms, and Congress chose not to employ them in Section 6409(a), determining instead to use the broader term, "wireless." The

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[404] *See., e.g.,* AT&T Comments at 23; CCA Reply Comments at 4-5; NAB Reply Comments at 3-4; PCIA Comments at 29-31; Sprint Comments at 8-9; TIA Comments at 5; WISPA Reply Comments at 4.

[405] *See* Conference Report at 136.

[406] *See* PCIA Comments at 29. *See also, e.g.*, CCA Reply Comments at 4-5.

[407] Towerstream Comments at 10-11; CCA Reply Comments at 5.

[408] Spectrum Act § 6408.

[409] *See, e.g.,* Alexandria *et al.* Comments at 26; CA Local Governments Comments at 2-3; CCUA *et al.* Comments at 9; Local Government Definitions.

[410] *See Incentive Auction Report and Order*, 29 FCC Rcd 6133, at paras. 1 (establishing rules to, among other thing, reorganize the broadcast television bands in order to "recover a portion of ultra-high frequency ('UHF') spectrum for a 'forward auction' of new, flexible-use licenses suitable for providing mobile broadband services"), 581 (providing that "[t]he following circumstances may justify an extension of a station's construction deadline: . . . delays faced by broadcast stations that must obtain government approvals, such as land use or zoning approvals"). We further note that Section 6403 allows broadcasters subject to relocation in the incentive auction process to accept, in lieu of reimbursement for relocation cost, a waiver of the applicable service rules to permit the licensee to make flexible use of its assigned spectrum to provide services other than broadcast television services, so long as the licensee provides "at least 1 broadcast television program stream on such spectrum at no charge to the public." Spectrum Act § 6403(b)(4)(B).

[411] *See* Local Government Definitions.

legislative history supports the conclusion that Congress intended to employ broader language. In the Conference Report, Congress emphasized that a primary goal of the Spectrum Act was to "advance wireless broadband service," which would "promot[e] billions of dollars in private investment, and creat[e] tens of thousands of jobs."[412] In light of its clear intent to advance wireless broadband deployment through enactment of Section 6409(a), we find it implausible that Congress meant to exclude facilities used for such services.

b. Transmission Equipment

155. *Background.* In addition to seeking comment on the scope of services supported by covered "transmission equipment," the Commission further proposed to define "transmission equipment" to encompass antennas and other equipment associated with and necessary to their operation, including power supply cables and backup power equipment.[413] It sought comment in particular on including backup power equipment in light of the public interest in continued service during emergencies. It further sought comment on whether to use the NPA's definition of "antenna" as the definition of "transmission equipment."[414]

156. Industry commenters support the Commission's proposal.[415] They argue that the definition of "transmission equipment" must include backup power equipment and other power supply equipment in light of the public interest in maintaining uninterrupted service during emergencies.[416] AT&T recommends that we base the definition on the definition of "antenna" in the NPA, which includes the transmission device and any on-site equipment, switches, wiring, cabling, power sources, shelters, or cabinets.[417]

157. Several local government commenters oppose the proposed definition, urging the Commission to limit its scope to electronic components that actually transmit or receive communications signals.[418] In particular, they oppose inclusion of backup power generators, arguing that some generators raise environmental, safety and zoning issues more properly suited to a discretionary review process.[419] Tempe argues further that backup power equipment should not be included in the definition because it is not "necessary" to wireless operations.[420]

158. *Discussion.* We adopt the proposal in the *Infrastructure NPRM* to define "transmission equipment" to encompass antennas and other equipment associated with and necessary to their operation, including power supply cables and backup power equipment.[421] We find that this definition reflects Congress's intent to facilitate the review of collocations and minor modifications, and it recognizes that

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[412] *See* Conference Report at 136.

[413] *Infrastructure NPRM*, 28 FCC Rcd at 14277-78 para. 105.

[414] *Id.* at 14278 para. 106.

[415] *See*, *e.g.*, AT&T Comments at 23; CCA Reply Comments at 4-5; CTIA Reply Comments at 7; Fibertech Comments at 18; PCIA Comments at 29-31; Sprint Comments at 8-9; TIA Comments at 5.

[416] *See, e.g.,* AT&T Comments at 23; PCIA Comments at 29-30; Sprint Comments at 8-9.

[417] AT&T Comments at 23.

[418] *See, e.g.,* CA Local Governments Comments at 2-3; CCC Comments at 3 (arguing "transmission equipment" should not include "ancillary or support equipment that is uninvolved in transmission, such as back-up power generators"); CCUA *et al.* Comments at 9; Coconut Creek Comments at 5-6; Tucson Comments at 5.

[419] *See, e.g.,* CA Local Governments Comments at 3; Coconut Creek Comments at 5-6; Fairfax Comments at 7-8; Tucson Comments at 5; West Palm Beach Comments at 5-6.

[420] Tempe Comments at 11.

[421] *Infrastructure NPRM,* 28 FCC Rcd at 14277-78 para. 105.

Congress used the broad term "transmission equipment" without qualifications that would logically limit its scope.[422]

159. We are further persuaded by wireless industry commenters that power supplies, including backup power, are a critical component of wireless broadband deployment and that they are necessary to ensure network resiliency.[423] Indeed, including backup power equipment within the scope of "transmission equipment" under Section 6409(a) is consistent with Congress's directive to the FirstNet Authority to "ensure the . . . resiliency of the network."[424] Tempe's assertion that backup power is not technically "necessary" because transmission equipment can operate without it is unpersuasive. Backup power is certainly necessary to operations during those periods when primary power is intermittent or unavailable.[425] We also conclude that "transmission equipment" should be interpreted consistent with the term "antenna" in the NPA and, given that the NPA term encompasses "power sources" without limitation, we find that "transmission equipment" includes backup power sources.[426] Finally, while we recognize the concerns raised by local government commenters regarding the potential hazards of backup power generators, we find that these concerns are fully addressed in the standards applicable to collocation applications discussed below.[427]

160. Therefore, we define "transmission equipment" under Section 6409(a) as any equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas and other relevant equipment associated with and necessary to their operation, including coaxial or fiber-optic cable, and regular and backup power supply.[428] This definition includes equipment used in any technological configuration associated with any Commission-authorized wireless transmission, licensed or unlicensed, terrestrial or satellite, including commercial mobile, private mobile, broadcast, and public safety services, as well as fixed wireless services such as microwave backhaul or fixed broadband.

c. Existing Wireless Tower or Base Station

161. *Background.* In addition to seeking comment on the scope of the word "wireless" as used in the phrase "wireless tower or base station," as discussed above, the Commission sought comment more generally on how to define "existing wireless tower or base station" in order to determine the scope of

[422] *Id. See also* CCA Reply Comments at 4-5; PCIA Comments at 29; Sprint Comments at 8-9; TIA Comments at 5.

[423] *See, e.g.,* PCIA Comments at 29-30; Sprint Comments at 8-9; TIA Comments at 5; CCA Reply Comments at 4-5. *See also* CTIA Comments at 23 ("Several significant storm-related disasters over the past three years have underscored the importance of infrastructure . . . hardening as [it] relate[s] to wireless carriers' ability to maintain communications at the very time it is needed by public safety to assist recovery efforts and by the public to find out the fates of loved ones.").

[424] Spectrum Act § 6206(b)(2)(A). *See also* "Why FirstNet," *available at* http://www.firstnet.gov/about/why (stating that "Reliability Must Be Built In" and emphasizing that "[a]s wind speeds rise and electrical power beings to fail, cell sites need ample power backup to address outages").

[425] For a history of the Commission's concerns about the availability of backup power to ensure the resiliency of wireless services, *see*, *generally*, Improving the Resiliency of Mobile Wireless Communications Networks, PS Docket Nos. 13-139, 11-50, *Notice of Proposed Rulemaking,* 28 FCC Rcd 14373 (2013).

[426] *See* NPA § II.A.1. The NPA defines "antenna" in part as "[a]n apparatus designed for the purpose of emitting radio frequency ('RF') radiation, to be operated or operating from a fixed location pursuant to Commission authorization, for the transmission of writing, signs, signals, data, images, pictures, and sounds of all kinds, including the transmitting device and any on-site equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with that antenna and added to a Tower, structure, or building as part of the original installation of the antenna." *Id.*

[427] *See infra*, para. 202.

[428] Spectrum Act § 6409(a).

support structures covered by Section 6409(a).[429] Based on the existing definitions in comparable contexts in the Collocation Agreement, the NPA, and the Commission's rules, the Commission proposed to define a "tower" as any structure built for the sole or primary purpose of supporting antennas used for any FCC-licensed or authorized wireless communications service.[430] The Commission proposed to define "base station" as "[a] station at a specified site that enables wireless communication between user equipment and a communications network, including any associated equipment such as, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply."[431] In addition, recognizing the Commission's efforts to encourage collocations on non-tower structures to enhance capacity for wireless networks,[432] and consistent with the Bureau's guidance in the *Section 6409(a) PN* on the scope of "base station," the Commission proposed to find that "wireless tower or base station" should be interpreted to encompass structures that support or house equipment that constitutes part of a base station, even if they were not built for the sole or primary purpose of providing such support.[433] Further, the Commission proposed to interpret "base station" as encompassing the relevant equipment in any technological configuration, including DAS.[434]

162. The Commission also sought comment on how to interpret the term "existing" in this context. It sought comment on whether the term, as applied to "wireless tower or base station," requires only that a structure exist at the time of a collocation application or whether it also requires that the structure is in use at that time as a tower or base station. In particular, the Commission asked whether an "existing" base station only includes a structure that currently supports or houses base station equipment. It sought comment on which interpretation of the word would both facilitate deployments that are unlikely to conflict with local land use policies and also preserve State and local authority to review construction proposals that may have impacts.[435]

163. Industry commenters agree that "wireless tower" means a structure built for the sole or primary purpose of supporting Commission-licensed or authorized antennas.[436] Many industry commenters also support interpreting "base station" to include structures that support or house an antenna, transceiver, or other associated equipment that constitutes part of a base station, even if the structure was not built for the sole or primary purpose of supporting that equipment.[437] Some industry commenters propose that the definition of "wireless tower or base station" should also include other structures that are "similar to wireless towers" or otherwise suitable for wireless deployment, such as

[429] *Infrastructure NPRM*, 28 FCC Rcd at 14278-80 paras. 107-112.

[430] *Id.* at 14278-9 para. 108, 14300 App. A, Proposed Rule § 1.30001 (b)(6); *see also* NPA § II.A.14.

[431] *See Infrastructure NPRM*, 28 FCC Rcd at 14299-302 App. A.

[432] *See*, *generally*, Implementation of Section 224 of the Act; A National Broadband Plan for Our Future, WC Docket No. 07-245, GN Docket No. 09-51, *Report and Order and Order on Reconsideration*, 26 FCC Rcd 5240 (2011), *aff'd sub nom. American Elec. Power Service Corp. v. FCC*, 708 F.3d 183 (D.C. Cir. 2013) (*Pole Attachment Order*).

[433] *Infrastructure NPRM*, 28 FCC Rcd at 14278-80 paras. 108, 111.

[434] *Id.* at 14279-80 para. 110. As noted above, DAS configuration differs from a traditional base station configuration in that transceiver equipment supporting an antenna is typically located not at the antenna site, but at a remote hub site typically connected to the antenna by fiber-optic cable. *See supra,* para. 31.

[435] *See Infrastructure NPRM*, 28 FCC Rcd at 14280 para. 111.

[436] *See, e.g.,* AT&T Comments at 22; PCIA Comments at 34.

[437] *See, e.g.,* AT&T Comments at 22; AT&T Reply Comments at 10-11; CCA Reply Comments at 5-6; Cox Reply Comments at 3-5; PCIA Comments at 31-32; Sprint Comments at 8-9; TIA Comments at 5; T-Mobile Reply Comments at 6-8; WISPA Reply Comments at 6-7.

water towers, light stanchions, and utility poles, even if they do not currently house or support transmission equipment.[438]

164. Industry commenters urge the Commission not to limit the scope of equipment and structures encompassed by the term "base station," arguing that it should extend to associated equipment buildings, shelters, and cabinets even if they are not located immediately adjacent to the support structure.[439] Sprint further argues that the word "base station" should cover DAS and small cell facilities, consistent with the guidance in the *Section 6409(a) PN*.[440]

165. Municipal commenters suggest narrower definitions. They argue that the definition of "wireless tower" should be limited to structures built for the sole or primary purpose of housing wireless facilities and should not include structures that have not previously been considered wireless towers, such as utility poles, light poles, or buildings.[441] Municipal commenters further argue that the term "base station" does not logically apply to any structures at all; they contend that a "wireless tower" is a structure, but a "base station" is a system of transmission equipment distinct from the structure that supports or houses it.[442] In addition, some commenters argue that a deployment at a particular site should not be considered a base station unless it includes all the components of a base station. Alexandria *et al.* thus assert that Section 6409(a) does not apply to most DAS facilities, arguing that DAS providers have stated that their facilities, including the distributed antenna, fiber optic connections, and hub site, do not constitute a "wireless . . . base station" at all except for the radio transmitters and reception equipment at the system's hub.[443]

166. *Discussion.* We adopt the definitions of "tower" and "base station" proposed in the *Infrastructure NPRM* with certain modifications and clarifications, in order to give independent meaning to both of these statutory terms, and consistent with Congress's intent to promote the deployment of wireless broadband services. First, we conclude that the term "tower" is intended to reflect the meaning of that term as it is used in the Collocation Agreement. Accordingly, we define "tower" to include any

[438] *See, e.g.,* Sprint Comments at 8-9; Verizon Comments at 27-28. *See also* CCA Reply Comments at 5-6; Cox Reply Comments at 4; NCTA Reply Comments at 3; WISPA Reply Comments at 6-7 (arguing that excluding structures such as water tanks and grain silos that are traditionally utilized to support wireless equipment in rural areas would sharply limit the benefits intended by the statute).

[439] *See, e.g.,* AT&T Comments at 23; Cox Reply Comments at 5.

[440] Sprint Comments at 9. *See also* AT&T Comments at 22; PCIA Comments at 33 (asserting that while DAS and small cells may be deployed differently than macrocells, their core components and functionality are the same and they should therefore should be the subject to the same streamlined processing); Verizon Comments at 27-28.

[441] *See, e.g.,* Alexandria *et al.* Comments at 22-26; Alexandria *et al.* Reply Comments at 9-12; CA Local Governments Comments at 4-6; CCUA *et al.* Reply Comments at 11; DC Comments at 8-9; DC Reply Comments at 7-8; Fairfax Reply Comments at 5; Henderson Comments at 2; CCUA *et al.* Comments at 7-8; Minneapolis Comments at 12; NATOA *et al.* Comments at 12-13; NATOA *et al.* Reply Comments at 4; RCRC Comments at 2; San Antonio Reply Comments at 3; St. Paul Reply Comments at 1-2; Tempe Reply Comments at 4.

[442] *See, e.g.,* Alexandria *et al.* Comments at 29; CA Local Governments Comments at 3, 7; CCUA *et al.* Comments at 9; DC Reply Comments at 8-9; NATOA *et al.* Comments at 12-13; NATOA *et al.* Reply Comments at 4; PEC Comments at 8-9. *See also* Alexandria *et al.* Reply Comments at 11 (contending that a "base station" is a "network element in [a] radio access network responsible for radio transmission and reception in one or more cells to or from the user equipment," not a structure that supports that network element) (internal quotation omitted).

[443] Alexandria *et al.* Reply Comments at 12-13, n.34 (citing CTC Report at 20) ("In a DAS, to the extent that any portion of the system may be considered a 'base station,' that base station is limited to the radio transmission and reception equipment in the headend building."). *See also* Fairfax Comments at 8-9; RCRC Comments at 2; St. Paul Reply Comments at 1-2.

structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities.[444]

167. As proposed in the *Infrastructure NPRM*, we interpret "base station" to extend the scope of the provision to certain support structures other than towers. Specifically, we define that term as the equipment and non-tower supporting structure at a fixed location that enable Commission-licensed or authorized wireless communications between user equipment and a communications network. We find that the term includes any equipment associated with wireless communications service including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supply, and comparable equipment.[445] We note that this definition reflects the types of equipment included in our definition of "transmission equipment," and that the record generally supports this approach.[446] For example, DC argues that the Commission should define a base station as "generally consist[ing] of radio transceivers, antennae, coaxial cable, a regular and backup power supply, and other associated electronics."[447] TIA concurs that the term "base station" encompasses transmission equipment, including antennas, transceivers, and other equipment associated with and necessary to their operation, including coaxial cable and regular and backup power equipment.[448]

168. We further find, consistent with the Commission's proposal, that the term "existing . . . base station" includes a structure that, at the time of the application, supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a "base station" as defined above, even if the structure was not built for the sole or primary purpose of providing such support.[449] As the Commission noted in the *Infrastructure NPRM*, while "tower" is defined in the Collocation Agreement and the NPA to include only those structures built for the sole or primary purpose of supporting wireless communications equipment, the term "base station" is not used in these agreements.[450] However, we reject the proposal to define a "base station" to include any structure that is merely capable of supporting wireless transmission equipment, whether or not it is providing such support at the time of the application.[451] We agree with municipalities' comments that by using the term "existing," Section 6409(a) preserves local government authority to initially determine what types of structures are appropriate for supporting wireless transmission equipment if the structures were not built (and thus were not previously approved) for the sole or primary purpose of supporting such equipment.[452] Some wireless industry commenters also support our interpretation that, while a tower that was built for the primary purpose of housing or supporting communications facilities should be considered "existing" even if it does not currently host wireless equipment, other structures should be considered "existing" only if they support or house wireless equipment at the time the application is filed.[453]

169. We find that the alternative definitions proposed by many municipalities are unpersuasive. First, we reject arguments that a "base station" includes only the transmission system

[444] Collocation Agreement § I.B.

[445] *Infrastructure NPRM*, 28 FCC Rcd at 14300 App. A, Proposed Rule § 1.30001(b)(1).

[446] *See*, *e.g.,* AT&T Comments at 22; DC Comments at 9; PCIA Comments at 32-33; Sprint Comments at 8-9; TIA Comments at 6.

[447] DC Comments at 9.

[448] TIA Comments at 6.

[449] *Infrastructure NPRM,* 28 FCC Rcd at 14278-79 para. 108; *see also Section 6409(a) PN*, 28 FCC Rcd at 3.

[450] *Infrastructure NPRM,* 28 FCC Rcd at 14278 para. 107; Collocation Agreement § V.A (referring to "building or non-Tower structure"); NPA § II.A.14. *See also* AT&T Comments at 22; AT&T Reply Comments at 10-11.

[451] *See, e.g.,* NCTA Reply Comments at 3; Sprint Comments at 9; Verizon Comments at 27-28.

[452] *See*, *e.g.,* Coconut Creek Comments at 6; IAC Recommendation at 3; Salem Comments at 10.

[453] *See, e.g.,* AT&T Comments at 22-23; PCIA Comments at 31-32; TIA Comments at 5.

equipment, not the structure that supports it. This reading conflicts with the full text of the provision, which plainly contemplates collocations on a base station as well as a tower. As noted above, Section 6409(a) defines an "eligible facilities request" as a request to modify an existing wireless tower *or base station* by collocating on it (among other modifications).[454] This statutory structure precludes us from limiting the term "base station" to transmission equipment; collocating on base stations, which the statute envisions, would be conceptually impossible unless the structure is part of the definition as well. We further disagree that defining "base station" to include supporting structures will deprive "tower" of all independent meaning.[455] As discussed above, we interpret "base station" not to include wireless deployments on towers. Further, we interpret "tower" to include all structures built for the sole or primary purpose of supporting Commission-licensed or authorized antennas, and their associated facilities, regardless of whether they currently support base station equipment at the time the application is filed. Thus, "tower" denotes a structure that is covered under Section 6409(a) by virtue of its construction. In contrast, a "base station" includes a structure that is not a wireless tower only where it already supports or houses such equipment.

170. We are also not persuaded by arguments that "base station" refers only to the equipment compound associated with a tower and the equipment located upon it. First, no commenters presented evidence that "base station" is more commonly understood to mean an equipment compound as opposed to the broader definition of all equipment associated with transmission and reception and its supporting structures. Furthermore, the Collocation Agreement's definition of "tower," which we adopt in this Report and Order, treats equipment compounds as part of the associated towers for purposes of collocations;[456] if towers include their equipment compounds, then defining base stations as equipment compounds alone would render the term superfluous. We also note that none of the State statutes and regulations implementing Section 6409(a) has limited its scope to equipment and structures associated with towers.[457] In addition, we agree with commenters who argue that limiting the definition of "base station" (and thus the scope of Section 6409(a)) to structures and equipment associated with towers would compromise the core policy goal of bringing greater efficiency to the process for collocations.[458] Other structures are increasingly important to the deployment of wireless communications infrastructure; omitting them from the scope of Section 6409(a) would mean the statute's efficiencies would not extend to many if not most wireless collocations, and would counterproductively exclude virtually all of the small cell collocations that have the least impact on local land use.

171. Some commenters arguing that Section 6409(a) covers no structures other than those associated with towers point to the Conference Report, which, in describing the equivalent provision in the House bill, states that the provision "would require approval of requests for modification of cell towers."[459] We do not find this ambiguous statement sufficient to overcome the language of the statute as enacted, which refers to "modification of an existing wireless tower *or base station*."[460] Moreover, this

[454] Spectrum Act § 6409(a)(2).

[455] *See, e.g.,* Alexandria *et al.* Comments at 29.

[456] NPA § II.A.14.

[457] *See, e.g.,* GA. ST §36-66B ("Mobile Broadband Infrastructure Leads to Development Act") (GA BILD Act); MI ST. 125.3514; MO ST 67.5090 *et seq.*, MO LEGIS S.B. 650 (2014) ("Uniform Wireless Communications Infrastructure Deployment Act"); NH Rev Stat § 12-K:10 (2013); NC ST § 160A-400.50 *et seq.* ("Wireless Telecommunications Facilities"); PA ST 53 P.S. § 11702.1 *et seq.* ("Municipalities - Wireless Broadband Collocation Act"); WI ST 66-0404 (2014) ("Mobile Tower Siting Regulations).

[458] *Infrastructure NPRM,* 28 FCC Rcd at 14278-80 paras. 107-110; AT&T Comments at 22; PCIA Comments at 31-33; Sprint Comments at 8-9; TIA Comments at 5; T-Mobile Reply Comments at 6-8; WISPA Reply Comments at 6-7.

[459] Conference Report at 133.

[460] Spectrum Act § 6409(a) (emphasis added).

statement from the report does not expressly state a limitation on the provision, and thus may reasonably be read as a simplified reference to towers as an important application of its mandate. Therefore, we do not view this language as indicating Congress's intention that the provision encompasses only modifications of structures that qualify as wireless towers.

172. We thus adopt the proposed definition of "base station" to include a structure that currently supports or houses an antenna, transceiver, or other associated equipment that constitutes part of a base station at the time the application is filed.[461] Consistent with the Bureau's guidance in the *Section 6409(a) PN*, we also find that "base station" encompasses the relevant equipment in any technological configuration, including DAS and small cells.[462] We disagree with municipalities that argue that "base station" should not include DAS or small cells.[463] As the record supports, there is no statutory language limiting the term "base station" in this manner. Our definition is sufficiently flexible to encompass, as appropriate to Section 6409(a)'s intent and purpose, future as well as current base station technologies and technological configurations, using either licensed or unlicensed spectrum.[464]

173. While we do not accept municipal arguments to limit Section 6409(a) to equipment or structures associated with towers, we reject industry arguments that Section 6409(a) should apply more broadly to include certain structures that neither were built for the purpose of housing wireless equipment nor have base station equipment deployed upon them.[465] We find no persuasive basis to interpret the statutory provision so broadly. We agree with Alexandria *et al.* that the scope of Section 6409(a) is different from that of the Collocation Agreement, as the statutory provision clearly applies only to collocations on an existing "wireless tower or base station" rather than any existing "tower or structure."[466] Further, interpreting "tower" to include structures "similar to a tower" would be contrary to the very Collocation Agreement to which these commenters point us, which defines "tower" in the narrower fashion that we adopt. We also agree with municipalities as a policy matter that local governments should retain authority to make the initial determination (subject to the constraints of Section 332(c)(7)) of which non-tower structures are appropriate for supporting wireless transmission equipment; our interpretations of "tower" and "base station" preserve that authority.[467]

174. Finally, we agree with Fairfax that the term "existing" requires that wireless towers or base stations have been reviewed and approved under the applicable local zoning or siting process or that the deployment of existing transmission equipment on the structure received another form of affirmative State or local regulatory approval (*e.g.*, authorization from a State public utility commission).[468] Thus, if a tower or base station was constructed or deployed without proper review, was not required to undergo siting review, or does not support transmission equipment that received another form of affirmative State or local regulatory approval, the governing authority is not obligated to grant a collocation application under Section 6409(a). We further clarify that a wireless tower that does not have a permit because it was not in a zoned area when it was built, but was lawfully constructed, is an "existing" tower. We find that our interpretation of "existing" is consistent with the purposes of Section 6409(a) to facilitate

[461] *Infrastructure NPRM,* 28 FCC Rcd at 14300 App. A., Proposed Rules §1.30001(b)(1).

[462] *Id.* at 14279-80 para. 110. *See also* Sprint Comments at 9.

[463] *See*, *e.g.*, Alexandria *et al.* Reply Comments at 12; Fairfax Comments at 8-9; RCRC Comments at 2.

[464] *See, e.g.,* CTIA Reply Comments at 12; Sprint Comments at 8-9.

[465] *See, e.g.,* PCIA Comments at 31-32; Sprint Comments at 9; Verizon Comments at 27-28; WISPA Reply Comments at 6. *See also* CCA Reply Comments at 5-6; Cox Reply Comments at 4; NCTA Reply Comments at 3; WISPA Reply Comments at 6-7.

[466] Alexandria *et al.* Comments at 30-31.

[467] *See e.g.,* Coconut Creek Comments at 6; IAC Recommendation at 3; Salem Comments at 10.

[468] Fairfax Comments at 5; *See also* Fairfax Reply Comments at 7 ("A tower or structure illegally constructed is not sanitized by § 6409(a).").

deployments that are unlikely to conflict with local land use policies and preserve State and local authority to review proposals that may have impacts. First, it ensures that a facility that was deployed unlawfully does not trigger a municipality's obligation to approve modification requests under Section 6409(a). Further, it guarantees that the structure has already been the subject of State or local review. This interpretation should also minimize incentives for governing authorities to increase zoning or other regulatory review in cases where minimally intrusive deployments are currently permitted without review. For example, under this interpretation, a homeowner's deployment of a femtocell that is not subject to any zoning or other regulatory requirements will not constitute a base station deployment that triggers obligations to allow deployments of other types of facilities at that location under Section 6409(a). By thus preserving State and local authority to review the first base station deployment that brings any non-tower structure within the scope of Section 6409(a), we ensure that subsequent collocations of additional transmission equipment on that structure will be consistent with congressional intent that deployments subject to Section 6409(a) will not pose a threat of harm to local land use values.

175. On balance, we find that the foregoing definitions are consistent with congressional intent to foster collocation on various types of structures, while addressing municipalities' valid interest in preserving their authority to determine which structures are suitable for wireless deployment, and under what conditions.[469]

d. Collocation, Replacement, Removal, Modification

176. *Background.* The Commission also sought comment on how to define or interpret the terms "collocation," "removal, "replacement," and "modification" as they are used in the statutory definition of "eligible facilities request."[470] It sought comment on whether to interpret "collocation" consistent with the Collocation Agreement, where it is defined as "the mounting or installation of an antenna on an existing tower, building or structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes."[471] It further proposed to interpret a "modification" of a wireless tower or base station to include collocation, removal, or replacement of an antenna or any other transmission equipment associated with the supporting structure, even if the equipment is not physically located upon the structure.[472] In this regard, the Commission observed that the Collocation Agreement similarly construes the mounting of an antenna "on a tower" to encompass installation of associated equipment cabinets or shelters on the ground.[473] The Commission also sought comment on whether the definition should apply to a request to replace or harden a tower or other covered structure if, for example, replacement or hardening of the tower or structure is necessary to support an otherwise covered collocation.[474]

177. Industry commenters generally agree with the Commission's proposed definition of "collocation."[475] Several municipalities, on the other hand, argue that the term "collocation" should not include the first wireless installation on a given structure.[476] In addition, PCIA and AT&T argue that

[469] *See, e.g.,* WISPA Reply Comments at 7.

[470] *Infrastructure NPRM*, 28 FCC Rcd at 14280 para. 113.

[471] *Id.*

[472] *Id.* at 14280 para. 114.

[473] *Id.*

[474] *See id.* at 14281 para. 115.

[475] *See, e.g.,* AT&T Comments at 24; PCIA Comments at 36; Sprint Comments at 9-10; TIA Comments at 6.

[476] *See, e.g.,* Alexandria *et al*. Comments at 30-31 (arguing that the definitions in the Commission's programmatic agreements do not define the scope of Section 6409(a)); CA Local Governments Comments at 9-11; CA Local Governments Reply Comments at 9-10 ("Whether a permit request constitutes a 'collocation' should depend on whether a legally established wireless use already exists on the structure."); CCUA *et al.* Comments at 10; CCUA *et al.* Reply Comments at 11-12; Tempe Reply Comments at 4.

replacing or hardening a supporting structure should fall under Section 6409(a) if it does not substantially change the physical dimensions of the tower.[477] However, Alexandria *et al*. argue that replacing or hardening of a tower should not be included as an "eligible facilities request" under Section 6409(a).[478]

178. *Discussion.* We conclude again that it is appropriate to look to the Collocation Agreement for guidance on the meaning of analogous terms, particularly in light of Section 6409(a)(3)'s specific recognition of the Commission's obligations under NHPA and NEPA. Accordingly, as proposed in the *Infrastructure NPRM* and supported by the record, we conclude that the definition of "collocation" for purposes of Section 6409(a) should be consistent with its definition in the Collocation Agreement.[479] We therefore define "collocation" under Section 6409(a) as "the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes."[480] The term "eligible support structure" means any structure that falls within the definitions of "tower" or "base station," as discussed above. Consistent with the language of Section 6409(a)(2)(A)-(C), we also find that a "modification" of a "wireless tower or base station" includes collocation, removal, or replacement of an antenna or any other transmission equipment associated with the supporting structure.

179. We therefore disagree with municipal commenters who argue that collocations are limited to mounting equipment on structures that already have transmission equipment on them.[481] That limitation is not consistent with the Collocation Agreement's definition of "collocation," and would not serve any reasonable purpose as applied to towers built for the purpose of supporting transmission equipment. Nevertheless, we observe that our approach leads to the same result in the case of "base stations;" since our definition of that term includes only structures that already support or house base station equipment, Section 6409(a) will not apply to the first deployment of transmission equipment on such structures. Thus, we disagree with CA Local Governments that adopting our proposed definition of collocation would require local governments to approve deployments on anything that could house or support a component of a base station.[482] Rather, Section 6409(a) will apply only where a State or local government has approved the construction of a structure with the sole or primary purpose of supporting covered transmission equipment (*i.e.*, a wireless tower) or, with regard to other support structures, where the State or local government has previously approved the siting of transmission equipment that is part of a base station on that structure.[483] In both cases, the State or local government must decide that the site is suitable for wireless facility deployment before Section 6409(a) will apply.

180. We find that the term "eligible facilities request" encompasses hardening through structural enhancement where such hardening is necessary for a covered collocation, replacement, or removal of transmission equipment, but does not include replacement of the underlying structure. We

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[477] *See* AT&T Comments at 24; PCIA Comments at 36-37. *See also* Tucson Comments at 6 (arguing that replacement or hardening of a tower should be covered if the tower already supports wireless equipment); UTC Comments at 15.

[478] Alexandria *et al*. Comments at 31; Alexandria *et al*. Reply Comments at 15. *See also* Tempe Comments at 20-21 (arguing that any new structures, including replacement structures, should be subject to review).

[479] *Infrastructure NPRM*, 28 FCC Rcd at 14280 para. 113.

[480] *Id.* at 14300 App. A, Proposed Rule § 1.30001(b)(2). As discussed above, "transmission equipment" includes antennas and other equipment associated with and necessary to their operation, including power supply cables and backup power equipment.

[481] *See, e.g.,* Alexandria *et al.* Comments at 30-31; CCUA *et al*. Comments at 10.

[482] *See* CA Local Governments Comments at 10.

[483] Thus, as noted above, if a tower or base station equipment was constructed or deployed without proper review or was not required to undergo siting review, the governing authority is not obligated to grant a collocation application under Section 6409(a).

note that the term "eligible facilities request" encompasses any "modification of an existing wireless tower or base station that involves" collocation, removal, or replacement of transmission equipment. Given that structural enhancement of the support structure is a modification of the relevant tower or base station,[484] we find that such modification is part of an eligible facilities request so long as the modification of the underlying support structure is performed in connection with and is necessary to support a collocation, removal, or replacement of transmission equipment. We further clarify that, to be covered under Section 6409(a), any such structural enhancement must not constitute a substantial change as defined below.

181. We agree with Alexandria *et al*., however, that "replacement," as used in Section 6409(a)(2)(C), relates only to the replacement of "transmission equipment," and that such equipment does not include the structure on which the equipment is located.[485] Even under the condition that it would not substantially change the physical dimensions of the structure, replacement of an entire structure may affect or implicate local land use values differently than the addition, removal, or replacement of transmission equipment, and we find no textual support for the conclusion that Congress intended to extend mandatory approval to new structures. Thus, we decline to interpret "eligible facilities requests" to include replacement of the underlying structure.

e. Substantial Change and Other Conditions and Limitations

182. *Background.* In the *Infrastructure NPRM*, the Commission sought comment on whether and how to determine when a collocation or other eligible modification will "substantially change the physical dimensions" of a wireless tower or base station under Section 6409(a).[486] The Commission noted that the Collocation Agreement establishes a four-prong test to determine whether a collocation will effect a "substantial increase in the size of a tower,"[487] and sought comment on whether to adopt this as the test

[484] We note that permitting structural enhancement as a part of a covered request may be particularly important to ensure that the relevant infrastructure will be available for use by FirstNet because of its obligation to "ensure the safety, security, and resiliency of the [public safety broadband] network . . . ." Spectrum Act § 6206(b)(2)(A). *See also* "FirstNet, Guiding Principles," *available at* http://www.firstnet.gov/about/guiding-principles (providing that "FirstNet will harden the network to assist with resiliency during natural disasters, incidents and man-made threats"). In addition to hardening for Public Safety, commercial providers may seek structural enhancement for many reasons, for example, to increase load capacity or to repair defects due to corrosion or other damage. *See, e.g.*, "Refurbishment – Structural Enhancement," *available at* http://m.rohnproducts.com/tower-upgrade.html.

[485] Alexandria *et al*. Comments at 31 (arguing that replacement of a tower is not a "modification" of it and that Congress knew how to address "replacement" when that was its intent).

[486] *See Infrastructure NPRM,* 28 FCC Rcd at 14281-82 paras. 116-122.

[487] Collocation Agreement § I.C. Under this test, a "substantial increase in the size of the tower" occurs if:

> 1) [t]he mounting of the proposed antenna on the tower would increase the existing height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to avoid interference with existing antennas; or
>
> 2) [t]he mounting of the proposed antenna would involve the installation of more than the standard number of new equipment cabinets for the technology involved, not to exceed four, or more than one new equipment shelter; or
>
> 3) [t]he mounting of the proposed antenna would involve adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater, except that the mounting of the proposed antenna may exceed the size limits set forth in this paragraph if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable; or

(continued….)

for a "substantial change" under Section 6409(a) and whether to modify or clarify any of the prongs.[488] The Commission further sought comment on how to address situations where the tower or other structure has been previously modified since it was originally approved, and specifically whether to measure any physical change in dimensions resulting from a proposed new modification based on the structure's original dimensions or the existing dimensions taking into account all modifications that have occurred previously.[489] The Commission also sought comment on whether the test should differ depending on the type of structure and whether a different test should apply to "stealth structures"—*i.e.*, those that have been constructed to blend in with their surroundings.[490] In particular, it sought comment on whether changes that would undermine stealth characteristics should be considered substantial.[491] The Commission further sought comment on the recommendation of the Commission's Intergovernmental Advisory Committee (IAC) that the question of substantiality cannot be resolved by applying inflexible numerical rules, but rather must be evaluated in the context of each specific installation and each community's land use requirements and decisions.[492]

183. The Commission also sought comment on whether there are implicit circumstances other than "substantial changes" under which Section 6409(a) would permit a State or local government to deny an otherwise covered request.[493] It also sought comment on whether States and localities may impose conditions or require alterations when granting a covered request and, if so, what types of conditions or alterations they could require. In particular, the Commission asked whether States and local governments could require covered requests to comply with State or local building codes and other laws reasonably related to health and safety, and whether States and localities are required to approve an otherwise covered modification of a tower or base station that has legal, non-conforming status,[494] or when the modification does not conform to a condition or restriction that the State or locality imposed as a prerequisite to its original approval of the tower or base station.[495] The Commission further sought

(Continued from previous page)

> 4) [t]he mounting of the proposed antenna would involve excavation outside the current tower site, defined as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site.

[488] *Infrastructure NPRM*, 28 FCC Rcd at 14281-82 paras. 117-19.

[489] *See id.* at 14282 para. 120.

[490] *Id.*at 14282 para. 121.

[491] *See id.*

[492] *See id.* at 14282 para. 122 (citing Intergovernmental Advisory Committee to the Federal Communications Commission: Advisory Recommendation Number 2013-9, "Response to Wireless Telecommunications Bureau's Guidance on Interpretation of Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012," dated July 31, 2013 ("IAC Recommendation"), at 2). This document has been filed in WC Docket No. 11-59 (Aug. 2, 2013) and is also available at http://www.fcc.gov/encyclopedia/intergovernmental-advisory-committee-comments. Subsequently, the IAC also filed comments on the *Infrastructure NPRM*. *See*, *generally*, IAC Comments. The IAC, comprised of fifteen representatives from local, State, and Tribal governments, advises the Commission on a range of telecommunications issues for which these governments share responsibility with the Commission. *See* FCC Announces The Reauthorization Of The Intergovernmental Advisory Committee And Seeks Nominations, *Public Notice*, 28 FCC Rcd 14749 (2013).

[493] *Infrastructure NPRM,* 28 FCC Rcd at 14283 para. 124.

[494] *See id.* at 14283-84 paras. 124, 126. Legal, non-conforming status refers to a structure that was approved at the time of construction but is not presently in conformance due to subsequent changes to the governing zoning ordinance. *Id.*

[495] *See id.* at 14283-84 paras. 124, 127.

comment generally on the legal basis for any of these asserted grounds for potential denial—for example, whether they should be understood as factors under the "substantial change" test.[496]

184. Industry commenters generally oppose the contextual, subjective approach to determining "substantial change" advocated by the IAC and instead support an objective test based on the Collocation Agreement's four-prong test, on the grounds that it will provide greater certainty and avoid delay.[497] Some of these commenters propose modifications to particular prongs of the test.[498] Industry commenters also support applying the "substantial change" test as a limit on cumulative increases by comparing changes to the state of the structure at some fixed point in time.[499] While some advocate using the same four-prong test for all structures, others argue that the Commission should consider a different test for some or all non-tower structures.[500] Several industry commenters agree that modifications that undermine the concealment elements of a stealth facility or defeat a stealth condition should be considered substantial,[501] and some argue that we should treat a change as "substantial" if it conflicts with any condition on the structure's original zoning approval.[502] Industry commenters generally oppose including

[496] *Id.* at 14285 para. 128.

[497] *See, e.g.,* AT&T Comments at 24 (arguing that a uniform approach to "substantial change" will provide certainty and avoid the delay in broadband deployment that will result from case-by-case determinations); AT&T Reply Comments at 9-10; PCIA Comments at 37; Sprint Comments at 10; Towerstream Comments at 21 (arguing that the IAC approach would be subject to abuse and "would undermine the intended purpose of Section 6409(a) to facilitate the rapid deployment of public safety and commercial wireless broadband networks"); Verizon Comments at 29-30; WISPA Reply Comments at 7-8.

[498] *See*, *e.g.,* AT&T Comments at 24 (proposing that the test should consider only changes with a visual effect and not equipment concealed from public view through screening or other camouflage techniques); Fibertech Comments at 27 (proposing an alternate substantial change test for small cells of 25 cubic feet or less); PCIA Comments at 37-38 (proposing that the Commission apply the test as modified in the NPA, allowing expansion outside the existing tower site that does not expand the boundaries of the leased or owned property by more than 30 feet in any direction or involve excavation outside these expanded boundaries or outside any existing access or utility easement related to the site); WISPA Reply Comments at 7-8.

[499] *See, e.g.,* PCIA Comments at 39 (proposing all changes be measured from the tower's last zoning approval or the effective date of the rules, whichever is later); Verizon Comments at 29-30 (proposing that changes be measured against the structure as of the date the rule becomes effective).

[500] *See, e.g.,* CCA Reply Comments at 6 (Commission should consider "a secondary set of standards for structures other than those 'built for the sole or primary purpose of supporting FCC-licensed antennas and their associated facilities'"); UTC Comments at 13 (arguing that the Commission should adopt a "higher threshold" for utility poles, because increases in height exceeding 10% are often necessary to meet utility safety codes); Verizon Comments at 30 (arguing that same test should apply to all structures, but that if the Commission adopts a different test for buildings, it should accommodate collocations on the sides or facades of buildings as well as roof-top collocations that extend some allowable height above the roof or that are not visible from the street). In an *ex parte* letter filed after its comments, Verizon suggests the definition of substantial change for towers should at least apply to utility structures, while a different definition could apply to other non-tower structures. *See* Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed Sept. 17, 2014, at 2 (Verizon Sept. 17, 2014 *Ex Parte*). For non-tower structures, Verizon proposes that the substantial change test allow new facilities to extend "up to six feet wider than the widest point on the structure," including an appurtenance attached to the structure, and "up to 15 feet above the highest point on the structure (which may be an appurtenance attached to the structure)." *See id.* Verizon also proposes that, if the Commission adopts a height limitation stated in terms of a percentage of the height of the structure, it should adopt "a minimum allowable height increase" that is "no less than ten feet above [the] highest point of the structure." Verizon Oct. 8, 2014 *Ex Parte*, at 3.

[501] *See, e.g.,* Crown Castle Comments at 14; PCIA Comments at 39; PCIA Reply Comments at 18-19.

[502] *See, e.g.,* AT&T Reply Comments at 12, 16.

other considerations in determining whether a modification is a "substantial change," such as whether a structure has legal, non-conforming status.[503]

185. Industry commenters generally agree that States and localities may require or otherwise condition approval of a covered request on compliance with building codes and other non-discretionary structural and safety codes, but they argue that States and localities may not otherwise impose conditions.[504] In particular, PCIA argues that States and municipalities may ensure that a modification is consistent with existing stealth requirements, but may not impose new stealth requirements when granting a covered request.[505]

186. Most municipalities support the IAC recommendation, arguing that a "substantial change" will mean different things depending on the particular structure and context, and therefore that the analysis does not lend itself to an objective or numerical formula.[506] They oppose adoption of the Collocation Agreement's four-prong test or another numerical test, arguing that it will inevitably require approval of modifications that cause significant harms to aesthetics, safety, or other local concerns.[507] They further object to any test that considers only "increases in size," arguing that the test should consider all physical dimensions, including height, width, depth, volume, surface area, weight, and visual impact.[508] Many support the test proposed in the Local Government Definitions, which provides that "substantially change the physical dimensions" means to "alter the physical dimensions of a wireless tower or base station in a manner that has a significant impact given the surroundings, characteristics of, and any conditions on, the wireless tower or base station."[509] In support of a context-specific approach, they argue that an objective and mechanical test will discourage States and municipalities from approving

[503] *See, e.g.,* Crown Castle Comments at 14; CTIA Reply Comments at 8; Fibertech Reply Comments at 16-17; PCIA Comments at 43-45.

[504] *See, e.g.,* AT&T Comments at 26; AT&T Reply Comments at 11-12; PCIA Comments at 40-41 (supporting requirement of compliance with general building codes or other objective ministerial laws reasonably related to health and safety so long as they are clearly related to structural standards); PCIA Reply Comments at 18; Sprint Comments at 11; T-Mobile Reply Comments at 15-16. *But see* PCIA Comments at 45 (arguing that fall zones and setbacks, while appropriate when approving new towers, should not be grounds for denying an otherwise covered request, because they can be too easily adjusted retroactively to transform compliant towers into legal, non-conforming towers).

[505] *See* PCIA Comments at 45-46.

[506] *See*, *e.g.*, Alexandria *et al.* Comments at 32-33; CA Local Governments Comments at 11-12 (arguing that whether modification is a substantial change depends on the character and circumstances of the particular tower or base station; issue therefore does not lend itself to a national standard); CCUA *et al*. Comments at 11-15; San Antonio Reply Comments at 3, 12-13 (arguing that "substantial change" must be "construed in a factual context that includes the historical or environmental surroundings, structural and public safety considerations, and generally applicable zoning requirements"). Certain municipalities support numerical standards, however. *See*, *e.g.*, Coconut Creek Comments at 6 (arguing that the four-prong test will lend uniformity and certainty to localities' application of Section 6409(a)). Savannah proposes that any increase in height or width be considered substantial. *See* Savannah *Ex Parte* at 7.

[507] *See*, *e.g.*, Alexandria *et al.* Comments at 33-36; Long Beach Comments at 2; Michaud Comments at 1 (arguing that numerical test ignores "local regulations on visual impact and building codes [and] regulations"); Minneapolis Comments at 11-12; MML Comments at 2; NJSLM Comments at 5.

[508] *See, e.g.,* CA Local Governments Comments at 14-15; CCUA *et al*. Comments at 14-15. CA Local Governments also highlight other aspects of the four-prong test as problematic, including exceptions to the size limits to avoid interference or accommodate weather conditions. *See* CA Local Governments Comments at 15.

[509] *See, e.g.,* Local Governments July 21, 2014 *Ex Parte,* Attach. B; CCUA *et al.* July 17, 2014 *Ex Parte*, Attach. A.

initial wireless facility deployments, because such deployments, even if unobjectionable on their own, would open the door to potentially objectionable collocations covered by Section 6409(a).[510]

187. State and local commenters also offer certain considerations that the Commission should incorporate into any test for substantial change. Similar to the position of some industry commenters, many municipalities propose that a change should be treated as substantial if it violates any existing conditions applicable to the tower or base station.[511] Many also contend that any request subject to Section 6409(a) must nonetheless comply with regulations related to health and safety, such as building, structural or safety codes, arguing that compliance with these codes is a factor in determining whether a change is substantial.[512] Municipal commenters also agree with industry commenters that "substantial change" should be measured as a cumulative limit on all changes from a fixed point in time but, unlike most industry commenters, they argue that the changes should be measured from the dimensions of the structure as originally approved.[513] In addition, the IAC suggests that any change in physical dimensions that would violate a federal law or regulation (such as FAA requirements or Commission RF exposure standards) should be considered substantial.[514] Alexandria *et al*. argue that a proposed change should be considered "substantial" if it would make a facility unsafe, create hazards or environmental harms, render public streets or sidewalks less accessible, damage a historically significant area or structure, expose a "stealth" facility, or otherwise defeat conditions applicable to the original regulatory approval of the underlying tower or base station.[515]

188. *Discussion.* After careful review of the record, we adopt an objective standard for determining when a proposed modification will "substantially change the physical dimensions" of an existing tower or base station. Specifically, and for the reasons discussed below, we provide that a modification substantially changes the physical dimensions of a tower or base station if it meets any of the following criteria: (1) for towers outside of public rights-of-way, it increases the height of the tower by more than 10%, or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater; for those towers in the rights-of-way and for all base stations, it increases the height of the tower or base station by more than 10% or 10 feet, whichever is greater; (2) for towers outside of public rights-of-way, it protrudes from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for those towers in the rights-of-way and for all base stations, it protrudes from the edge of the structure more than six feet; (3) it involves installation of more than the

[510] *See, e.g.,* IAC Comments at 5-6.

[511] *See, e.g.,* Alexandria *et al.* Comments at 41; CA Local Governments Reply Comments at 13-14; CCUA *et al.* Comments at 13, 20; CCUA *et al.* Reply Comments at 12; Henderson Comments at 2; Minneapolis Comments at 11-13; RCRC Comments at 2.

[512] *See, e.g.,* Alexandria *et al*. Comments at 37-39; CCUA *et al*. Comments at 18; Fairfax Comments at 14-15; NATOA *et al.* Comments at 13; Springfield Comments at 13.

[513] *See, e.g.,* Alexandria *et al.* Comments at 19; CA Local Governments Comments at 16-17 (arguing that a cumulative limit should take the form of a boundary on the physical dimensions of the wireless tower or base station, but not necessarily a limit on the number of changes a wireless service provider may request within that cumulative limit); Coconut Creek Comments at 6-7 (arguing that height increase should be calculated from the original tower or structure height prior to any previous additions).

[514] *See* IAC Comments at 5.

[515] Alexandria *et al*. Comments at 42. *See also* CA Local Governments Comments at 12. Alexandria *et al.* further argue that modifications that would violate load-bearing limits, undermine hardening standards, or violate fall zone or set-back distances should fail the test as well. *See* Alexandria *et al*. Comments at 42-43. *See also* CA Local Governments Comments at 17 (arguing that a modification is a "substantial change" if it violates a "generally applicable law"); CCUA *et al*. Comments at 12 (arguing that a modification is a "substantial change" if it would create a public safety hazard or otherwise violate any local, State, or Federal law, or negatively impact the aesthetics of a community).

standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; (4) it entails any excavation or deployment outside the current site of the tower or base station; (5) it would defeat the existing concealment elements of the tower or base station; or (6) it does not comply with conditions associated with the prior approval of construction or modification of the tower or base station unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that does not exceed the corresponding "substantial change" thresholds identified above. We further provide that the changes in height resulting from a modification should be measured from the original support structure in cases where the deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act. Beyond these standards for what constitutes a substantial change in the physical dimensions of a tower or base station, we further provide that for applications covered by Section 6409(a), States and localities may continue to enforce and condition approval on compliance with generally applicable building, structural, electrical, and safety codes and with other laws codifying objective standards reasonably related to health and safety.

189. We initially conclude that we should adopt a test that is defined by specific, objective factors rather than the contextual and entirely subjective standard advocated by the IAC and municipalities. As we discuss in detail below, Congress took care to refer, in excluding certain modifications from mandatory approval requirements, to those that would substantially change the tower or base station's "physical dimensions." We also find that Congress intended approval of covered requests to occur in a timely fashion.[516] While we acknowledge that the IAC approach would provide municipalities with maximum flexibility to consider potential effects, we are concerned that it would invite lengthy review processes that conflict with Congress's intent. Indeed, some municipal commenters anticipate their review of covered requests under a subjective, case-by-case approach could take even longer than their review of collocations absent Section 6409(a).[517] We also anticipate that disputes arising from a subjective approach would tend to require longer and more costly litigation to resolve given the more fact-intensive nature of the IAC's open-ended and context-specific approach. We find that an objective definition, by contrast, will provide an appropriate balance between municipal flexibility and the rapid deployment of covered facilities. We find further support for this approach in State statutes that have implemented Section 6409(a), all of which establish objective standards.[518]

190. We further find that the objective test for "substantial increase in size" under the Collocation Agreement should inform our consideration of the factors to consider when assessing a "substantial change in physical dimensions." This reflects our general determination that definitions in the Collocation Agreement and NPA should inform our interpretation of similar terms in Section 6409(a). Further, as noted in the *Infrastructure NPRM*, the Commission has previously relied on the Collocation Agreement's test in comparable circumstances, concluding in the *2009 Declaratory Ruling* that collocation applications are subject to a shorter shot clock under Section 332(c)(7) to the extent that they do not constitute a "substantial increase in size of the underlying structure."[519] The Commission has also applied a similar objective test to determine whether a modification of an existing registered tower requires public notice for purposes of environmental review.[520] We note that some municipalities support

[516] *See infra*, Section V.B.2.

[517] *See*, *e.g.*, CA Local Governments Comments at 21-22.

[518] *See infra*, n.522.

[519] *Infrastructure NPRM,* 28 FCC Rcd at 14281 para. 117 (citing *2009 Declaratory Ruling*, 24 FCC Rcd at 14012 para. 46).

[520] *See* 47 C.F.R. § 17.4(c)(1)(B); *Environmental Notification Order on Remand*, 26 FCC Rcd at 16720-21 para. 53.

this approach,[521] and we further observe that the overwhelming majority of State collocation statutes adopted since the passage of the Spectrum Act have adopted objective criteria similar to the Collocation Agreement test for identifying collocations subject to mandatory approval.[522] We note as well that there is nothing in the record indicating that any of these objective State-law tests have resulted in objectionable collocations that might have been rejected under a more subjective approach. Therefore, we are persuaded that it is reasonable to look to the Collocation Agreement test as a starting point in interpreting the very similar "substantial change" standard under Section 6409(a). We further decide, however, to modify and supplement the factors to establish an appropriate balance between promoting rapid wireless facility deployment and preserving States' and localities' ability to manage and protect local land-use interests.

191. First, we decline to adopt the Collocation Agreement's exceptions that allow modifications to exceed the usual height and width limits when necessary to avoid interference or shelter the antennas from inclement weather.[523] We agree with CA Local Governments that these issues pose technically complex and fact-intensive questions that many local governments cannot resolve without the aid of technical experts; modifications that would not fit within the Collocation Agreement's height and width exceptions are thus not suitable for expedited review under Section 6409(a).[524]

192. Second, we conclude that the limit on height and width increases should depend on the type and location of the underlying structure. Under the Collocation Agreement's "substantial increase in size" test, which applies only to towers, a collocation constitutes a substantial increase in size if it would increase a tower's height by 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater.[525] In addition, the Collocation Agreement authorizes collocations that would protrude by twenty feet, or by the width of the tower structure at the level of the appurtenance, whichever is greater.[526] We find that the Collocation Agreement's height and width criteria are generally suitable for towers, as was contemplated by the Agreement.

193. These tests were not designed with non-tower structures in mind, however, and we find that they may often fail to identify substantial changes to non-tower structures such as buildings or poles, particularly insofar as they would permit height and width increases of 20 feet under all circumstances. Instead, considering the proposals and arguments in the record and the purposes of the provision, we conclude that a modification to a non-tower structure that would increase the structure's height by more than 10% or 10 feet, whichever is greater, constitutes a substantial change under Section 6409(a).

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[521] *See*, *e.g.,* San Diego Comments at 3. Other municipalities, including Coconut Creek and West Palm Beach, also support adoption of a standard based on the Collocation Agreement's test. *See* Coconut Creek Comments at 6; West Palm Beach Comments at 6.

[522] *See, e.g.,* GA. ST § 36-66B-4(b) (establishing a four-prong test for mandatory streamlined process, barring any increase in height or width and requiring compliance with pre-existing conditions and weight limits); MI ST §125.3514(1)(c) (establishing a four-prong test for "substantial change" similar to the Collocation Agreement test); MO ST § 67.5092(13) (establishing a four-prong test for "substantial modification" similar to the Collocation Agreement test); NC. ST § 160A-400.51(7a) (establishing a three-prong test for "substantial modification," imposing limits on height and width increases and on increases to the equipment compound area); N.J.S.A. 40:55 D-46.2.a.(2) (establishing a three-prong test, including limits on increases to height and compound size and barring any increases in width); PA ST 53 P.S. § 11702.2 (establishing a two-prong test for "substantial change"); WI ST 66-0404(1)(s) (establishing a four-prong test for "substantial modification").

[523] *See* Collocation Agreement § I.C.

[524] *See* CA Local Governments Comments at 15.

[525] Collocation Agreement § I.C(1).

[526] *See* Collocation Agreement § I.C(3).

Permitting increases of up to 10% has significant support in the record.[527] Further, we find that the adoption of a fixed minimum best serves the intention of Congress to advance broadband service by expediting the deployment of minor modifications of towers and base stations. Without such a minimum, we find that the test will not properly identify insubstantial increases on small buildings and other short structures, and may undermine the facilitation of collocation, as vertically collocated antennas often need 10 feet of separation and rooftop collocations may need such height as well.[528] Further, the fact that the 10-foot minimum is substantially less than the 20-foot minimum limit under the Collocation Agreement and many State statutes or the 15-foot limit proposed by some commenters provides us additional assurance that our interpretation of what is considered substantial under Section 6409(a) is reasonable.[529]

194. We also provide, as suggested by Verizon and PCIA, that a proposed modification of a non-tower structure constitutes a "substantial change" under Section 6409(a) if it would protrude from the edge of the structure more than six feet.[530] We find that allowing for width increases up to six feet will promote the deployment of small facility deployments by accommodating installation of the mounting brackets/arms often used to deploy such facilities on non-tower structures, and that it is consistent with small facility deployments that municipalities have approved on such structures.[531] We further note that it is significantly less than the limits in width established by most State collocation statutes adopted since the Spectrum Act.[532] We therefore find that six feet is the appropriate objective standard for substantial changes in width for non-tower structures, rather than the alternative proposals in the record.

195. We decline to apply the same substantial change criteria to utility structures as apply to towers. While Verizon argues in an *ex parte* that this approach is justified because of the "significant similarities" between towers and utility structures, its own comments note that in contrast to "macrocell

[527] *See, e.g.,* PEC Comments at 7-8 (proposing that the test allow for one increase of 10% over the initially approved height); Tucson Comments at 9 ("Typically those increases should be 10% or less than what was originally approved for the facility to receive an expedited review."); San Diego Comments at 3 ("[I]f a project results in a change of more than 10% beyond the baseline condition, it would be substantial.").

[528] *See* Kenmore Municipal Code, § 18.60.130 ("Minor communication facilities – Collocation"), *available at* http://www.codepublishing.com/wa/Kenmore/html/Kenmore18/Kenmore1860.html (requiring support structures to have the "structural strength to allow the collocation of additional antennas from other service providers at the standard 10-foot separation"); American Planning Association, Planning and Urban Design Standards, 358 (2006) ("A 10-foot vertical separation between antennas of different carriers is typically required to avoid interference"); Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed Oct. 10, 2014 (Verizon Oct. 10, 2014 *Ex Parte*) at 2 (stating that a minimum allowance of ten feet would "accommodate the height of panel antennas and their mounting brackets, to enable the antennas to clear other structures on roof-tops, such as parapet walls and HVAC facilities – which can limit the coverage provided by the facilities, and to reduce the radiofrequency emissions produced by antennas on the surface of the roof.").

[529] MI ST. 125.3514(1)(c) (20 feet or 10%); MO ST 67.5092(12) (same); NH Rev Stat § 12-K:2(XXV) (same); NC ST § 160A-400.51(7a) (same); PA ST 53 P.S. § 11702.1 *et seq.*(same); WI ST 66-0404(1) (same).

[530] *See* Verizon Oct. 10, 2014 *Ex Parte* at 2; Letter from Jonathan M. Campbell, PCIA-The Wireless Infrastructure Association, to Marlene H. Dortch, Secretary, FCC, filed Oct. 9, 2014 (PCIA Oct. 9, 2014 *Ex Parte*) at 1-2.

[531] *See* Verizon Oct. 10, 2014 *Ex Parte* at 2 (asserting that the six-foot allowance is needed to account for both the width of the antenna panels and the mounting arms that attach the antenna panels to the structure); PCIA Oct. 9, 2014 *Ex Parte* at 1-2 (proposing that the mounting of the proposed antenna may protrude six feet or less from the structure). *See also, e.g.*, Letter from Tamara Preiss, Verizon, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-59, filed May 14, 2013 (providing dimensions to small-cell and DAS equipment used on poles with depths of 19 or 20 inches); Letter from Colleen Thompson, AT&T, to Marlene H. Dortch, Secretary, FCC, WC Docket No. 11-59, filed June 17, 2013 (providing small cell and DAS dimensions reflecting depths of 2.08 inches, 3.75 inches, 8.25 inches, 11.2 inches, and 18 inches).

[532] *See supra*, n.529 (citing to statutes).

towers," utility structures are "smaller sites[.]"[533] Because utility structures are typically much smaller than traditional towers, and because utility structures are often located in easements adjacent to vehicular and pedestrian rights-of-way where extensions are more likely to raise aesthetic, safety, and other issues, we do not find it appropriate to apply to such structures the same substantial change criteria applicable to towers. We further find that towers in the public rights-of-way should be subject to the more restrictive height and width criteria applicable to non-tower structures rather than the criteria applicable to other towers. We note that, to deploy DAS and small-cell wireless facilities, carriers and infrastructure providers must often deploy new poles in the rights-of-way. Because these structures are constructed for the sole or primary purpose of supporting Commission-licensed or authorized antennas, they fall under our definition of "tower." They are often identical in size and appearance, however, to utility poles in the area, which do not constitute towers.[534] As a consequence, applying the tower height and width standards to these poles constructed for DAS and small-cell support would mean that two adjacent and nearly identical poles could be subject to very different standards. To ensure consistent treatment of structures in the public rights-of-way, and because of the heightened potential for impact from extensions in such locations,[535] we provide that structures qualifying as towers that are deployed in public rights-of-way will be subject to the same height and width criteria as non-tower structures.

196. We agree with commenters that our substantial change criteria for changes in height should be applied as limits on cumulative changes; otherwise, a series of permissible small changes could result in an overall change that significantly exceeds our adopted standards.[536] Specifically, we find that whether a modification constitutes a substantial change must be determined by measuring the change in height from the dimensions of the "tower or base station" as originally approved or as of the most recent modification that received local zoning or similar regulatory approval prior to the passage of the Spectrum Act, whichever is greater.

197. We decline to provide that changes in height should always be measured from the original tower or base station dimensions, as suggested by some municipalities. As with the original tower or base station, discretionary approval of subsequent modifications reflects a regulatory determination of the extent to which wireless facilities are appropriate, and under what conditions. At the same time, we decline to adopt industry commenters' proposal always to measure changes from the last approved change or the effective date of the rules.[537] Measuring from the last approved change in all cases would provide no cumulative limit at all. In particular, since the Spectrum Act became law, approval of covered requests has been mandatory and therefore, approved changes after that time may not establish an appropriate baseline because they may not reflect a siting authority's judgment that the modified structure is consistent with local land use values. Because it is impractical to require parties, in measuring cumulative impact, to determine whether each pre-existing modification was or was not required by the Spectrum Act, we provide that modifications of an existing tower or base station that occur after the passage of the Spectrum Act will not change the baseline for purposes of measuring

[533] Verizon Comments at 2-3. *See also id.* at 6 (arguing that historic preservation review should distinguish "[macrocells] on large towers from small cells on utility poles").

[534] *See, e.g.,* Jefferson Comments at 2 (noting that facilities disguised as light poles but constructed for the primary purpose of supporting antennas would "seem to meet the proposed definition of a tower").

[535] *See, e.g.,* St. Paul Reply Comments at 2 (stating that, although "St. Paul wishes to leave open the possibility of allowing implementation of DAS or other small scale wireless technology in the public right-of-way," it is unlikely to pursue that route because of concerns about the impact of potential multiple collocations); *see also* Alexandria *et al*. Reply Comments at 4.

[536] *See, e.g.,* Alexandria *et al*. Comments at 36; Alexandria *et al*. Reply Comments at 19; CA Local Governments Comments at 16; PCIA Comments at 38; Verizon Comments at 29-30. We note that it is unnecessary to impose any cumulative limit on increases to width because, consistent with the Collocation Agreement, all changes in width are measured from the original structure.

[537] *See*, *e.g.*, PCIA Comments at 39; Verizon Comments at 29-30.

substantial change. Consistent with our determination above that a tower or base station is not covered by Section 6409(a) unless it received such approval,[538] this approach will in all cases limit modifications that are subject to mandatory approval to the same modest increments over what the relevant governing authority has previously deemed compatible with local land use values. We further find that, for structures where collocations are separated horizontally rather than vertically (such as building rooftops), substantial change is more appropriately measured from the height of the original structure, rather than the height of a previously approved antenna. Thus, for example, the deployment of a 10-foot antenna on a rooftop would not mean that a nearby deployment of a 20-foot antenna would be considered insubstantial.

198. Again drawing on the Collocation Agreement's test, we further provide that a modification is a substantial change if it entails any excavation or deployment outside the current site of the tower or base station. As in the Collocation Agreement, we define the "site" for towers outside of the public rights-of-way as the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site. For other towers and all base stations, we further restrict the site to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

199. We also reject the PCIA and Sprint proposal to expand the Collocation Agreement's fourth prong, as modified by the 2004 NPA, to allow applicants to excavate outside the leased or licensed premises.[539] Under the NPA, certain undertakings are excluded from the Section 106 review, including "construction of a replacement for an existing communications tower and any associated excavation that . . . does not expand the boundaries of the leased or owned property surrounding the tower by more than 30 feet in any direction or involve excavation outside these expanded boundaries or outside any existing access or utility easement related to the site."[540] The NPA exclusion from Section 106 review, however, applies to replacement of "an existing communications tower." In contrast, as discussed above, "replacement," as used in Section 6409(a)(2)(C), relates only to the replacement of "transmission equipment,"[541] not the replacement of the supporting structures. Thus, the activities covered under Section 6409(a) are more nearly analogous to those covered under the Collocation Agreement than under the replacement towers exclusion in the NPA. We therefore agree with localities comments that any eligible facilities requests that involve excavation outside the premises should be considered a substantial change, as under the fourth prong of the Collocation Agreement's test.[542]

200. Based on our review of the record and various state statutes, we further find that a modification constitutes a substantial change in physical dimensions under Section 6409(a) if the change (1) would defeat the existing concealment elements of the tower or base station, or (2) does not comply with pre-existing conditions associated with the prior approval of construction or modification of the tower or base station.[543] The first of these criteria is widely supported by both wireless industry and

[538] *See supra*, para. 174.

[539] *See* PCIA Comments at 37-38; Sprint Comments at 10.

[540] NPA § III.B.

[541] *See supra*, para. 181.

[542] *See, e.g.,* CA Local Governments Reply Comments at 12; San Antonio Reply Comments at 15.

[543] *See, e.g.,* Alexandria *et al.* Comments at 37-39; CCUA *et al*. Comments at 11-15; GA. Code Ann. §36-66B-4(b)(3) ("The proposed modification or collocation shall comply with applicable conditions of approval, if any, applied to the initial wireless facilities and wireless support structure."); Mich. Comp. Laws Serv. § 125.3514 (2012) ("The proposed collocation complies with the terms and conditions of any previous final approval of the support structure or compound."). We recognize that issues may arise under these two criteria that do not relate to a change in physical dimensions. For example, a replacement of exactly the same dimensions could still violate concealment elements if it does not have the same camouflaging paint as the replaced facility. We expect, however, that failures to meet these criteria will generally relate to changes in physical dimensions, and taking into account the support in (continued….)

municipal commenters, who generally agree that a modification that undermines the concealment elements of a stealth wireless facility, such as painting to match the supporting façade or artificial tree branches, should be considered substantial under Section 6409(a).[544] We agree with commenters that in the context of a modification request related to concealed or "stealth"-designed facilities—*i.e.*, facilities designed to look like some feature other than a wireless tower or base station—any change that defeats the concealment elements of such facilities would be considered a "substantial change" under Section 6409(a).[545] Commenters differ on whether any other conditions previously placed on a wireless tower or base station should be considered in determining substantial change under Section 6409(a). After consideration, we agree with municipal commenters that a change is substantial if it violates any condition of approval of construction or modification imposed on the applicable wireless tower or base station,[546] unless the non-compliance is due to an increase in height, increase in width, addition of cabinets, or new excavation that does not exceed the corresponding "substantial change" thresholds we identify above. In other words, modifications qualify for Section 6409(a) only if they comply, for example, with conditions regarding fencing, access to the site, drainage, height or width increases that exceed the thresholds we adopt above, and other conditions of approval placed on the underlying structure. This approach, we find, properly preserves municipal authority to determine which structures are appropriate for wireless use and under what conditions, and reflects one of the three key priorities identified by the IAC in assessing substantial change.[547]

201. We agree with PCIA that legal, non-conforming structures should be available for modification under Section 6409(a), as long as the modification itself does not "substantially change" the physical dimensions of the supporting structure as defined here.[548] We accordingly reject municipal arguments that any modification of an existing wireless tower or base station that has "legal, non-conforming" status should be considered a "substantial change" to its "physical dimensions."[549] As PCIA argues, the approach urged by municipalities could thwart the purpose of Section 6409(a) altogether, as simple changes to local zoning codes could immediately turn existing structures into legal, non-conforming uses unavailable for collocation under the statute.[550] Considering Congress's intent to

(Continued from previous page)
the record for including these criteria, we find it appropriate to include them as criteria of the substantial change test. Further, we find that, as with building codes, Congress did not intend to exempt covered modifications from compliance with such elements and conditions or to undermine such conditions, whether or not they affect the physical dimensions of the wireless tower or base station, and that Section 6409(a) in any case permits States and localities to condition a covered request on compliance with such criteria or otherwise require a covered request to meet these criteria. Thus, as discussed below, even if we were not persuaded that a modification that violates one of these criteria should be considered a substantial change, we would nevertheless conclude that States and localities may require covered requests to meet these criteria.

[544] *See, e.g,,* Alexandria *et al*. Comments at 42; CCA Comments at 5; CCUA *et al*. Comments at 20; PCIA Comments at 39, 46.

[545] *See, e.g.,* Coconut Creek Comments at 7; West Palm Beach Comments at 7; *see also* PCIA Comments at 46 (arguing that for an eligible facilities request involving previously concealed or "stealth" facilities, the modification should qualify as an insubstantial increase as long as the concealment elements are maintained).

[546] *See, e.g.,* Alexandria *et al.* Comments at 12-13, 40-42; CCUA *et al*. Comments at 20; Henderson Comments at 2; NJSLM Comments at 6; RCRC Comments at 2.

[547] *See* IAC Comments at 5 (recommending that any change that would violate the conditions of approval under which the site construction was initially authorized should be considered a substantial change in physical dimensions).

[548] PCIA Comments at 43-45. *See also* Crown Castle Comments at 14; CTIA Reply Comments at 8; Fibertech Reply Comments at 16-17.

[549] *See, e.g.,* Alexandria *et al.* Comments at 21-23.

[550] *See* PCIA Reply Comments at 18-19.

promote wireless facilities deployment by encouraging collocation on existing structures, and considering the requirement in Section 6409(a) that States and municipalities approve covered requests "[n]otwithstanding . . . any other provision of law," we find the municipal commenters' proposal to be unsupportably restrictive.[551]

202. The record also reflects general consensus that wireless facilities modification under Section 6409(a) should remain subject to building codes and other non-discretionary structural and safety codes.[552] As municipal commenters indicate, many local jurisdictions have promulgated code provisions that encourage and promote collocations and replacements through a streamlined approval process, while ensuring that any new facilities comply with building and safety codes and applicable Federal and State regulations.[553] Consistent with that approach on the local level, we find that Congress did not intend to exempt covered modifications from compliance with generally applicable laws related to public health and safety.[554] We therefore conclude that States and localities may require a covered request to comply with generally applicable building, structural, electrical, and safety codes or with other laws codifying objective standards reasonably related to health and safety, and that they may condition approval on such compliance. In particular, we clarify that Section 6409(a) does not preclude States and localities from continuing to require compliance with generally applicable health and safety requirements on the placement and operation of backup power sources, including noise control ordinances if any.

203. We further clarify that eligible facility requests covered by Section 6409(a) must still comply with any relevant Federal requirement, including any applicable Commission, FAA, NEPA, or Section 106 requirements. We find that this interpretation is supported in the record, addresses a concern raised by several municipal commenters and the IAC, and is consistent with the express direction in Section 6409(a) that the provision is not intended to relieve the Commission from the requirements of NEPA and NHPA.[555]

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204. In sum, we find that the definitions, criteria, and related clarifications we adopt for purposes of Section 6409(a) will provide clarity and certainty, reducing delays and litigation, and thereby facilitate the rapid deployment of wireless infrastructure and promote advanced wireless broadband services. At the same time, we conclude that our approach also addresses concerns voiced by municipal commenters and reflects the priorities identified by the IAC.[556] We conclude that this approach reflects a reasonable interpretation of the language and purposes of Section 6409(a) and will serve the public interest.

2. Application Review Process, Including Timeframe for Review

205. *Background*. In the *Infrastructure NPRM*, the Commission sought comment on whether Section 6409(a) places any particular limitations on the application filing and review process, and if so, how to implement such limitations.[557] The Commission proposed to find that State or local governments

[551] Spectrum Act § 6409(a)(1) (emphasis added).

[552] *See, e.g.,* PCIA Comments at 41; Sprint Comments at 11.

[553] *See, e.g.,* CCUA *et al*. Comments at 18.

[554] *See, e.g.,* Alexandria *et al*. Comments at 42; CA Local Governments Comments at 17; CCUA *et al*. Comments at 25; Gallina Comments at 1; Haddon Heights Comments at l.

[555] *See* Spectrum Act § 6409(a)(3).

[556] *See* IAC Comments at 5. The IAC recommended that any change in physical dimensions constitutes a "substantial change" if it would violate (1) a building or safety code; (2) a federal law or regulation, including environmental law, historic preservation law, Commission RF exposure standards, or FAA requirements; or (3) the conditions of approval under which the site construction was initially authorized.

[557] *See Infrastructure NPRM*, 28 FCC Rcd at 14285-86 para.130. *See also Section 6409(a) PN*, 28 FCC Rcd at 3-4.

at a minimum may require the submission of applications (so that the State or local government can determine whether Section 6409(a) applies),[558] and it sought comment on whether Section 6409(a) warrants rules limiting applicable fees, review procedures, or time for review.[559] In particular, the Commission sought comment on whether to limit State and local application review to resolving whether the request is in fact covered by Section 6409(a).[560] In this regard, the Commission sought comment on whether to impose limits on the kinds of information and documentation that States and localities may require in connection with an application that the applicant asserts is covered by Section 6409(a).[561] It specifically sought comment on whether to clarify that, when an applicant asserts that its application falls under Section 6409(a), States and localities may not require the submission of information or documents that are not relevant to determining whether the provision applies.[562]

206. The Commission further sought comment on whether, in the event it decides to adopt a time limit for State or local review, it should establish 90 days as a presumptively reasonable period of time for reviewing requests or if a shorter period is warranted in light of the narrow scope of review under Section 6409(a).[563] It further sought comment on whether a State or municipality may toll the review period if it notifies the applicant in writing that an application is incomplete and specifies the additional information or documentation required to complete the application.[564] In addition, given Congress's explicit language that a State or local government "may not deny, and shall approve" a covered application "[n]otwithstanding . . . any other provision of law," the Commission proposed to preempt the application of any moratoria to covered requests under Section 6409(a).[565]

207. Industry commenters generally argue that the Commission should adopt procedural restrictions on State or local review of applications subject to Section 6409(a). In particular, many industry commenters propose restrictions on the information that a State or municipality can require in connection with eligible facilities requests.[566] Several argue that we should permit States or localities to require only the information needed to confirm that the request is covered under Section 6409(a).[567] Some commenters assert that the Commission should expressly clarify that certain types of information—such as information to demonstrate "proof of need" or the business case for the proposed modification, an authorization or a valid lease agreement from the property owner and/or tower owner, and surveys—are not relevant for this narrow purpose.[568] Others argue that jurisdictions should not be permitted to impose documentation requirements that vary from or exceed the requirements expressly identified in applicable

[558] *See id.*

[559] *See id.* at 14286 para. 131.

[560] *See id.* at 14286 para. 132.

[561] *See id.* at 14286-87 para.133.

[562] *See id.*

[563] *See id.* at 14287 para.134.

[564] *See id.*

[565] *Id.* at 14287-88 para.135.

[566] *See, e.g.,* AT&T Comments at 25; CCA Reply Comments at 7-8; PCIA Comments at 46-47; PCIA Reply Comments at 20-21; PWA Comments at 2-3; T-Mobile Reply Comments at 12-14; Towerstream Reply Comments at 5-7; WISPA Reply Comments at 9.

[567] *See, e.g.,* CCA Reply Comments at 7-8; PCIA Comments at 46-47; PCIA Reply Comments at 20-21; WISPA Reply Comments at 9. *See also* T-Mobile Reply Comments at 13-14.

[568] *See, e.g.,* PCIA Comments at 47; T-Mobile Reply Comments at 13-14; *see also* CCA Reply Comments at 7-8; PCIA Reply Comments at 20-21; PWA Comments at 2-3; Towerstream Reply Comments at 5-6; WISPA Reply Comments at 9.

regulations.[569] CCA argues that, because a deployment of DAS or small-cell wireless technology to serve even a medium-sized city could require hundreds of modification applications, the Commission should adopt a mechanism for applicants to submit multiple modification requests using a single application.[570] Some industry commenters further argue that the Commission should preempt any unreasonable or non-cost based fees that may be associated with applications covered by Section 6409(a).[571]

208. Industry commenters also generally urge the Commission to place a time limit on State or local review of an eligible facilities request.[572] Many of these commenters argue for a 45-day timeframe,[573] while others argue for 60 days.[574] These commenters argue that a time period shorter than 90 days is warranted in light of the limited scope of review permitted for such applications and Congress's goal of expediting the facilities siting process.[575] They further argue that the timeframe should not in any case exceed 90 days, the presumptively reasonable timeframe for review of collocation applications under the *2009 Declaratory Ruling*.[576] Some industry commenters propose that 90 days is the appropriate period,[577] and Fibertech proposes 90 days for collocations but argues that 45 days should "be adequate for the administrative review for transmission equipment replacement . . . ."[578] Many industry commenters also support the Commission's proposals regarding treatment of moratoria under Section 6409(a).[579] Further, while many industry commenters agree that the review period should be tolled when a State or locality determines an application is incomplete, they recommend that the Commission set reasonable limits on the ability of States or localities to require additional information or documentation.[580] For example, T-Mobile and PCIA argue that tolling is appropriate only if the State or locality notifies the applicant that its application is incomplete within 30 days of its submission, as under the *2009 Declaratory Ruling*.[581]

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[569] *See*, *e.g.*, AT&T Comments at 25 (arguing that Section 6409(a) "requires State and local jurisdictions to promulgate rules that identify the specific limited documentation that applicants must include to demonstrate that they qualify for Section 6409 approval" and that the Commission should not interpret the provision to permit State and local jurisdictions to "impose [documentation] standards that are inconsistent with State or local laws").

[570] *See* CCA Reply Comments at 8. *See also* Towerstream Reply Comments at 6-7 ("Wi-Fi and small cell technologies, however, often require tens of thousands of facilities sitings to cover a geographic area and provide effective and reliable broadband service").

[571] *See, e.g.,* CCA Reply Comments at 7-8; PCIA Comments at 46-49; PWA Comments at 2-3; T-Mobile Reply Comments at 13; WISPA Reply Comments at 9.

[572] *See, e.g.,* AT&T Comments at 30-31; CTIA Reply Comments at 9; NYSWA Comments at 2; PCIA Comments ii, 48; PCIA Reply Comments at 21-22; Sprint Comments at 10-11; Sprint Reply Comments at 6; T-Mobile Reply Comments at 12-14; Verizon Comments at 31-32; WISPA Reply Comments at 8-9.

[573] *See, e.g.,* CTIA Reply Comments at 9; PCIA Comments ii, 48; PCIA Reply Comments at 21; Sprint Reply Comments at 6; T-Mobile Reply Comments at 14; Verizon Comments at 31-32; WISPA Reply Comments at 8-9.

[574] *See, e.g.,* WISPA Comments at 10.

[575] *See, e.g.*, CCA Reply Comments at 8 (arguing that the "circumscribed scope of review" supports a shorter period); CTIA Reply Comments at 9.

[576] *See, e.g.,* CCA Reply Comments at 8-9; NYSWA Comments at 2; T-Mobile Reply Comments at 14. *See also 2009 Declaratory Ruling*, 24 FCC Rcd at 13995, 13999 paras. 4, 18-19.

[577] *See, e.g.,* Joint Venture Comments at 7.

[578] Fibertech Comments at 31.

[579] *See, e.g.,* AT&T Comments at 30; Sprint Reply Comments at 7.

[580] *See, e.g.,* PCIA Comments at ii, 48; Sprint Comments at 10-11; T-Mobile Reply Comments at 14-15.

[581] *See* PCIA Comments at ii, 48; T-Mobile Reply Comments at 14. T-Mobile contends that, whenever a State or locality rejects an applicant's claim that Section 6409(a) applies or finds its application incomplete, the State or (continued….)

209. Municipal commenters generally oppose the adoption of any procedural requirements. They argue that the statutory provision itself contains no process requirements and, accordingly, that we should not impose any.[582] They also contend that placing procedural limits on State or local governments would contravene the principles of federalism under the Tenth Amendment and would result in the incongruous application of nationwide rules to a diverse universe of government entities.[583] Regarding application documentation, some municipal commenters assert that in order to process requests, they will require more information than the bare minimum necessary to determine whether the request falls under Section 6409(a).[584] Regarding permit review fees, municipal commenters assert that while Section 6409(a) may obviate some review costs, it does not eliminate them altogether, and nothing in the statute requires local authorities to subsidize wireless service providers by internalizing administrative costs.[585]

210. Municipal commenters generally argue that the maximum review period, if there is one at all, should be no less than the 90-day timeframe for review under the *2009 Declaratory Ruling*.[586] These commenters argue that States and localities must have sufficient time to review proposed changes, particularly in circumstances involving complex technical issues, local environmental and historic preservation concerns, local traffic and economic development patterns, and other concerns that are important to the community.[587] Further, commenters assert that the review period must allow for tolling in certain instances, such as when the application is incomplete, the parties mutually consent to extend the

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locality must inform the applicant in writing in a timely manner, specifying with particularity the reasons for its conclusion. *See* T-Mobile Reply Comments at 14-16.

[582] *See*, *e.g.*, CA Local Governments Comments at 18 ("Section 6409(a) mandates a particular result but not any particular process to achieve that result" and therefore "does not invite the Commission to impose rules on the permit application and review process.").

[583] *See, e.g.,* Alexandria *et al.* Comments at 45-46; Minneapolis Comments at 15-16; Pennsauken Reply Comments at 1; Tucson Comments at 3.

[584] *See, e.g.,* CA Local Governments Comments at 19-20 ("The Commission should reaffirm that State and local governments may legitimately seek information from the carriers to perform their fact finding duties and to confirm compliance with legal requirements in the wireless siting process," including information relevant to address factual issues under Section 6409(a) and whether the applications "comply with the local requirements"); Coconut Creek Comments at 8 (arguing that the Commission should impose no document restrictions because municipalities need more than the bare minimum necessary to determine eligibility under Section 6409(a), including information demonstrating compliance with structural standards and information that will enable communities to "analyze deployment of infrastructure and plan for future needs"); MDIT Comments at 5-6; West Palm Beach Comments at 8.

[585] *See, e.g.,* Alexandria *et al.* Comments at 44-45; CA Local Governments Comments at 20; Minneapolis Comments at 15; PEC Comments at 13.

[586] *See, e.g.,* Alexandria *et al.* Comments at 44-45; Alexandria *et al.* Reply Comments at 23-24 (arguing that adopting a period shorter than 90 days would be premature because the Commission lacks a record about how Section 6409(a) is operating and "would only be guessing at what time period is reasonable"); CA Local Governments at 20-21; Coconut Creek Comments at 8-9; DC Comments at 18; Fairfax Reply Comments at 8; Henderson Comments at 3; NJSLM Comments at 7; San Antonio Reply Comments at 20-22; San Diego Comments at 4; West Palm Beach Comments 8. Alexandria *et al.* further argue that a local government should be able to defend the reasonableness of any review that extends beyond a 90-day period. *See* Alexandria *et al.* Comments at 44-45.

[587] *See, e.g.,* CA Local Governments Comments at 20-21 (asserting that "(1) no fully developed factual record exists to show that Section 6409(a) review subjects applicants to unreasonable delays and (2) the terms of that statute require local governments to act as factfinders on complex and technical issues"); Fairfax Reply Comments at 8; Henderson Comments at 3. *See also* Alexandria *et al.* Reply Comments at 24; San Diego Comments at 5.

review period, or the municipality enacts a temporary moratorium to amend or otherwise revise its permit review process, rules, or policies.[588]

211. *Discussion*. As an initial matter, we find, consistent with the Commission's proposal, that State or local governments may require parties asserting that proposed facilities modifications are covered under Section 6409(a) to file applications, and that these governments may review the applications to determine whether they constitute covered requests.[589] As the Bureau observed in the *Section 6409(a) PN*, the statutory provision requiring a State or local government to approve an "eligible facilities request" implies that the relevant government entity may require an applicant to file a request for approval.[590] Further, nothing in the provision indicates that States or local governments must approve requests merely because applicants claim they are covered. Rather, under Section 6409(a), only requests that do in fact meet the provision's requirements are entitled to mandatory approval. Therefore, States and local governments must have an opportunity to review applications to determine whether they are covered by Section 6409(a), and if not, whether they should in any case be granted.

212. However, we further conclude that Section 6409(a) warrants the imposition of certain requirements with regard to application processing, including a specific timeframe for State or local government review and a limitation on the documentation States and localities may require. While Section 6409(a), unlike Section 332(c)(7), does not expressly provide for a time limit or other procedural restrictions, we conclude that certain limitations are implicit in the statutory requirement that a State or local government "may not deny, and shall approve" covered requests for wireless facility siting. In particular, we conclude that the provision requires not merely approval of covered applications, but approval within a reasonable period of time commensurate with the limited nature of the review, whether or not a particular application is for "personal wireless service" facilities covered by Section 332(c)(7).[591] With no such limitation, a State or local government could evade its statutory obligation to approve covered applications by simply failing to act on them, or it could impose lengthy and onerous processes not justified by the limited scope of review contemplated by the provision. Such unreasonable delays not only would be inconsistent with the mandate to approve but also would undermine the important benefits that the provision is intended to provide to the economy, competitive wireless broadband deployment, and public safety. Accordingly, pursuant to our authority to implement and enforce Section 6409(a) described above, we require that States and localities grant covered requests within a specific time limit and pursuant to other procedures outlined below.

213. We find substantial support in the record for adopting such requirements. It is clear from the record that there is significant dispute as to whether any time limit applies at all under Section 6409(a) and, if so, what that limit is. We also note that there is already some evidence in the record, albeit anecdotal, of significant delays in the processing of covered requests under this new provision, which may be partly a consequence of the current uncertainty regarding the applicability of any time limit.[592]

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[588] *See, e.g.,* CA Local Governments Comments at 22-23; Coconut Creek Comments at 8-9; Henderson Comments at 3; NJSLM Comments at 8; West Palm Beach Comments at 8.

[589] *See Infrastructure NPRM*, 28 FCC Rcd at 14286 para.131.

[590] *Section 6409(a) PN,* 28 FCC Rcd at 3.

[591] Implementation of Section 621(A)(1) of the Cable Communications Policy Act of 1984 as Amended by the Cable Television Consumer Protection and Competition Act of 1992, MB Docket No. 05-311, *Report and Order and Further Notice of Proposed Rulemaking*, 22 FCC Rcd 5101, 5137 para. 73 (2006) ("*Local Franchising Order"*), *aff'd sub nom., Alliance for Community Media v. FCC*, 529 F.3d 763 (6th Cir. 2008) (finding that "[f]ailure of [a local franchising authority] to act [on a franchise application] within [specified] time frames … constitutes a refusal to award a competitive franchise" under Section 621(a)(1) of the Communications Act); *Section 6409(a) PN*, 28 FCC Rcd at 4. *See also* AT&T Comments at 25 ("Section 6409 is an administrative requirement for an application that is not subject to discretionary review and must be granted in a timely manner.").

[592] *See*, *e.g.*, Verizon Comments at 31-32.

Because the statutory language does not provide guidance on these requirements, we are concerned that, without clarification, future disputes over the process could significantly delay the benefits associated with the statute's implementation. Moreover, we find it important that all stakeholders have a clear understanding of when an applicant may seek relief from a State or municipal failure to act under Section 6409(a). We find further support for establishing these process requirements in analogous State statutes, nearly all of which include a timeframe for review, as discussed below. Therefore, we adopt the following procedural requirements for processing applications under Section 6409(a).[593]

214. First, we provide that in connection with requests asserted to be covered by Section 6409(a), State and local governments may only require applicants to provide documentation that is reasonably related to determining whether the request meets the requirements of the provision. We find that this restriction is appropriate in light of the limited scope of review applicable to such requests and that it will facilitate timely approval of covered requests. At the same time, under this standard, State or local governments have considerable flexibility in determining precisely what information or documentation to require. We agree with PCIA, however, that States and localities may not require documentation proving the need for the proposed modification or presenting the business case for it.[594] We anticipate that over time, experience and the development of best practices will lead to broad standardization in the kinds of information required.[595]

215. In addition to defining acceptable documentation requirements, we establish a specific and absolute timeframe for State and local processing of eligible facilities requests under Section 6409(a).

[593] Contrary to the suggestion of municipalities, we disagree that the Tenth Amendment prevents the Commission from exercising its authority under the Spectrum Act to implement and enforce the limitations imposed thereunder on State and local land use authority. These limitations serve to preempt the operation of state law, not to "compel the States to enact or administer a federal regulatory program." *Printz v. United States,* 521 U.S. 898, 900 (1997). They do not require State or local authorities to review wireless facilities siting applications, but rather preempt them from choosing to exercise such authority under their laws other than in accordance with Federal law—*i.e.*, to deny any covered requests. *See Cellular Phone Taskforce v. FCC,* 205 F.3d 823, 96-97 (2d Cir. 2000). *See also City of Arlington v. FCC,* 133 S. Ct. 1863, 1873 (2013) (dispute about FCC shot clock rules implementing Section 332(c)(7) "has nothing to do with federalism," as that provision "explicitly supplants state authority"). *Compare Petersburg Cellular Partnership v. Board of Supervisors of Nottoway County,* 205 F.3d 688, 716 (4th Cir. 2000) (King, J., dissenting), *with id.* at 699-705 (Niemeyer, J., separate opinion). Similar arguments with respect to similar remedies were rejected by the Commission in its *Local Franchising Order*, 22 FCC Rcd at 5161-62 para. 136. Such arguments were also made by State and local authorities on judicial review of that Order. *See* Brief of Petitioners, City of Tampa *et al.*, *Alliance for Community Media v. FCC*, No. 07-3391 (6th Cir. Nov. 1, 2007), at 20-24; Reply Brief of Petitioners, City of Tampa *et al.*, *Alliance for Community Media v. FCC*, No. 07-3391 (6th Cir. Nov. 1, 2007), at 12-13; Brief of the Dept. of the Public Advocate, Division of Rate Counsel, *Alliance for Community Media v. FCC*, No. 07-3391 (6th Cir. July 18, 2007), at 15-17; Reply Brief of the Dept. of the Public Advocate, Division of Rate Counsel, *Alliance for Community Media v. FCC*, No. 07-3391 (6th Cir. Oct. 4, 2007), at 15-16. The Sixth Circuit rejected these arguments without discussion. *See Alliance for Community Media v. FCC*, 529 F.3d 763 (6th Cir. 2008).

[594] *See* PCIA Reply Comments at 20-21.

[595] As discussed above, even as to applications covered by Section 6409(a), State and local governments may continue to enforce and condition approval on compliance with non-discretionary codes reasonably related to health and safety, including building and structural codes. We find that municipalities should have flexibility to decide when to require applicants to provide documentation of such compliance, as a single documentation submission may be more efficient than a series of submissions, and municipalities may also choose to integrate such compliance review into the zoning process. *See* Coconut Creek Comments at 8 (arguing that requiring a separate documentation submission to demonstrate compliance with structural codes will introduce further delay); MML Comments at 14 ("Cities should be able to require full applications, primarily because submission of full applications up front will provide for speedier processing of all applications and, on the whole, decrease costs for all parties."). Accordingly, we clarify that our documentation restriction does not prohibit States and local governments from requiring documentation needed to demonstrate compliance with any such applicable codes.

We find that a 60-day period for review, including review to determine whether an application is complete, is appropriate. In addressing this issue, it is appropriate to consider not only the record support for a time limit on review but also State statutes that facilitate collocation applications. Many of these statutes impose review time limits, thus providing valuable insight into States' views on the appropriate amount of time. Missouri, New Hampshire, and Wisconsin, for example, have determined that 45 days is the maximum amount of time available to a municipality to review applications,[596] while Georgia, North Carolina, and Pennsylvania have adopted a 90-day review period, including review both for completeness and for approval.[597] Michigan's statute provides that after the application is filed, the locality has 14 days to deem the application complete and an additional 60 days to review.[598] With consideration of the time periods adopted in these statutes, and for the further reasons discussed below, we find it appropriate to adopt a 60-day time period as the time limit for review of an application under Section 6409(a).

216. We find that a period shorter than the 90-day period applicable to review of collocations under Section 332(c)(7) of the Communications Act is warranted to reflect the more restricted scope of review applicable to applications under Section 6409(a). We further find, however, that a 60-day period of review, rather than the 45-day period proposed by many industry commenters,[599] is appropriate to provide municipalities with sufficient time to review applications for compliance with Section 6409(a), because the timeframe sets an absolute limit that—in the event of a failure to act—results in a deemed grant.[600] Thus, whereas a municipality may rebut a claim of failure to act under Section 332(c)(7) if it can demonstrate that a longer review period was reasonable, that is not the case under Section 6409(a). Rather, if an application covered by Section 6409(a) has not been approved by a State or local government within 60 days from the date of filing, accounting for any tolling, as described below, the reviewing authority will have violated Section 6409(a)'s mandate to approve and not deny the request, and the request will be deemed granted.

217. We further provide that the foregoing Section 6409(a) timeframe may be tolled by mutual agreement or in cases where the reviewing State or municipality informs the applicant in a timely manner that the application is incomplete. As with tolling for completeness under Section 332(c)(7) (as discussed later in this Report and Order), an initial determination of incompleteness tolls the running of the period only if the State or local government provides notice to the applicant in writing within 30 days of the application's submission. We also require that any determination of incompleteness must clearly and specifically delineate the missing information in writing, similar to determinations of incompleteness under Section 332(c)(7), as discussed below.[601] Further, consistent with the documentation restriction established above, the State or municipality may only specify as missing information and supporting documents that are reasonably related to determining whether the request meets the requirements of Section 6409(a).

218. The timeframe for review will begin running again when the applicant makes a supplemental submission, but may be tolled again if the State or local government provides written notice to the applicant within 10 days that the application remains incomplete and specifically delineates which of the deficiencies specified in the original notice of incompleteness have not been addressed. The

[596] *See* MO ST § 67.5100.2; NH Rev Stat § 12-K:10 (2013); WI ST § 66-0404(3)(b), (c) (providing for up to 5 days to determine completeness of application and up to 45 days to review).

[597] *See* GA ST §36-66B-4(d); NC ST § 160A-400.53; PA ST 53 P.S. §11702.4(b)(2). The North Carolina statute provides a municipality up to 45 days to determine completeness, and then an additional 45 days for review, for a total of up to 90 days. *See* NC ST § 160A-400.53.

[598] *See* MI ST 125.3514(2).

[599] *See supra*, para. 208.

[600] *See infra*, para. 226.

[601] *See infra*, Section VI.B.1.

timeframe for review will be tolled in this circumstance until the applicant supplies the relevant authority with the information delineated. Consistent with determinations of incompleteness under Section 332(c)(7) as described below, any second or subsequent determination that an application is incomplete may be based only on the applicant's failure to provide the documentation or information the State or municipality required in its initial request for additional information.[602] Further, if the 10-day period passes without any further notices of incompleteness from the State or locality, the period for review of the application may not thereafter be tolled for incompleteness.

219. We further find that the timeframe for review under Section 6409(a) continues to run regardless of any local moratorium. This is once again consistent with our approach under Section 332(c)(7), as discussed below, and is further warranted in light of Section 6409(a)'s direction that covered requests shall be approved "[n]otwithstanding . . . any other provision of law."[603]

220. Some additional clarification of time periods and deadlines will assist in cases where both Section 6409(a) and Section 332(c)(7) apply. In particular, we note that States and municipalities reviewing an application under Section 6409(a) will be limited to a restricted application record tailored to the requirements of that provision. As a result, the application may be complete for purposes of Section 6409(a) review but may not include all of the information the State or municipality requires to assess applications not subject to Section 6409(a). In such cases, if the reviewing State or municipality finds that Section 6409(a) does not apply (because, for example, it proposes a substantial change), we provide that the presumptively reasonable timeframe under Section 332(c)(7) will start to run from the issuance of the State's or municipality's decision that Section 6409(a) does not apply. To the extent the State or municipality needs additional information at that point to assess the application under Section 332(c)(7), it may seek additional information subject to the same limitations applicable to other Section 332(c)(7) reviews, as discussed below. We recognize that, in such cases, there might be greater delay in the process than if the State or municipality had been permitted to request the broader documentation in the first place. We find, however, that applicants are in a position to judge whether to seek approval under Section 6409(a), and we expect they will have strong incentives to do so in a reasonable manner to avoid unnecessary delays. Finally, as we proposed in the *Infrastructure NPRM*, we find that where both Section 6409(a) and Section 332(c)(7) apply, Section 6409(a) governs, consistent with the express language of Section 6409(a) providing for approval "[n]otwithstanding" Section 332(c)(7) and with canons of statutory construction that a more recent statute takes precedence over an earlier one and that "normally the specific governs the general."[604]

221. Beyond the guidance provided in this Report and Order, we decline to adopt the other proposals put forth by commenters regarding procedures for the review of applications under Section 6409(a) or the collection of fees. We conclude that our clarification and implementation of this statutory provision strikes the appropriate balance of ensuring the timely processing of these applications and preserving flexibility for State and local governments to exercise their rights and responsibilities. Given the limited record of problems implementing the provision, further action to specify procedures would be premature.

3. Remedies

222. *Background*. In the *Infrastructure NPRM*, the Commission sought comment on the remedies that should be available to applicants in cases where a State or locality fails to act on an

[602] *See infra*, Section VI.B.1.

[603] Spectrum Act § 6409(a)(1); *see also infra* § VI.B.2 (discussing application of moratoria to timeframes for review under Section 332(c)(7) and the *2009 Declaratory Ruling*).

[604] *Infrastructure NPRM*, 28 FCC Rcd at 14290 para. 143. *See also*, *e.g., Long Island Care at Home, Ltd. v. Coke*, 551 U.S. 158, 170 (2007).

application covered by Section 6409(a) or issues a decision adverse to the applicant.[605] The Commission sought comment on whether, for example, it should provide that a covered request is "deemed granted" by operation of law if a State or local government fails to act within a specified period of time, and if so, how a deemed granted remedy should operate and how it should be enforced.[606] It also sought comment on any alternative remedies to provide recourse in cases of State or municipal inaction, including whether the Commission should preempt State or local authority after a specified period of time.[607] With regard to adverse decisions, the Commission sought comment on whether it should adopt a deemed granted rule applicable in these cases as well. It further proposed to permit applicants to file petitions for declaratory ruling with the Commission in cases of alleged violations of Section 6409(a), and sought comment on whether to adopt special procedures for such petitions.

223. Many industry commenters support adoption of a deemed granted remedy if a State or municipality fails to act on an application covered under Section 6409(a) within a specified period of time,[608] and some propose that this remedy should apply to application denials as well.[609] PCIA further proposes that if an applicant requires an actual permit, the applicant should have the option of either (1) informing the State or municipality of the deemed grant and requesting issuance of the permit or (2) seeking a court order directing the State or municipality to issue the permit.[610] AT&T recommends that the applicant should have the burden of notifying the State or local government that its application is deemed granted under the rule, and that the State or local government would then have the opportunity to file a challenge with the Commission within 14 days arguing that the application is not covered by Section 6409(a). Under AT&T's proposal, if no challenge is filed within the 14-day period the application would conclusively be deemed granted.[611]

224. Industry commenters contend that Section 6003 of the Spectrum Act and various provisions of the Communications Act authorize the Commission to adopt a deemed granted remedy, and they argue that doing so would not present constitutional concerns.[612] They argue that a deemed granted remedy is necessary to effectuate congressional intent to expedite covered applications, and that judicial and administrative remedies are costly and time-consuming and would impede applicants' ability to

[605] *See Infrastructure NPRM,* 28 FCC Rcd at 14288-90 paras. 137-143.

[606] *Id.* at 14288 para. 137.

[607] *See id.* at 14289 para.139.

[608] *See, e.g.,* AT&T Comments at 26-28; AT&T Reply Comments at 3-4, 14-15; CCA Reply Comments at 8-9; CTIA Reply Comments at 1-2, 8-10; Fibertech Reply Comments at 19; NYSWA Comments at 2; PCIA Comments at 50-53; Sprint Comments at 11; Sprint Reply Comments at 6; Towerstream Reply Comments at 5-7; Verizon Comments at 31-33. PCIA proposes that the deemed grant should apply in cases of a failure to act on an "eligible facilities request." PCIA Comments at 50. It is not clear from its comments whether, in this context, PCIA means an "eligible facilities request" generally as that term is used in Section 6409(a) (*i.e.,* any request for collocation, removal, or replacement of transmission equipment on an existing wireless tower or base station) or whether PCIA refers to the subset of eligible facilities requests that require mandatory approval (*i.e.*, covered requests). Given that PCIA asserts that the "plain language of Section 6409(a) requires states and localities to approve all EFR applications without exception and without discretionary review," PCIA Comments at 40, we interpret its use of the term to refer to covered requests.

[609] *See*, *e.g.*, AT&T Reply Comments at 3-4; PCIA Comments at 51-52. We note that commenters do not specifically describe how or to what extent a deemed grant would apply in the context of a denial.

[610] *See* PCIA Comments at 50.

[611] *See* AT&T Comments at 26-27.

[612] *See*, *e.g.*, PCIA Comments at 51-53.

deploy wireless facilities.[613] Several industry commenters also argue that applicants should be permitted to bring complaints alleging violations of Section 6409(a) to the Commission through petitions for declaratory ruling or otherwise, either challenging a State or municipal action on a specific application or alleging that a particular State or local requirement violates the provision.[614]

225. Municipal commenters addressing this issue oppose a deemed granted remedy and argue that the courts should resolve Section 6409(a) disputes.[615] These commenters argue that a deemed granted remedy would contravene the Tenth Amendment as well as the approach developed in the *2009 Declaratory Ruling*.[616] For support, these commenters assert that such a remedy would pose an unnecessary intrusion into State and local governments' longstanding zoning authority and would be inconsistent with traditional notions of Federal and state jurisdiction.[617] Municipal commenters further contend that resolving Section 6409(a) disputes via Commission action rather than in court—whether through the Commission's adoption of a deemed granted approach or its review of specific applications—would conflict with the Commission's stated intention not to become a "national zoning board."[618] They argue as well that the Commission lacks expertise in zoning disputes, that requiring adjudication at the Commission would significantly and unreasonably burden municipalities, and that local courts are better equipped to identify applicable precedents and assess the particular facts and circumstances of individual disputes.[619] Alexandria *et al.* argue that Section 6409(a) neither specifies a judicial cause of action nor directs the Commission to review disputes, and that Congress is therefore "best understood to have elected to rely on existing avenues of relief."[620] They therefore propose that applicants follow the normal state-law procedures for challenging local zoning decisions or that they seek judicial review under Section

[613] *See, e.g.,* AT&T Comments at 8, 25-26; CTIA Reply Comments at 1-2, 7-8; Verizon Comments at 32-33. *See also* PCIA Comments at 50 (arguing that deemed grant is a "reasonable and appropriate way of enforcing" the "shall approve" requirement).

[614] *See*, *e.g.*, AT&T Comments at 27-28; Fibertech Comments at 33; Towerstream Comments at 27-28; Towerstream Reply Comments at 7.

[615] *See, e.g.,* Alexandria *et al.* Comments at 45-48; Alexandria *et al.* Reply Comments at 25-28; CA Local Governments Comments at 24-26; CA Local Governments Reply Comments at iv, 19-23; CalWA Reply Comments at 3, 10-11; CCA Reply Comments at 9-10; Coconut Creek Comments at 9; DC Comments at 20; IAC Comments at 2; RCRC Comments at 4; San Antonio Reply Comments at 3-4, 21-23; Springfield Comments at 16; Tucson Comments at 9-10; West Palm Beach Comments at 9.

[616] *See, e.g.,* Alexandria *et al.* Comments at 46-47; Alexandria *et al.* Reply Comments at 27-28; CA Local Governments Comments at 25-26; Coconut Creek Comments at 9; Fairfax Comments at 19; San Antonio Reply Comments at 3-4; Tucson Comments at 10; West Palm Beach Comments at 9. Some commenters also contend that a deemed granted remedy would violate the Due Process Clause. *See, e.g.,* Alexandria *et al.* Reply Comments at 25-28; Springfield Comments at 16.

[617] *See, e.g.,* Alexandria *et al.* Reply Comments at 27-28; Coconut Creek Comments at 9; DC Comments at 20; Fairfax Comments at 19; San Antonio Reply Comments at 22; Tucson Comments at 10; West Palm Beach Comments at 9.

[618] *See, e.g.,* Alexandria *et al.* Comments at 47-48; Fairfax Comments at 19-20; Tucson Comments at 10.

[619] *See, e.g.,* Alexandria *et al.* Comments at 47-48; CA Local Governments Comments at 24 (asserting an "express Congressional intent to allow federal courts to craft individualized remedies"), 27-28; CA Local Governments Reply Comments at 19-20; CCUA *et al*. Comments at 15; Coconut Creek Comments at 9; IAC Comments at 2; RCRC Comments at 4; San Antonio Reply Comments at 23; Tucson Comments at 10. Commenters point out that localities generally do not have Washington, D.C.-based counsel available for representation before the Commission. *See, e.g.,* Alexandria *et al.* Comments at 47-48; CCUA *et al.* Comments at 15; Coconut Creek Comments at 9; IAC Comments at 2 ("Localities should not be required to incur the expense of retaining legal counsel in Washington, D.C. and traveling long distances to defend local zoning decisions"), 8 (noting in particular the costs and burden on smaller communities); RCRC Comments at 4; Tucson Comments at 10.

[620] Alexandria *et al.* Comments at 47.

332(c)(7), which they believe "has proven effective."[621] Coconut Creek argues that Section 6409(a) disputes should be raised through causes of action brought in court under Section 332(c)(7).[622]

226. *Discussion*. After a careful assessment of the statutory provision and a review of the record, we establish a deemed granted remedy for cases in which the applicable State or municipal reviewing authority fails to issue a decision within 60 days (subject to any tolling, as described above) on an application submitted pursuant to Section 6409(a). We further conclude that a deemed grant does not become effective until the applicant notifies the reviewing jurisdiction in writing, after the time period for review by the State or municipal reviewing authority as prescribed in our rules has expired, that the application has been deemed granted.

227. Our reading of Section 6409(a) supports this approach. The provision states without equivocation that the reviewing authority "may not deny, and shall approve" any qualifying application.[623] This directive leaves no room for a lengthy and discretionary approach to reviewing an application that meets the statutory criteria; once the application meets these criteria, the law forbids the State or local government from denying it. Moreover, while State and local governments retain full authority to approve or deny an application depending on whether it meets the provision's requirements, the statute does not permit them to delay this obligatory and non-discretionary step indefinitely. In this Report and Order, we have defined objectively the statutory criteria for determining whether an application is entitled to a grant under this provision. Given the objective nature of this assessment, then, we conclude that withholding a decision on an application indefinitely, even if an applicant can seek relief in court or in another tribunal, would be tantamount to denying it, in contravention of the statute's pronouncement that reviewing authorities "may not deny" qualifying applications. We therefore find that the text of Section 6409(a) supports adoption of a deemed granted remedy, which will directly serve the broader goal of promoting the rapid deployment of wireless infrastructure. We note as well that our approach is consistent with other Federal agencies' processes to address inaction by State and local authorities.[624]

228. As noted above, many municipalities oppose the adoption of a deemed granted remedy primarily on the ground that it arguably represents an intrusion into local decision-making authority.[625] We fully acknowledge and value the important role that local reviewing authorities play in the siting process, and, as the Commission stated in the *Infrastructure NPRM*, "our goal is not to 'operate as a national zoning board.'"[626] At the same time, our authority and responsibility to implement and enforce Section 6409(a) as if it were a provision of the Communications Act obligate us to ensure effective enforcement of the congressional mandate reflected therein. To do so, given our "broad grant of rulemaking authority,"[627] the importance of ensuring rapid deployment of commercial and public safety wireless broadband services as reflected in the adoption of the Spectrum Act, and in light of the record of disputes in this proceeding, as well as the prior experience of the Commission with delays in municipal

[621] *Id.*

[622] *See* Coconut Creek Comments at 9. *See also* CA Local Governments Reply Comments at 23, 27-28; CCUA *et al.* Reply Comments at 5; San Antonio Reply Comments at 3-4, 21-22; Tucson Comments at 9-10.

[623] Spectrum Act § 6409(a)(1).

[624] *See, e.g.*, 42 C.F.R. § 438.56(e)(2) (Centers for Medicare and Medicaid Services rule providing that an application to disenroll from a Medicaid managed care plan shall be "considered approved" if not acted on by a State agency within the regulatory deadline). *See also* 47 U.S.C. § 160(c) (petition for forbearance deemed granted if Commission fails to deny within the regulatory deadline).

[625] *See supra*, para. 225.

[626] *See Infrastructure NPRM*, 28 FCC Rcd at 14276 para. 99 (quoting Preemption of Local Zoning or Other Regulation of Receive-Only Satellite Earth Stations, CC Docket No. 85-87, 59 Rad. Reg. 2d (P&F) 1073, para. 39 (1986)).

[627] *City of Arlington v. FCC*, 133 S.Ct. 1863, 1874 (2013).

action on wireless facility siting applications that led to the *2009 Declaratory Ruling*, we conclude it is necessary to balance these federalism concerns against the need for ensuring prompt action on Section 6409(a) applications.[628] We therefore adopt this approach in tandem with several measures that safeguard the primacy of State and local government participation in local land use policy, to the extent consistent with the requirements of Section 6409(a). First, we have adopted a 60-day time period for States and localities to review applications submitted under Section 6409(a).[629] While many industry commenters proposed a 45-day review period based on the non-discretionary analysis that the provision requires,[630] we have provided more time in part to ensure that reviewing authorities have sufficient time to assess the applications.

229. Second, we are establishing a clear process for tolling the 60-day period when an applicant fails to submit a complete application, thus ensuring that the absence of necessary information does not prevent a State or local authority from completing its review before the time period expires.[631]

230. Third, even in the event of a deemed grant, the Section 106 historic preservation review process—including coordination with State and Tribal historic preservation officers—will remain in place with respect to any proposed deployments in historic districts or on historic buildings (or districts and buildings eligible for such status).[632]

231. Fourth, as explained below, a State or local authority may challenge an applicant's written assertion of a deemed grant in any court of competent jurisdiction when it believes the underlying application did not meet the criteria in Section 6409(a) for mandatory approval, would not comply with applicable building codes or other non-discretionary structural and safety codes, or for other reasons is not appropriately "deemed granted."[633]

232. Finally, and perhaps most importantly, the deemed granted approach does not deprive States and localities of the opportunity to determine whether an application is covered; rather, it provides a remedy for a failure to act within the fixed but substantial time period within which they must determine, on a non-discretionary and objective basis, whether an application fits within the parameters of Section 6409(a).

233. We emphasize as well that we expect deemed grants to be the exception rather than the rule. To the extent there have been any problems or delays due to ambiguity in the provision, we anticipate that the framework we have established, including the specification of substantive and procedural rights and applicable remedies, will address many of these problems. We anticipate as well that the prospect of a deemed grant will create significant incentives for States and municipalities to act in a timely fashion.

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[628] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14004-06 paras. 32-34. *See also*, *e.g.*, T-Mobile Comments, Sullivan Decl. at 1-5 (stating that "wireless siting permit issues are so prevalent that T-Mobile has had to bring or defend more than 300 lawsuits in state and federal courts," and describing several disputes over land use regulation of wireless facility modifications, including two cases that remain pending in trial court after more than three years), 3 ("Even in the absence of litigation, T-Mobile experiences substantial delays in obtaining local approvals to collocate on existing towers and base stations, or to modify such facilities as part of the company's modernization efforts.").

[629] *See supra*, para. 216.

[630] *See supra*, para. 208.

[631] *See supra*, paras. 217-219.

[632] *See supra*, para. 88 (excluding collocations from Section 106 review under certain circumstances, but not when they would be located on buildings that are listed in or eligible for listing in the National Register or in or near a historic district).

[633] *See*, *e.g.*, *infra*, paras. 234-236.

234. With respect to the appropriate forum for redress or for resolving disputes, including disputes over the application of the deemed grant rule, we find that the most appropriate course for a party aggrieved by operation of Section 6409(a) is to seek relief from a court of competent jurisdiction. Although we find that we have authority to resolve such disputes under our authority to implement and enforce that provision, we also find that requiring that these disputes be resolved in court, and not by the Commission, will better accommodate the role of the States and local authorities and serve the public interest for the reasons the municipal commenters identify and as discussed below.[634]

235. A number of factors persuade us to require parties to adjudicate claims under Section 6409(a) in court rather than before the Commission. First, we find that Commission adjudication would impose significant burdens on localities, many of which are small entities with no representation in Washington, D.C. and no experience before the Commission. The possible need for testimony to resolve disputed factual issues, which may occur in these cases, would magnify the burden. We are also concerned that the Commission may simply lack the resources to adjudicate these matters in a timely fashion if we enable parties to seek our review of local zoning disputes arising in as many as 38,000 jurisdictions, thus thwarting Congress's goal of speeding up the process.[635] We also agree with municipalities that the Commission does not have any particular expertise in resolving local zoning disputes, whereas courts have been adjudicating claims of failure to act on wireless facility siting applications since the adoption of Section 332(c)(7).[636]

236. Accordingly, we require parties to bring claims related to Section 6409(a) in a court of competent jurisdiction. Such claims would appear likely to fall into one of three categories. First, if the State or local authority has denied the application, an applicant might seek to challenge that denial. Second, if an applicant invokes its deemed grant right after the requisite period of State or local authority inaction, that reviewing authority might seek to challenge the deemed grant. Third, an applicant whose application has been deemed granted might seek some form of judicial imprimatur for the grant by filing a request for declaratory judgment or other relief that a court may find appropriate. In light of the policy underlying Section 6409(a) to ensure that covered requests are granted promptly, and in the self-interest of the affected parties, we would expect that these parties would seek judicial review of any such claims relating to Section 6409(a) expeditiously. The enforcement of such claims is a matter appropriately left to such courts of competent jurisdiction. However, given the foregoing Federal interest reflected in Section 6409(a), it would appear that the basis for equitable judicial remedies would diminish significantly absent prompt action by the aggrieved party. In our judgment, based on the record established in this proceeding, we find no reason why (absent a tolling agreement by parties seeking to resolve their differences) such claims cannot and should not be brought within 30 days of the date of the

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[634] Section 6003 of the Spectrum Act, 47 U.S.C. § 1403, directs us to enforce the provisions of Title VI as though they were part of the Communications Act. We adopt the approach described in the text—namely, adjudication in court rather than before the Commission—pursuant to our well-established discretion in matters of enforcement, including in determining whether it is appropriate for the Commission to resolve a controversy. *See* National Association of Regulatory Utility Commissioners' Petition for Clarification or Declaratory Ruling That No FCC Order or Rule Limits State Authority to Collect Broadband Data, *Memorandum Opinion and Order*, 25 FCC Rcd 5051, 5053 para. 5 (2010) (noting that the Commission has broad discretion whether to issue a ruling to terminate a controversy or remove uncertainty); *Heckler v. Chaney*, 470 U.S. 821, 831 (1985) ("[A]n agency's decision not to prosecute or enforce, whether through civil or criminal process, is a decision generally committed to an agency's absolute discretion."); *New York State Dept. of Law v. FCC*, 984 F.2d 1209, 1213 (D.C. Cir. 1993) (upholding the Commission's exercise of its enforcement discretion) (citing *Heckler*, 470 U.S. at 831).

[635] *See "*Government Organization Summary Report: 2012,*" available at* http://www2.census.gov/govs/cog/g12_org.pdf (finding 38,910 general purpose local governments). *See also* CA Local Governments Comments at 11.

[636] As we note in connection with Section 332(c)(7), *see infra*, para. 284, a party pursuing a claim under Section 6409(a) may seek injunctive relief, which may be appropriate in many cases in light of Congress's goal of advancing wireless broadband service. *See* Conference Report at 136.

relevant event (*i.e.*, the date of the denial of the application or the date of the notification by the applicant to the State or local authority of a deemed grant in accordance with our rules).

4. Non-application to States or Municipalities in Their Proprietary Capacities

237. *Background.* In the *Infrastructure NPRM*, the Commission sought comment on the IAC's argument that the Section 6409(a) mandate applies only to State and local governments acting in their role as land use regulators and does not apply to such entities acting in their capacities as property owners.[637] In its Recommendations to the Commission, the IAC had asserted that "[w]here . . . a county government, as landlord rather than as land use regulator, has by contract or lease chosen, in its discretion, to authorize the installation of an antenna on a county courthouse rooftop of certain exact dimensions and specifications, Section 6409 does not require the county, acting in its capacity as landlord rather than its capacity as regulator of private land use, to allow the tenant to exceed to any extent those mutually and contractually agreed-upon exact dimensions and specifications."[638] The Commission proposed to adopt this interpretation, and sought comment on how to determine in which capacity a government is acting and whether to address how Section 6409(a) applies where both capacities are implicated.[639]

238. Although T-Mobile argues that Section 6409(a) does not distinguish between situations in which a local government is acting as a municipal authority or as a proprietary landlord,[640] the record otherwise reflects near unanimity in support of the IAC's recommendation.[641] Certain industry commenters argue, however, that municipal regulation of the public rights-of-way constitutes action by a government in its regulatory capacity rather than its proprietary capacity.[642] Municipal commenters argue, by contrast, that there is no need at this time to further define what is or is not proprietary action.[643]

239. *Discussion.* As proposed in the *Infrastructure NPRM* and supported by the record, we conclude that Section 6409(a) applies only to State and local governments acting in their role as land use regulators and does not apply to such entities acting in their proprietary capacities. As discussed in the record, courts have consistently recognized that in "determining whether government contracts are subject to preemption, the case law distinguishes between actions a State entity takes in a proprietary capacity—actions similar to those a private entity might take—and its attempts to regulate."[644] As the Supreme Court has explained, "[i]n the absence of any express or implied implication by Congress that a State may not manage its own property when it pursues its purely proprietary interests, and when analogous private conduct would be permitted, this Court will not infer such a restriction."[645] Like private property owners, local governments enter into lease and license agreements to allow parties to place antennas and other wireless service facilities on local-government property, and we find no basis for applying Section 6409(a) in those circumstances. We find that this conclusion is consistent with judicial decisions holding

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[637] *See Infrastructure NPRM,* 28 FCC Rcd at 14285 para. 129.

[638] *Id.* (citing IAC Recommendations at 3).

[639] *See id.*

[640] *See* T-Mobile Reply Comments at 19.

[641] *See, e.g.,* Alexandria *et al.* Comments at 49-51; CA Local Governments Comments at 16-17; Coconut Creek Comments at 7-8; CTC Reply Comments at 8; DC Comments at 19; DC Reply Comments at 14; Fairfax Comments at 15-16; IAC Comments at 2; Minneapolis Comments at 11-12; NATOA *et al.* Reply Comments at 3; NJSLM Comments at 7; PCIA Reply Comments at 22; VA DOSP Comments at 4-6.

[642] *See, e.g.,* PCIA Reply Comments at 22; T-Mobile Reply Comments at 19.

[643] *See*, *e.g.*, Alexandria *et al.* Reply Comments at 3.

[644] *See, e.g.,* Alexandria *et al.* Comments at 49 (citing *American Airlines v. Dept. of Transp*., 202 F.3d 788, 810 (5th Cir. 2000)).

[645] *Building & Construction Trades Council of Metropolitan District v. Associated Builders & Contractors of Massachusetts/Rhode Island Inc.*, 507 U.S. 218, 231-32 (1993).

that Sections 253 and 332(c)(7) of the Communications Act do not preempt "non regulatory decisions of a state or locality acting in its proprietary capacity."[646]

240. We decline at this time to further elaborate as to how this principle should apply to any particular circumstance in connection with Section 6409(a). We agree with Alexandria *et al.* that the record does not demonstrate a present need to define what actions are and are not proprietary, and we conclude in any case that such a task is best undertaken, to the extent necessary, in the context of a specific municipal action and associated record.[647] Further, as discussed above, there is extensive case law on the application of this distinction in other contexts, including in connection with wireless facility siting applications under Section 332(c)(7), which can provide valuable guidance for its application under Section 6409(a).

5. Effective Date

241. *Background.* The Commission sought comment on whether, in the event it adopted rules in connection with Section 6409(a), it should provide a transition period to allow States and localities time to implement the rules in their laws, ordinances, and procedures.[648] The Commission further asked how it could establish a transition period consistent with the provision's requirements and how long any transition period should be.[649] The record reflects divided views, with industry commenters arguing against a transition period and municipalities arguing for one. While PCIA argues that no transition is necessary for States and localities to implement Section 6409(a) requirements into their laws,[650] municipal commenters contend that a transition period would be essential in order for them to accommodate the additional workload involved in updating regulations and procedures.[651] In particular, the IAC urges the Commission to provide that the rules will not take effect until 90 days after publication in the Federal Register, arguing that a transition period is necessary to allow affected State, local, and Tribal governments time to make the necessary changes to their laws and procedures.[652]

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[646] *Qwest Corp. v. City of Portland*, 385 F.3d 1236, 1240 (9th Cir. 2004) (recognizing that Section 253(a) preempts only "regulatory schemes"); *Sprint Spectrum v. Mills*, 283 F.3d 404, 421 (2d Cir. 2002) (finding that Section 332(c)(7) "does not preempt nonregulatory decisions of a local governmental entity or instrumentality acting in its proprietary capacity").

[647] *See* Alexandria *et al.* Reply Comments at 3. We note that this issue has been raised informally by parties in the context of New York City's payphone franchising regulation. *See* Letter from Robert G. Scott, Jr., Davis Wright Tremaine LLP, to Marlene H. Dortch, Secretary, FCC, filed July 24, 2014 (Telebeam *Ex Parte*) at 4 (urging the Commission on behalf of Telebeam Telecommunications Corp. to avoid any statement that would "allow the City of New York . . . to evade the wireless siting rules ultimately adopted, through claims that its regulation of public telephones is an exercise of proprietary authority or otherwise"). We take no position on Telebeam's argument in this Report and Order.

[648] *See Infrastructure NPRM,* 28 FCC Rcd at 14276 para. 100.

[649] *See id.*

[650] *See* PCIA Comments at 27-28.

[651] *See, e.g.,* Alexandria *et al.* Reply Comments at 24; CA Local Governments Comments at 29-30 (arguing that at least twelve months is necessary to adjust local land use ordinances, policies, and procedures to reflect any new rules adopted as a result of this proceeding); Haddon Heights Comments at 2; San Diego Comments at 3.

[652] *See* Letter from Kenneth S. Fellman, Intergovernmental Advisory Committee, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed Oct. 8, 2014 (IAC Oct. 8, 2014 *Ex Parte*), at 1-2 (asserting that it will be necessary to educate staff and elected officials throughout the country of the substance of the Order and the changes that might be required once local codes are reviewed in light of the Commission's guidance). *See also* Letter fromYejin Jang, National Association of Counties, to Marlene H. Dortch, Secretary, FCC, WT Docket No. 13-238, filed Oct. 10, 2014 (NACo Oct. 10, 2014 *Ex Parte*), at 1 (asserting that the effective date should be no earlier than 90 days after publication and that in implementing such changes to existing State and local laws and requirements, States and municipalities would need time for appropriate action, such as providing notice for official meetings and (continued….)

242. *Discussion.* Based on our review of the record, we are persuaded that a transition period is necessary and appropriate. We agree with certain municipal commenters that affected State and local governments may need time to make modifications to their laws and procedures to conform to and comply with the rules we adopt in this Report and Order implementing and enforcing Section 6409(a), and that a transition period is warranted to give them time to do so.[653] We therefore conclude, as proposed by the IAC and other parties, that the rules adopted to implement Section 6409(a) will take effect 90 days after Federal Register publication.

VI. SECTION 332(C)(7) AND THE 2009 DECLARATORY RULING

243. In this section, we address questions related to Section 332(c)(7) and the Commission's *2009 Declaratory Ruling*.[654] In particular, we clarify when a siting application is considered complete for the purpose of triggering the presumptively reasonable timeframes for local and State review of personal wireless service facilities siting applications under the *2009 Declaratory Ruling*, and we also clarify how the presumptively reasonable timeframes apply to local moratoria and DAS or small-cell facilities. We find that these actions will resolve ambiguities and thus enable both industry and State and local jurisdictions to expedite personal wireless service facilities siting and facilitate the provision of advanced wireless services across the country.

244. With regard to certain other issues, after review of the record, we decline to take action at this time. Specifically, we decline to further clarify or amend the test for determining which applications must be reviewed under the shorter 90-day period applicable to collocations under the *2009 Declaratory Ruling*, to hold that preferences for the placement of wireless facilities on municipal property are *per se* unlawful under Section 332(c)(7), or to adopt additional remedies beyond the one articulated in the *2009 Declaratory Ruling* for failures to act in a timely manner under Section 332(c)(7).

A. Background

245. Section 332(c)(7) of the Communications Act, adopted as part of the Telecommunications Act of 1996, generally preserves State and local authority over "personal wireless service facilities" siting, while also placing important limitations on that authority.[655] Three of these limits involve substantive restrictions. The first, Section 332(c)(7)(B)(i)(I), states that municipal regulation of the placement, construction, and modification of personal wireless service facilities "shall not unreasonably discriminate among providers of functionally equivalent services."[656] A second substantive limit provides that a State or local government's siting regulations "shall not prohibit or have the effect of prohibiting the provision of personal wireless services."[657] The third provides that a State or

(Continued from previous page)
agenda, informing the public, providing opportunity for comment, gathering public input and testimony, and, in some instances, action by state legislatures to support local compliance with the Commission's order).

[653] To the extent existing State and local laws conflict with our rules implementing Section 6409(a), they will no longer apply once the rules take effect.

[654] *See*, *generally*, 47 U.S.C. § 332(c)(7); *2009 Declaratory Ruling*, 24 FCC Rcd 13994.

[655] 47 U.S.C. § 332(c)(7)(A) (stating that, "[e]xcept as provided in this paragraph, nothing in this chapter 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 services facilities"). Personal wireless services are defined as "commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services." 47 U.S.C. § 332(c)(7)(C)(i). As discussed above, in 2012, Congress expressly modified this preservation of local and State authority by enacting Section 6409(a), which requires local or State governments to approve certain types of facilities siting applications "[n]otwithstanding section 704 of the Telecommunications Act of 1996 [codified in substantial part as Section 332(c)(7)] . . . or any other provision of law . . . ." Spectrum Act § 6409(a)(1). *See supra*, Section V.

[656] 47 U.S.C. § 332(c)(7)(B)(i)(I).

[657] *Id.* at § 332(c)(7)(B)(i)(II).

local government may not regulate the siting of personal wireless service facilities "on the basis of the environmental effects of [RF] emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions."[658] Section 332(c)(7)(B) also imposes procedural obligations on State and local governments, including a requirement that they must act on requests for personal wireless service facilities sitings "within a reasonable period of time."[659]

246. Section 332(c)(7) also sets forth a judicial remedy for violations of the provision, stating that "[a]ny person adversely affected by any final action or failure to act by a State or local government" that is inconsistent with the requirements of Section 332(c)(7) "may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction."[660] The provision further directs the court to "decide such action on an expedited basis."[661] While the statute makes this judicial remedy available for any violation of Section 332(c)(7), it also provides that applicants may petition the Commission for relief in one circumstance—where they are adversely affected by a State or local government's action or failure to act based on the effects of RF emissions.[662]

247. In 2009, the Commission adopted a Declaratory Ruling[663] in response to a petition requesting clarification on two points: what constitutes a "reasonable period of time" after which an aggrieved applicant may file suit asserting a failure to act under Section 332(c)(7), and whether a zoning authority may restrict competitive entry by multiple providers in a given area under Section 332(c)(7)(B)(i)(II).[664] In the *2009 Declaratory Ruling*, the Commission interpreted a "reasonable period of time" under Section 332(c)(7)(B)(ii) to be 90 days for processing collocation applications, and 150 days for processing applications other than collocations.[665] The Commission further determined that failure to meet the applicable timeframe presumptively constitutes a failure to act under Section 332(c)(7)(B)(v), enabling an applicant to pursue judicial relief within the next 30 days.[666]

248. The Commission also defined certain circumstances that would warrant adjustments to the presumptive deadlines, including when the applicant fails to submit a complete application or to file necessary additional information in a timely manner.[667] Specifically, the Commission stated that "when applications are incomplete as filed, the timeframes do not include the time that applicants take to respond

[658] *Id.* at § 332(c)(7)(B)(iv).

[659] *Id.* at § 332(c)(7)(B)(ii). In addition, Section 332(c)(7)(B)(iii) provides that "[a]ny decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record." *Id.* at § 332(c)(7)(B)(iii). *See T-Mobile S., LLC v. City of Roswell*, 731 F.3d 1213 (11th Cir. 2013) *cert. granted* 134 S. Ct. 2136 (2014).

[660] 47 U.S.C. § 332(c)(7)(B)(v).

[661] *Id.*

[662] *See id.*

[663] *See 2009 Declaratory Ruling*, 24 FCC Rcd 13994.

[664] 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, Petition for Declaratory Ruling of CTIA–The Wireless Association, WT Docket No. 08-165, filed July 11, 2008 (*CTIA Petition*). In its petition, CTIA also requested that the Commission find that a State or local regulation that requires a variance or waiver for every wireless facility siting violates Section 253(a) of the Communications Act. 47 U.S.C. § 253(a). The Commission denied this request due to a lack of a specific controversy. *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14019-20 paras. 66-67.

[665] *See id.* at 14012 para. 45.

[666] *See id.* at 14005 para. 32, 14012 para. 45.

[667] *See id*. at 14010 para. 42.

to State and local governments' requests for additional information."[668] This automatic tolling, however, applies only if a zoning authority notifies an applicant within the first 30 days that its application is incomplete.[669] In addition, the Commission clarified that the presumptive deadlines for acting on siting applications could be extended beyond 90 or 150 days by mutual consent, and that such an agreement would toll the commencement of the 30-day period for filing suit.[670]

249. Finally, addressing Section 332(c)(7)(B)(i)(II)'s direction that States and localities shall not regulate in a manner that prohibits or has the effect of prohibiting the provision of personal wireless services, the Commission found that this provision prohibits a State or local government from denying a personal wireless service facility siting application solely because service is available from another provider.[671]

250. On December 17, 2009, a Petition for Reconsideration or Clarification (Petition) was filed by the National Association of Telecommunications Officers and Advisors, the United States Conference of Mayors, the National League of Cities, the National Association of Counties, and the American Planning Association (Petitioners).[672] In August of 2010, the Commission adopted the *2010 Shot Clock Reconsideration Order*, in which it denied the requests to reconsider certain of its conclusions.[673]

251. In 2012, the United States Court of Appeals for the Fifth Circuit upheld the *2009 Declaratory Ruling* in its entirety,[674] deferring to the Commission's conclusion that it had jurisdiction to address these issues. In 2013, the United States Supreme Court affirmed the Fifth Circuit's decision, finding that judicial deference under *Chevron* applies to an agency's determination of the scope its own statutory jurisdiction.[675]

252. Subsequent to the Supreme Court's decision, the Commission released the *Infrastructure NPRM*. While stating that the Commission would not generally revisit the *2009 Declaratory Ruling*, it

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[668] *Id.* at 14014 para. 52.

[669] *See id*. at 14014-15 para. 53.

[670] *See id.* at 14013 para. 49.

[671] *See id*. at 14016 para. 56.

[672] *See* 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, *Petition for Reconsideration or Clarification*, WT Docket No. 08-165, filed Dec. 17, 2009. Also on December 17, 2009, Petitioners filed an Emergency Motion for Stay pending Commission action on their petition. *See* 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, *Emergency Motion for Stay*, WT Docket No. 08-165, filed Dec. 17, 2009. On January 29, 2010, WTB denied the stay request. *See* 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, WT Docket No. 08-165, *Order*, 25 FCC Rcd 1215 (WTB 2010) (*2010 Stay Denial Order*).

[673] *See*, *generally*, 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, WT Docket No. 08-165, *Order on Reconsideration*, 25 FCC Rcd 11157 (2010) (*2010 Reconsideration Order*).

[674] *See City of Arlington v. FCC*, 668 F.3d 229 (5th Cir. 2012), *aff'd*, 133 S.Ct. 1863 (2013).

[675] *See City of Arlington,* 133 S.Ct. at 1874 ("[T]he preconditions to deference under *Chevron* are satisfied because Congress has unambiguously vested the FCC with general authority to administer the Communications Act through rulemaking and adjudication, and the agency interpretation at issue was promulgated in the exercise of that authority."); s*ee Chevron U.S.A. Inc. v. NRDC, Inc.*, 467 U.S. 837 (1984).

sought comment on six discrete issues arising under Section 332(c)(7) and the *2009 Declaratory Ruling*:[676] (1) whether and how to clarify when a siting application is considered complete for the purpose of triggering the *2009 Declaratory Ruling*'s shot clock; (2) whether to clarify that the presumptively reasonable period for State or local government action on an application runs regardless of any local moratorium; (3) whether the *2009 Declaratory Ruling* applies to DAS and small-cell facilities; (4) whether to clarify the types of actions that constitute "collocations" for purposes of triggering the shorter shot clock; (5) whether local ordinances establishing preferences for deployment on municipal property violate Section 332(c)(7)(B)(i)(I); and (6) whether to adopt an additional remedy for failures to act in violation of Section 332(c)(7).[677]

B. Discussion

253. In order to add greater efficiency to the siting process—for the municipal and State entities that must review applications, for the applicants that file them, and for the tribunals that resolve disputes—we clarify how the *2009 Declaratory Ruling* applies in some but not all of the contexts we identified in the *NPRM*. The record demonstrates that these clarifications will promote the deployment of infrastructure necessary for advanced wireless broadband services while preserving both State and municipalities' front-line roles in the siting process. We discuss each of the six issues on which the Commission sought comment below.

1. Completeness of Applications

254. *Background*. The *2009 Declaratory Ruling* held that, when an application is incomplete as filed, the shot clock timeframe does not include the time the applicant takes to respond to a State or local government's request for additional information, provided that the State or locality makes its request within 30 days of the application's submission.[678]

255. The *2009 Declaratory Ruling* did not, however, define when a siting application should be considered "complete" for this purpose. PCIA has asserted that, as a result, some jurisdictions have repeatedly requested additional information to toll the shot clock and delay application processing.[679] In the *Infrastructure NPRM*, the Commission sought comment on whether to clarify when a siting application is considered complete for the purpose of triggering the *2009 Declaratory Ruling* timeframe and, if so, how that should be determined.

256. Several industry commenters argue that the *2009 Declaratory Ruling* needs clarification in this area, and they suggest specific approaches.[680] Crown Castle and PCIA, for example, propose that a request for additional information should toll the shot clock only if it: (1) is in writing, (2) delineates any information alleged to be missing, and (3) specifies the particular subsection of the applicable code that requires the applicant to submit the information.[681] Crown Castle further proposes that the clock should continue running if a jurisdiction requests information not specifically identified in the zoning application's requirements.[682] Municipalities generally oppose these clarifications.[683]

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[676] *See Infrastructure NPRM,* 28 FCC Rcd at 14293 para. 152.

[677] *Id.* at 14293-96 paras. 153-162.

[678] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14014 paras. 52-53.

[679] PCIA and DAS Forum *NOI* Comments, WC Docket No. 11-59, at 14.

[680] *See, e.g.,* Crown Castle Comments at 15-17; ExteNet Comments at 6-7; PCIA Comments at iii, 54-55; PCIA Reply Comments at iii, 28.

[681] *See* Crown Castle Comments at 17; PCIA Comments at iii, 54-55.

[682] *See* Crown Castle Comments at 17.

[683] *See, e.g.,* Alexandria *et al*. Comments at 57-58; Alexandria *et al.* Reply Comments at 30-35; CA Local Governments Comments at 31-32; Coconut Creek Comments at 10; DC Comments at 23; Fairfax Comments at 25; (continued….)

257. *Discussion*. We find that we should clarify under what conditions the presumptively reasonable timeframes may be tolled on grounds that an application is incomplete. We take this action not only to provide clarity in connection with a State's or municipality's first request for additional information in connection with a particular application, but also in situations where a State or municipality makes repeated requests. Indeed, the *2009 Declaratory Ruling* did not address how such repeated requests would toll the timeframes. For example, while the *2009 Declaratory Ruling* provided that a State or municipality must notify the applicant of incompleteness within 30 days, it did not indicate whether that restriction applies where the State or municipality, after receiving additional data, determines at some point after the first 30 days that the application remains incomplete. We find that this ambiguity has undermined the effectiveness of the timeframes.[684]

258. As an initial matter, we note that under the *2009 Declaratory Ruling*, the presumptively reasonable timeframe begins to run when an application is first submitted, not when it is deemed complete.[685] Accordingly, to the extent municipalities have interpreted the clock to begin running only after a determination of completeness, that interpretation is incorrect.

259. Further, consistent with proposals submitted by Crown Castle and PCIA,[686] we clarify that, following a submission in response to a determination of incompleteness, any subsequent determination that an application remains incomplete must be based solely on the applicant's failure to supply information that was requested within the first 30 days. The shot clock will begin running again after the applicant makes a supplemental submission. The State or local government will have 10 days to notify the applicant that the supplemental submission did not provide the information identified in the original notice delineating missing information. In other words, a subsequent determination of incompleteness can result in further tolling of the shot clock only if the local authority provides it to the applicant in writing within 10 days of the supplemental submission, specifically identifying the information the applicant failed to supply in response to the initial request. Once the 10-day period passes, the period for review of the application may not thereafter be tolled for incompleteness.

260. We further provide that, in order to toll the timeframe for review on grounds of incompleteness, a municipality's request for additional information must specify the code provision, ordinance, application instruction, or otherwise publically-stated procedures that require the information to be submitted.[687] This requirement will avoid delays due to uncertainty or disputes over what documents or information are required for a complete application. Further, while some municipal commenters argue that "[n]ot all jurisdictions codify detailed application submittal requirements because doing so would require a code amendment for even the slightest change,"[688] our approach does not restrict them to reliance on codified documentation requirements.

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Mendham Comments at 6; Springfield Comments at 17-18; Steel in the Air Comments at 10; Tempe Comments at 30; West Palm Beach Comments at 10.

[684] Some commenters cite certain instances in which local authorities have significantly delayed action on applications through successive unrelated data requests. *See*, *e.g.*, Crown Castle Comments at 15-16 (asserting one instance in which Crown Castle went before a local reviewing board eight times, and that "with each review the Town alleged new and different 'deficiencies' with the permit applications"); PCIA Comments at 55 n.182 (asserting that in one case, "a second notice of incomplete application was provided to a member over five months after the date of the initial application"); *see also* AT&T Comments, WC Docket No. 11-59, at 15-16.

[685] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14014 para. 52 (providing that the "timeframes do not include the time that applicants take to respond to State and local governments' requests for additional information").

[686] *See* Crown Castle Comments at 17; PCIA Comments at 54-55.

[687] *See, e.g.,* Crown Castle Comments at 17; PCIA Comments at iii, 54-55.

[688] *See, e.g.,* Alexandria *et al.* Reply Comments at 35.

261. Beyond these procedural requirements, we decline to enumerate what constitutes a "complete" application. We find that, as some commenters note, State and local governments are best suited to decide what information they need to process an application.[689] Differences between jurisdictions make it impractical for the Commission to specify what information should be included in an application.

262. We find that these clarifications will provide greater certainty regarding the period during which the clock is tolled for incompleteness. This in turn provides clarity regarding the time at which the clock expires, at which point an applicant may bring suit based on a "failure to act." Further, we expect that these clarifications will result in shared expectations among parties, thus limiting potential miscommunication and reducing the potential or need for serial requests for more information. Accordingly, these clarifications will facilitate faster application processing, reduce unreasonable delay, and accelerate wireless infrastructure deployment.

2. Moratoria

263. *Background*. In the *Infrastructure NPRM*, the Commission sought comment on whether and how the presumptively reasonable timeframes under Section 332(c)(7) apply to delays in processing applications that result from a local moratorium—that is, when a State or local government freezes all siting applications across the board while, for example, it updates applicable zoning regulations.[690] We proposed to find that the presumptively reasonable period continues to run regardless of any local moratorium.[691] We alternatively sought comment on whether a moratorium should toll the shot clock and, if so, whether the tolling period for moratoria should be limited in some manner.[692]

264. Industry commenters generally argue that moratoria should not suspend the shot clock,[693] while localities argue that they should.[694] On a more granular level, UTC proposes prohibiting moratoria over 6 months,[695] while municipal commenters disagree.[696]

265. *Discussion*. We clarify that the shot clock runs regardless of any moratorium. This is consistent with a plain reading of the *2009 Declaratory Ruling,* which specifies the conditions for tolling and makes no provision for moratoria. Moreover, our conclusion that the clock runs regardless of any moratorium means that applicants can challenge moratoria in court when the shot clock expires without State or local government action, which is consistent with the case-by-case approach that courts have generally applied to moratoria under Section 332(c)(7).[697] This approach, which establishes clearly that

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[689] *See, e.g.,* CA Local Governments Comments at 31. *See also* Alexandria *et al.* Reply Comments at 31-32; Coconut Creek Comments at 10; DC Comments at 23; Fairfax Comments at 25; Mendham Comments at 6; Steel in the Air Comments at 10; Tempe Comments at 30; West Palm Beach Comments at 10.

[690] *See Infrastructure NPRM,* 28 FCC Rcd at 14294 para. 155.

[691] *See id.* at 14294 para. 156.

[692] *See id.* at 14294 para. 157.

[693] *See, e.g.,* AT&T Comments at 30; Crown Castle Comments at 15; ExteNet Comments at 7-8; PCIA Comments at iii, 55; PCIA Reply Comments at iii, 27-28; UTC Comments at 16.

[694] *See, e.g.,* Alexandria *et al*. Comments at 53-56; Alexandria *et al*. Reply Comments at 36-37; CA Local Governments Comments at 32-34; Coconut Creek Comments at 8-10; LOC Comments at 5; Steel in the Air Comments at 8-10; West Palm Beach Comments at 8-10. *See also* Fairfax Comments at 25.

[695] *See* UTC Comments at 16. *See also* Coconut Creek Comments at 10; Steel in the Air Comments at 10; West Palm Beach Comments at 10.

[696] *See, e.g.,* Alexandria *et al*. Comments at 55; Alexandria *et al*. Reply Comments at 37.

[697] *See*, *e.g.*, *Illinois Bell Telephone Co. v. Village of Itasca, Illinois,* 503 F.Supp.2d 928, 935 (N.D.Ill. 2007) (finding that moratoria, some of which were extended formally or informally, were effectively complete prohibitions on the expansion of plaintiff's telecommunications facilities); *Masterpage Communications, Inc. v. Town of Olive*, (continued….)

an applicant can seek redress in court even when a jurisdiction has imposed a moratorium, will prevent indefinite and unreasonable delay of an applicant's ability to bring suit.

266. Some commenters argue that if moratoria do not toll the presumptively reasonable periods, this would discourage local governments from updating their regulations.[698] Similarly, others contend that this approach would, in effect, improperly require municipal staff to simultaneously review and update their regulations to adapt to new technologies while also reviewing applications.[699] We recognize that new technologies may in some cases warrant changes in procedures and codes, but we find no reason to conclude that the need for any such change should freeze all applications. We are confident that industry and local governments can work together to resolve applications that may require more staff resources due to complexity, pending changes to the relevant siting regulations, or other special circumstances. Moreover, in those instances in which a moratorium may reasonably prevent a State or municipality from processing an application within the applicable timeframe, the State or municipality will, if the applicant seeks review, have an opportunity to justify the delay in court. We therefore clarify that the shot clock continues to run regardless of any moratorium.

267. We decline at this time to determine that a moratorium that lasts longer than six months constitutes a *per se* violation of the obligation to take action in a reasonable period of time. Although some have argued that a six-month limit would "discourage localities from circumventing the intent of the Commission's shot clock rules,"[700] others disagree, and the record provides insufficient evidence to support a *per se* determination at this juncture.[701] Given our clarification that the presumptively reasonable timeframes apply regardless of moratoria, any moratorium that results in a delay of more than 90 days for a collocation application or 150 days for any other application will be presumptively unreasonable. The courts are well situated to assess whether such moratoria are in fact reasonable on a case-by-case basis, including when the moratorium extends for six months or longer.

3. Application to DAS and Small Cells

268. *Background*. In the *Infrastructure NPRM*, the Commission noted that some jurisdictions have adopted the view that the shot clocks do not apply to DAS or small-cell deployments.[702] The Commission proposed to clarify that to the extent DAS or small-cell facilities, including neutral-host deployments shared by more than one carrier, are or will be used for the provision of personal wireless services, their siting applications are subject to the same presumptively reasonable timeframes and other requirements as applications related to other personal wireless service facilities.[703]

269. Several industry commenters support our proposal, arguing that DAS and small-cell applications are covered by the *2009 Declaratory Ruling* and are subject to the same timeframes as other

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NN, 418 F.Supp.2d 66,78 (N.D.N.Y. 2005) (finding that delay was unreasonable where a moratorium lasted more than two years, was extended at least once without explanation, and prohibited Masterpage from applying for more than one year); *Sprint Spectrum, L.P. v. City of Medina*, 924 F.Supp. 1036, 1039-40 (W.D.Wash. 1996) (finding a six-month moratorium was reasonable). *See also* CA Local Governments Comments at 34.

[698] *See, e.g.,* Coconut Creek Comments at 8, 10; Steel in the Air Comments at 8, 10; West Palm Beach Comments at 8, 10.

[699] *See, e.g.,* Alexandria *et al*. Comments at 55.

[700] *See, e.g.,* UTC Comments at 16. *See also* Coconut Creek Comments at 10; Steel in the Air Comments at 10; West Palm Beach Comments at 10.

[701] *See, e.g.,* Alexandria *et al*. Comments at 55; Alexandria *et al*. Reply Comments at 36-37.

[702] *See*, *e.g.*, PCIA and DAS Forum *NOI* Comments, WC Docket No. 11-59, at 13, 47 (asserting that the *2009 Declaratory Ruling* timeframes have not been applied to DAS projects in some jurisdictions due to the lack of clarity or consensus regarding their applicability).

[703] *See Infrastructure NPRM,* 28 FCC Rcd at 14295 para. 158.

covered applications.[704] Other commenters support the proposal with modifications. Some, for example, argue that the shot clocks apply, but also that the applicable timeline should be adjusted if a single DAS deployment entails more than 10 antenna siting applications, in light of the greater review and processing burden.[705] Coconut Creek proposes that we apply a shot clock only when a DAS deployment will support multiple providers, but not where it is designed to support only one.[706] Some municipalities disagree with our proposal altogether, arguing that the *2009 Declaratory Ruling* timeframes do not apply to DAS or small cells,[707] while others assert this issue does not require any additional clarification.[708]

270. *Discussion*. We clarify that to the extent DAS or small-cell facilities, including third-party facilities such as neutral host DAS deployments, are or will be used for the provision of personal wireless services, their siting applications are subject to the same presumptively reasonable timeframes that apply to applications related to other personal wireless service facilities. We note that courts have addressed the issue and, consistent with our conclusion, have found that the timeframes apply to DAS and small-cell deployments.[709]

271. Some commenters argue that the shot clocks should not apply because some providers describe DAS and small-cell deployments as wireline, not wireless, facilities.[710] The City of Eugene, Oregon, for example, argues that the Commission should not consider DAS a personal wireless service because one DAS provider has argued that its service is "no different from, and indeed competes directly with, the fiber-based backhaul/private line service provided by Incumbent Local Exchange Carriers."[711] This argument is not persuasive. Determining whether facilities are "personal wireless service facilities" subject to Section 332(c)(7) does not rest on a provider's characterization in another context; rather, the analysis turns simply on whether they are facilities used to provide personal wireless services.[712] Based on our review of the record, we find no evidence sufficient to compel the conclusion that the characteristics of DAS and small-cell deployments somehow exclude them from Section 332(c)(7) and the *2009 Declaratory Ruling*. For similar reasons, we reject Coconut Creek's argument that the shot clocks should apply only to neutral host deployments.

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[704] *See, e.g.,* CalWa Comments at 3-4; CTIA Comments at 21-22; CTIA Reply Comments at 12; ExteNet Comments at 4, 7; Fibertech Comments at 33-34; Fibertech Reply Comments at 20-21; PCIA Comments at 55-56; PCIA Reply Comments at iii, 28; Sprint Comments at 12.

[705] *See, e.g.,* Coconut Creek Comments at 10; Steel in the Air Comments at 10; West Palm Beach Comments at 10. *See also* CA Local Governments Comments at 34 (arguing that a 150-day review period is necessary for DAS collocations because antennas will typically be installed on poles that do not, prior to the installation, host any personal wireless service equipment); Fairfax Comments at 27-28 (arguing that, due to the number of nodes proposed with many DAS systems and the fact that they are not collocations, 150 days is an appropriate time for processing applications).

[706] *See* Coconut Creek Comments at 10; Steel in the Air Comments at 10; West Palm Beach Comments at 10.

[707] *See, e.g.,* Eugene Comments at v, 16-17; San Antonio Comments at v-vi, 18-20; San Antonio Reply Comments at 18-19; *see also* Tempe Comments at 30 (arguing that the shot clock should not apply to DAS and small-cell installations "where the wireless antenna portion will be going on a support structure that does not currently house a wireless facility").

[708] *See, e.g.,* Alexandria *et al*. Reply Comments at 39; Fairfax Comments at 27-28.

[709] *See*, *e.g.*, *Crown Castle NG East Inc. v. Town of Greenburgh*, 2013 WL 3357169 (S.D.N.Y. 2013), *aff'd*, 552 Fed.Appx. 47 (2d Cir. 2014).

[710] *See, e.g.,* Alexandria *et al.* Reply Comments at 38-39; Eugene Comments at v, 16-17; San Antonio Reply Comments at 18-19.

[711] Eugene Comments at 16.

[712] *See, e.g.,* Alexandria *et al*. Comments at 58-59; Alexandria *et al.* Reply Comments at 38; CTIA Comments at 21-22.

272. Some commenters suggest revising our proposal on the grounds that the unique qualities of DAS and small-cell systems require longer timeframes for municipal review.[713] We decline to adjust the timelines as these commenters suggest. We note that the timeframes are presumptive, and we expect applicants and State or local governments to agree to extensions in appropriate cases. Moreover, courts will be positioned to assess the facts of individual cases—including whether the applicable time period "t[ook] into account the nature and scope of [the] request"—in instances where the shot clock expires and the applicant seeks review.[714] We also note that DAS and small-cell deployments that involve installation of new poles will trigger the 150-day time period for new construction that many municipal commenters view as reasonable for DAS and small-cell applications.[715] Accordingly, we find it unnecessary to modify the presumptive timeframes as they apply to DAS applications.

4. Definition of Collocation

273. *Background*. In the *2009 Declaratory Ruling*, the Commission held that the presumptively reasonable timeframe for review of personal wireless facility siting applications is 90 days for "collocation" applications and 150 days for all other applications.[716] It further determined that an application is a request for collocation for purposes of the Section 332(c)(7) shot clock if it seeks authorization to place an antenna on an existing structure and does not involve a "substantial increase in . . . size," as that phrase is defined in the Collocation Agreement.[717]

274. In the *Infrastructure NPRM*, the Commission sought comment on whether to revise the test for a "substantial increase in size" under Section 332(c)(7) and the *2009 Declaratory Ruling* to reflect the test we adopt in this Report and Order for a "substantial change in physical dimensions" under Section 6409(a) of the Spectrum Act.[718]

275. We received a wide array of comments on this question. Some commenters propose that we harmonize the two tests completely,[719] others oppose any revisions to the current rule,[720] and others suggest some specific revisions. Some, for example, oppose formal harmonization but support a "plain language" approach to defining "collocation,"[721] while another supports defining "substantial increase" to include changes to both the collocation site and any associated ground equipment.[722] Still others contend that the collocation definition should apply to mounting an antenna on any structure, including utility

[713] *See, e.g.,* Alexandria *et al.* Comments at 60; Alexandria *et al.* Reply Comments at 39; CA Local Governments Comments at 34; Coconut Creek Comments at 10; Fairfax Comments at 27-28; Steel in the Air Comments at 10; West Palm Beach Comments at 10.

[714] 47 U.S.C. § 332(c)(7)(B)(ii).

[715] *See, e.g.,* CA Local Governments Comments at 34; Fairfax Comments at 28.

[716] *2009 Declaratory Ruling*, 24 FCC Rcd at 14012 para. 45.

[717] *Id.* at 14012 para. 46.

[718] *Infrastructure NPRM,* 28 FCC Rcd at 14293-94 para. 153.

[719] *See, e.g.,* AT&T Comments at 28-29; Coconut Creek Comments at 9-10; Fibertech Comments at 34 (arguing that if Commission expands the *2009 Declaratory Ruling* to collocations on existing base stations, it should adopt the same "substantial change" test as Fibertech proposed for Section 6409(a)); PCIA Comments at iii, 53-54; Steel in the Air Comments at 9-10; UTC Comments at 16; West Palm Beach Comments at 9-10.

[720] *See, e.g.,* MDIT Comments at 7; Springfield Comments at 17.

[721] *See, e.g.,* CA Local Governments Comments at 30 (proposing to define "collocation" as a wireless facility placed at a location shared with an existing wireless tower or other wireless structure); Fairfax Comments at 23-24 (proposing to define "collocation" as an installation of additional antennas on an existing wireless facility that already supports one or existing antennas, with no substantial change in the existing facility's physical dimensions).

[722] Tempe Comments at 30.

poles,[723] while another expressly opposes this approach.[724] Another proposes to include aggregate limits in the "substantial change" definition to avoid the cumulative impact that can result from successive changes that are individually insignificant.[725]

276. *Discussion*. After reviewing the record, we decline to make any changes or clarifications to the existing standard established in the *2009 Declaratory Ruling* for applying the 90-day shot clock for collocations. In particular, we decline to apply the "substantial change" test that we establish in this Report and Order for purposes of Section 6409(a). We observe that Sections 6409(a) and 332(c)(7) serve different purposes, and we accordingly find that the tests for "substantial change" and "substantial increase in size" are appropriately distinct.[726] More specifically, the test for a "substantial increase in size" under Section 332(c)(7) affects only the length of time for State or local review, while the test we adopt under Section 6409(a) identifies when a State or municipality must grant an application. This is a meaningful distinction that merits a more demanding standard under Section 6409(a).

277. In further support for this conclusion, we note that while the two statutory provisions overlap in many cases, some collocation applications covered by Section 332(c)(7) do not constitute "eligible facilities requests" for purposes of Section 6409(a). Moreover, as noted above, Section 6409(a) covered requests extend to any "wireless" tower or base station modification, not just "personal wireless service" facilities. Considering that these provisions cover different (though overlapping) pools of applications, it is appropriate to apply them differently. Further, we find no compelling evidence in the record that using the same test for both provisions would provide significant administrative efficiencies or limit confusion, as some have argued.[727] We therefore preserve distinct standards under the two provisions.

5. Preferences for Deployments on Municipal Property

278. *Background*. Some municipalities have established preferences for siting wireless facilities on municipal property.[728] PCIA argues that these preferences violate Section 332(c)(7)(B)(i)(I),[729] which states that regulation of the placement, construction, and modification of personal wireless service facilities "shall not unreasonably discriminate among providers of functionally equivalent services."[730] PCIA contends that preferences for placing wireless facilities on municipal property unreasonably discriminate among providers by limiting the siting flexibility of subsequent wireless entrants in a given area.[731] The *Infrastructure NPRM* sought comment on PCIA's contention.[732]

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[723] *See, e.g.,* ExteNet Comments at 6; Fibertech Comments at 34; Fibertech Reply Comments at 20-21; Joint Venture Comments at 8.

[724] *See* Alexandria *et al.* Reply Comments at 38.

[725] Pennsauken Reply Comments at 1.

[726] MDIT Comments at 7 ("Maryland believes that there are substantial differences between the parties contemplated in 332(c)(7) . . . and 6409(a) . . . . As a result, the State believes that the test for 'substantial change in physical dimensions' in 6409 should be distinct from the test for 'substantial increase in size' under 332.").

[727] *See, e.g.,* AT&T Comments at 28-29; Coconut Creek Comments at 10; Steel in the Air Comments at 10; West Palm Beach Comments at 10.

[728] *See*, *e.g.*, Seattle Resolution 29344, *available at* http://clerk.seattle.gov/~archives/Resolutions/Resn_29344.pdf, which allows City facilities to be used for wireless communication facilities. *See* CCUA *et al.* Comments at 18-19.

[729] *See* PCIA and DAS Forum *NOI* Comments, WC Docket No. 11-59, at 43-44.

[730] 47 U.S.C. § 332(c)(7)(B)(i)(I).

[731] *See* PCIA and DAS Forum *NOI* Comments, WC Docket No. 11-59, at 44.

[732] *See Infrastructure NPRM,* 28 FCC Rcd at 14295 para. 160.

279. Most commenters, including many municipal commenters and also some industry commenters, argue that municipal property preferences are not *per se* unlawful under Section 332(c)(7).[733] For example, Fairfax argues that location preferences are not impermissibly discriminatory because they apply equally to all applicants and because there are many valid reasons for such preferences.[734] Some commenters agree with Fairfax that the Commission cannot reach a *per se* conclusion because there are valid reasons for such preferences,[735] and others assert that the courts, not the Commission, must decide whether a municipal preference is unreasonably discriminatory on a case-by-case basis.[736] Many industry commenters, on the other hand, argue that municipal property preferences are unlawfully discriminatory under Section 332(c)(7)[737] and that they violate the statute by effectively prohibiting the provision of wireless services.[738]

280. *Discussion*. We find insufficient evidence in the record to make a determination that municipal property preferences are *per se* unreasonably discriminatory or otherwise unlawful under Section 332(c)(7). To the contrary, most industry and municipal commenters support the conclusion that many such preferences are valid.[739] For example, some commenters assert that such preferences are not unlawfully discriminatory as a general matter, but that they can violate Section 332(c)(7) if they effectively "pressure" applicants to use municipal property or are coupled with ordinances making it too onerous to site anywhere else.[740] As an example, PCIA describes a situation where a member company had difficulty siting due to a municipal property preference that coupled high municipal lease fees with onerous regulations, making it difficult to site on non-municipal property.[741] As PCIA's argument suggests, however, determining whether a particular municipal property preference violates Section 332(c)(7) depends on the specific details of the preference and related requirements.[742] We note that available court precedent further supports the conclusion that the validity of preferences is an inquiry best suited to resolution on a case-by-case basis.[743] Therefore, consistent with the majority of comments on

[733] *See, e.g.,* Alexandria *et al.* Comments at 56-57; Alexandria *et al.* Reply Comments at 40-41; CA Local Governments Comments at 34-35; CA Local Governments Reply Comments at 24-25; Coconut Creek Comments at 10; DC Comments at 23; Eugene Comments at vi, 23-24; LOC Comments at 5; Steel in the Air Comments at 10; San Antonio Comments at vii, 25-28; San Antonio Reply Comments at 23-25; West Palm Beach Comments at 10.

[734] *See* Fairfax Comments at 26-27 (citing diminished visual impact of telecommunication facilities, potential to join publicly managed communication systems with commercial wireless service antennas, greater continuity of telecommunications facilities, improved buffering from adjacent residential uses, and enhanced cell phone service in more remote parts of the County as valid reasons for preferences).

[735] *See, e.g.,* Alexandria *et al.* Reply Comments at 41 (asserting municipal preferences encourage wireless deployments by making municipal property available where options may be limited); CA Local Governments Comments at 35 (asserting that benefits to municipal preferences include reduced aesthetic impact, fewer land use restrictions, and quicker application approval process); CA Local Governments Reply Comments at 25.

[736] *See, e.g.,* Alexandria *et al.* Comments at 56-57; CA Local Governments Comments at 35; CA Local Governments Reply Comments at 24-25; DC Comments at 23.

[737] *See, e.g.,* PCIA Reply Comments at iii, 28-29; UTC Comments at 17.

[738] *See, e.g.,* PCIA Comments at iii, 56; *see also* 47 U.S.C. § 332(c)(7)(B)(i)(II).

[739] *See, e.g.,* Alexandria *et al.* Comments at 56-57; CA Local Governments Comments at 34-35; CA Local Governments Reply Comments at 24-25; CTIA Comments at 20; DC Comments at 23; PCIA Comments at 56.

[740] *See, e.g.,* CTIA Comments at 20-21; PCIA Comments at iii, 56.

[741] *See* PCIA Comments at 56, n.183. We note that St. Paul, the municipality in question, has challenged PCIA's assertions regarding the preference. *See* St. Paul Reply Comments at 1. *See also* MACTA Reply Comments at 2.

[742] *See, e.g.,* Alexandria *et al.* Comments at 56-57; CA Local Governments Comments at 35; DC Comments at 23.

[743] *See, e.g., T-Mobile Northeast LLC v. Fairfax County Bd. of Sup'rs*, 672 F.3d 259 (4th Cir. 2012).

this issue, we decline at this time to find municipal property preferences *per se* unlawful under Section 332(c)(7).

6. Remedies

281. *Background*. In the *2009 Declaratory Ruling*, the Commission considered whether an application should be deemed granted when a State or local government fails to take action before the shot clock expires. The Commission declined to establish this remedy.[744] Noting that Section 332(c)(7) expressly establishes a judicial remedy, the Commission concluded that "this provision indicates congressional intent that courts should have the responsibility to fashion appropriate case-specific remedies."[745] The Commission also declined to suggest that a reviewing court should presumptively issue an injunction granting the application, noting that "case law does not establish that an injunction granting the application is always or presumptively appropriate when a 'failure to act' occurs."[746] The Commission further noted that in cases where injunctions were granted, courts did so "only after examining all the facts in the case."[747] Although the Commission declined to adopt a presumption that the court should issue an injunction granting the application, it recognized that injunctions granting applications may be appropriate in many cases.[748]

282. The *Infrastructure NPRM* noted that some parties have asked the Commission to revisit this issue. In response, the Commission sought comment on whether to adopt remedies beyond the judicial remedy described in the *2009 Declaratory Ruling*.[749]

283. Commenters are split on the issue, with industry supporting a deemed granted remedy[750] and municipalities opposing the idea.[751] Industry generally asserts that a deemed granted remedy is necessary to help ensure that States and localities act within the prescribed timelines,[752] and that the Commission has ample authority to adopt such a remedy.[753] State and local governments disagree,

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[744] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14009 para. 39.

[745] *Id.*

[746] *Id.*

[747] *Id.*

[748] *See id.*

[749] *See Infrastructure NPRM,* 28 FCC Rcd at 14296 para. 162.

[750] *See, e.g.,* AT&T Comments at 8, 30-31; CalWa Comments at 3-4; CalWa Reply Comments at 3-11; Crown Castle Comments at 15-18; CTIA Comments at 19; CTIA Reply Comments at 1-2, 8-9; ExteNet Comments at 4; Fibertech Comments at 34-35; Joint Venture Comments at 8; PCIA Comments at iii, 56-59; PCIA Reply Comments at iii, 26, 29-32; Sprint Comments at 12; Sprint Reply Comments at 7-8; UTC Comments at 17; UTC Reply Comments at 6-7.

[751] *See, e.g.,* Alexandria *et al.* Comments at 51-53; Alexandria *et al.* Reply Comments at 41-44; CA Local Governments Comments at 35-36; Coconut Creek Comments at 9-11; Cornelius Comments at 5-6; DC Comments at 22; Eugene Comments at v, 18-20; Fairfax Comments at 21-23; Fairfax Reply Comments at 9-10; Happy Valley Comments at 5-6; NATOA *et al.* Reply Comments at 7; Orange Reply Comments at 6; Oregon City Comments at 6; RCRC Comments at 4; San Antonio Comments at vi, 20-23; San Antonio Reply Comments at 19-20; Springfield Comments at 19-20; Steel in the Air Comments at 9-11; West Palm Beach Comments at 9-11.

[752] *See, e.g.,* AT&T Comments at 30-31; CalWa Reply Comments at 10-11; Crown Castle Comments at 18; CTIA Reply Comments at 8-9; PCIA Comments at 56-57; PCIA Reply Comments at 30-31.

[753] *See, e.g.,* Crown Castle Comments at 18-19; CTIA Comments at 19-20; CTIA Reply Comments at 9-10; PCIA Comments at 57-58; PCIA Reply Comments at 32.

arguing that the Commission lacks authority to adopt a deemed granted remedy,[754] that the deemed granted remedy raises Constitutional concerns,[755] that failures to comply with the shot clock timelines require fact-specific inquiries from courts,[756] and that there is no convincing evidence that a deemed granted remedy is warranted.[757]

284. *Discussion*. After reviewing the record, we decline to adopt an additional remedy for State or local government failures to act within the presumptively reasonable time limits. We also note that a party pursuing a "failure to act" claim may ask the reviewing court for an injunction granting the application. As the *2009 Declaratory Ruling* noted,[758] courts have considered, and in many cases granted, such relief.[759] Moreover, Congress recognized the importance of expeditious action with regard to the application process and infrastructure deployment, by directing the court to "hear and decide such action on an expedited basis."[760] While the propriety of prompt injunctive relief should be a matter for the courts to decide in light of "the specific facts of individual applications,"[761] such relief may be appropriate in many cases in light of the balance of equities, including the public interest reflected in the statute of promoting rapid but responsible wireless facility deployment.[762] Moreover, in the case of a failure to act within the reasonable timeframes set forth in our rules, and absent some compelling need for additional time to review the application, we believe that it would also be appropriate for the courts to treat such circumstances as significant factors weighing in favor of such relief.

[754] *See, e.g.,* Alexandria *et al.* Comments at 51-53; Alexandria *et al.* Reply Comments at 41-44; Eugene Comments at v, 18-20; Fairfax Comments at 21-22; Fairfax Reply Comments at 9-10; San Antonio Comments at vi, 20-23; San Antonio Reply Comments at 19.

[755] *See, e.g.,* Coconut Creek Comments at 10-11; Steel in the Air Comments at 10-11; West Palm Beach Comments at 10-11.

[756] *See, e.g.,* Cornelius Comments at 5-6; Happy Valley Comments at 5-6; Mendham Comments at 6; Oregon City Comments at 6.

[757] *See, e.g.,* Alexandria *et al.* Reply Comments at 42; CA Local Governments Comments at 36; Fairfax Reply Comments at 8-9; NATOA *et al.* Reply Comments at 7.

[758] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 14009 para. 39.

[759] *See Cellular Telephone Company v. The Town of Oyster Bay*, 166 F.3d 490, 497 (2d Cir.1999) (finding that Section 332(c)(7) does not specify a remedy for violations and that a majority of district courts have held that the appropriate remedy is injunctive relief in the form of an order to issue the relevant permits); *Bell Atlantic Mobile of Rochester L.P. v. Town of Irondequoit*, 848 F.Supp.2d 391, 403 (finding that further municipal review would serve no useful purpose and would cause additional delay in the applicant's ability to provide service, and that a mandatory injunction was therefore an appropriate remedy); *Preferred Sites, LLC v. Troup County*, 296 F.3d 1210, 1222 (11th Cir. 2002) (finding that an injunction ordering a municipality to issue a permit is an appropriate remedy for a violation of Section 332(c)(7)); *Nat'l Tower, LLC v. Plainville Zoning Board of Appeals*, 297 F.3d 14, 21–22 (1st Cir. 2002) (finding that an injunction directing a zoning board to authorize construction is the proper remedy for most violations of Section 332(c)(7)); *Omnipoint Communications, Inc. v. Planning & Zoning Com'n of Town of Wallingford*, 83 F.Supp.2d 306, 312 (D.Conn. 2000) (finding that remand to board would not be appropriate as that would create further delay, especially in light of the multiple hearings that had already spanned many months). *See also Omnipoint Communications MB Operations, LLC v. Town of Lincoln*, 107 F. Supp.2d 108, 120-121 (D. Mass. 2000); *Masterpage Communications, Inc. v. Town of Olive*, 418 F.Supp.2d 66, 81 (N.D.N.Y. 2005).

[760] 47 U.S.C. § 332(c)(7)(B)(v).

[761] *2009 Declaratory Ruling,* 24 FCC Rcd at 14009 para. 39.

[762] *See 2009 Declaratory Ruling*, 24 FCC Rcd at 13994 para. 1.

VII. PROCEDURAL MATTERS

A. Final Regulatory Flexibility Analysis

285. With respect to this Report and Order, a Final Regulatory Flexibility Analysis (FRFA) is contained in Appendix C. As required by Section 603 of the Regulatory Flexibility Act, the Commission has prepared a FRFA of the expected impact on small entities of the requirements adopted in this Report and Order. The Commission will send a copy of the Report and Order, including the FRFA, to the Chief Counsel for Advocacy of the Small Business Administration.

B. Paperwork Reduction Act

286. This Report and Order contains revised information collection requirements subject to the Paperwork Reduction Act of 1995 (PRA), Public Law 104-13. It will be submitted to the Office of Management and Budget (OMB) for review under Section 3507(d) of the PRA. OMB, the general public, and other Federal agencies are invited to comment on the modified information collection requirements contained in this proceeding. In addition, we note that pursuant to the Small Business Paperwork Relief Act of 2002, Public Law 107-198, *see* 44 U.S.C. 3506(c)(4), we previously sought specific comment on how the Commission might further reduce the information collection burden for small business concerns with fewer than 25 employees. In addition, we have described impacts that might affect small businesses, which includes most businesses with fewer than 25 employees, in the FRFA in Appendix C, *infra.*

C. Congressional Review Act

287. The Commission will send a copy of this Report and Order in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act (CRA), *see* 5 U.S.C. § 801(a)(1)(A).

VIII. ORDERING CLAUSES

288. ACCORDINGLY, IT IS ORDERED, pursuant to sections 1, 2, 4(i), 7, 201, 301, 303, 309, and 332 of the Communications Act of 1934, as amended, Sections 6003, 6213, and 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, 126 Stat. 156, 47 U.S.C. §§ 151, 152, 154(i), 157, 201, 301, 303, 309, 332, 1403, 1433, and 1455(a), Section 102(C) of the National Environmental Policy Act of 1969, as amended, 42 U.S.C. § 4332(C), and Section 106 of the National Historic Preservation Act of 1966, as amended, 16 U.S.C. § 470f, that this Report and Order IS HEREBY ADOPTED. If any section, subsection, paragraph, sentence, clause or phrase of this Report and Order or the rules adopted herein is declared invalid for any reason, the remaining portions of this Report and Order and the rules adopted herein SHALL BE severable from the invalid part and SHALL REMAIN in full force and effect.

289. IT IS FURTHER ORDERED that Parts 1 and 17 of the Commission's Rules ARE AMENDED as set forth in Appendix B, and that these changes SHALL BE EFFECTIVE 30 days after publication in the Federal Register, except for Section 1.40001, which SHALL BE EFFECTIVE 90 days after publication in the Federal Register; provided, however, that those rules and requirements that require approval by the Office of Management and Budget (OMB) under the Paperwork Reduction Act SHALL BECOME EFFECTIVE after the Commission publishes a notice in the Federal Register announcing such approval and the relevant effective date.

290. IT IS FURTHER ORDERED that the Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, SHALL SEND a copy of this Report and Order, including the Final Regulatory Flexibility Analysis, to the Chief Counsel for Advocacy of the Small Business Administration.

FEDERAL COMMUNICATIONS COMMISSION

Marlene H. Dortch
Secretary

APPENDIX A

List of Comments and Replies

Comments	Short Title
Aaron Baker / City of Mesquite, Nevada	Mesquite
ACUTA - The Association for Information Communications Technology Professionals	ACUTA
Adirondack Council; Adirondack Mountain Club; Citizen's Campaign for the Environment; The Mohawk Hudson Land Conservancy; New York Public Interest Research Group; Parks and Trails New York.	Adirondack Council
Adirondack Park Agency	APA
Alex Hempton / City of San Diego	San Diego
American Cultural Resources Association	ACRA
American Public Works Association	APWA
Arkansas Historic Preservation Program	AHPP
Association of American Railroads	AAR
AT&T Services Inc.	AT&T
Ben Mulé	Mulé
Borough of Bloomingdale	Bloomingdale
California Coastal Commission	CCC
California Wireless Association	CalWA
Carolinas Wireless Association	CarWA
CCUA, RCC, Tacoma, Seattle, King County, CML and AWC	CCUA *et al.*
City of Alexandria, Virginia; City of Arlington, Texas; City of Bellevue, Washington; City of Boston, Massachusetts; City of Davis, California; City of Los Angeles, California; Los Angeles County, California; City of McAllen, Texas; Montgomery County, Maryland; City of Ontario, California; Town of Palm Beach, Florida; City of Portland, Oregon; City of Redwood City, California; City of San Jose, California; Village of Scarsdale, New York; City of Tallahassee, Florida; Texas Coalition of Cities for Utility Issues; Georgia Municipal Association; International Municipal Lawyers Association; and American Planning Association	Alexandria *et al*.
City of Chicago	Chicago
City of Coconut Creek	Coconut Creek
City of Cornelius, OR	Cornelius
City of Des Moines, Iowa	Des Moines
City of Eugene, Oregon	Eugene
City of Happy Valley, OR	Happy Valley
City of Henderson	Henderson
City of Huntsville, Alabama	Huntsville
City of Long Beach	Long Beach
City of Mount Vernon and Mount Vernon Planning Board	Mount Vernon
City of Mountlake Terrace	Mountlake Terrace
City of New York / DoITT	NYC
City of Oregon City, OR	Oregon City
City of Portland	Portland
City of Salem	Salem
City of San Antonio, Texas	San Antonio
City of Springfield	Springfield
City of Tempe, Arizona	Tempe

City of West Palm Beach, FL	West Palm Beach
Commonwealth of Virginia Department of State Police	Virginia DOSP
Corey M. Conover/City of Minneapolis	Minneapolis
County of San Diego Planning & Development Services San Diego	San Diego PDS
Crown Castle	Crown Castle
CTIA - The Wireless Association	CTIA
David Ellertson	Ellertson
David Lindsay / Society for American Archeology	SAA
Dennis Michaud	Michaud
Diana Tang / City of Long Beach	Long Beach
District of Columbia	DC
Donald G. Everist	Everist
EMR Policy Institute	EPI
Erik Hein - NCSHPO	NCSHPO
ExteNet Systems, Inc.	ExteNet
Fairfax County	Fairfax
Fibertech Networks, LLC	Fibertech
Intergovernmental Advisory Committee	IAC
Jefferson County, Colorado	Jefferson
Jennifer Imo / City of High Point	High Point
John P. Gallina	Gallina
John Strand - Strand Consult	Strand
Joint Venture: Silicon Valley	Joint Venture
Joseph Saldibar / Colorado State Historic Preservation Office	COSHPO
Karen Jackson	Jackson
Kenneth Coppage / Maryland Department of Information Technology	MDIT
League of California Cities, California State Association of Counties, and SCAN NATOA	CA Local Governments
Maja K. Haium / League of Oregon Cities	LOC
Mark Epstein/Ohio Historic Preservation Office	OHPO
Mendham Borough Planning Board	Mendham
Michael R. Schaffert / City of Phoenix	Phoenix
Missouri Municipal League	MML
Naj Wikoff	Wikoff
NATOA, NACo, NLC, USCM	NATOA *et al*.
Nettie Richardson for Lee County	Lee
New Jersey State League of Municipalities	NJSLM
New York State Wireless Association	NYSWA
California Office of Historic Preservation Department of Parks and Recreation	CAOHP
Padre Dam Municipal Water District	Padre Dam
Passaic County Planning Board	Passaic
PCIA - The Wireless Infrastructure Association & The HetNet Forum	PCIA
Pennsylvania Wireless Association	PWA
Piedmont Environmental Council	PEC
Piroschka Glinsky / City of Tucson	Tucson
Planning Board of the Borough of Haddon Heights, NJ	Haddon Heights
QUALCOMM Incorporated	QUALCOMM
Rama Communications, Inc.	Rama
Riverside County Office of Education	RCOE
Rural County Representatives of California	RCRC
Sprint Corporation	Sprint
Steel in the Air, Inc.	Steel in the Air
Stephen A. McFadden, M.S.	McFadden

Steven Magee	Magee
Sweetwater Authority	Sweetwater
Telecommunications Industry Association	TIA
Towerstream Corporation	Towerstream
Town of Hillsborough, California	Hillsborough
Utilities Telecom Council	UTC
Valley Center Municipal Water District	VCMWD
Verizon and Verizon Wireless	Verizon
Wireless Internet Service Providers Association	WISPA

Reply Comments	**Short Title**
American Petroleum Institute	API
Association of American Railroads	AAR
AT&T Services Inc.	AT&T
Borough of Glen Gardner Planning and Zoning Board	Glen Gardner
Brian Wahler	Wahler
California Wireless Association	CalWA
CCUA, RCC, Tacoma, Seattle, King County, CML and AWC	CCUA *et al*.
Cherry Hill Township, NJ	Cherry Hill
City of Alexandria, Virginia; City of Arlington, Texas; City of Bellevue, Washington; City of Boston, Massachusetts; City of Davis, California; City of Los Angeles, California; Los Angeles County, California; City of McAllen, Texas; Montgomery County, Maryland; City of Ontario, California; Town of Palm Beach, Florida; City of Portland, Oregon; City of Redwood City, California; City of San Jose, California; Village of Scarsdale, New York; City of Tallahassee, Florida; Texas Coalition of Cities for Utility Issues; Georgia Municipal Association; International Municipal Lawyers Association; and American Planning Association	Alexandria *et al*.
City of Eugene, Oregon	Eugene
City of Mesa, Arizona	Mesa
City of Saint Paul	St. Paul
City of San Antonio, Texas	San Antonio
City of Tempe, Arizona	Tempe
Coalition of Texas Cities	CTC
Competitive Carriers Association	CCA
County of Orange, California	Orange
Cox Communications, Inc.	Cox
CTIA-The Wireless Association	CTIA
District of Columbia	DC
Eric Alan DelaPena	DelaPena
Fairfax County, Virginia	Fairfax
Fibertech Networks, LLC	Fibertech
League of California Cities, California State Association of Counties, and SCAN NATOA	CA Local Governments
Minnesota Association of Community Telecommunications Administrators	MACTA
National Association of Broadcasters	NAB
National Cable & Telecommunications Association	NCTA
NATOA, NLC, NACo, USCM	NATOA *et al.*
Nina Beety	Beety
Paul Benoit / City of Astoria	Astoria
PCIA - The Wireless Infrastructure Association & The HetNet Forum	PCIA

Sprint Corporation	Sprint
State Wireless Association Presidents	SWAP
T-Mobile USA, Inc.	T-Mobile
Towerstream Corporation	Towerstream
Township of Pennsauken	Pennsauken
Utilities Telecom Council	UTC
Wireless Internet Service Providers Association	WISPA

APPENDIX B

Final Rules

For the reasons discussed in the preamble, the Federal Communications Commission amends 47 C.F.R. Part 1 and Part 17 as follows:

PART 1 – PRACTICE AND PROCEDURE

1. The authority citation for Part 1 is amended to read as follows:

AUTHORITY: 15 U.S.C. 79, *et seq*.; 47 U.S.C. 151, 154(i), 154(j), 155, 157, 160, 201, 225, 227, 303, 309, 332, 1403, 1404, 1451, 1452, and 1455.

2. Section 1.1306 is amended by revising NOTE 1 and adding NOTE 4 to read as follows:

§ 1.1306 Actions which are categorically excluded from environmental processing.

* * * * *

NOTE 1: The provisions of § 1.1307(a) requiring the preparation of EAs do not encompass the mounting of antenna(s) and associated equipment (such as wiring, cabling, cabinets, or backup-power), on or in an existing building, or on an antenna tower or other man-made structure, unless § 1.1307(a)(4) is applicable. Such antennas and associated equipment are subject to § 1.1307(b) and require EAs if their construction would result in human exposure to radiofrequency radiation in excess of the applicable health and safety guidelines cited in § 1.1307(b). The provisions of §§ 1.1307 (a) and (b) do not encompass the installation of aerial wire or cable over existing aerial corridors of prior or permitted use or the underground installation of wire or cable along existing underground corridors of prior or permitted use, established by the applicant or others. The use of existing structures or corridors is an environmentally desirable alternative to the construction of new facilities and is encouraged. The provisions of §§ 1.1307(a) and (b) do not encompass the construction of new submarine cable systems.

* * * * *

NOTE 4: Unless § 1.1307(a)(4) is applicable, the provisions of § 1.1307(a) requiring the preparation of EAs do not encompass the construction of wireless facilities, including deployments on new or replacement poles, if:

(a) the facilities will be located in a right-of-way that is designated by a Federal, State, local, or Tribal government for communications towers, above-ground utility transmission or distribution lines, or any associated structures and equipment;

(b) the right-of-way is in active use for such designated purposes; and

(c) the facilities would not

(1) increase the height of the tower or non-tower structure by more than 10% or twenty feet, whichever is greater, over existing support structures that are located in the right-of-way within the vicinity of the proposed construction;

(2) involve the installation of more than four new equipment cabinets or more than one new equipment shelter;

(3) add an appurtenance to the body of the structure that would protrude from the edge of the structure more than twenty feet, or more than the width of the structure at the level of the appurtenance, whichever is greater (except that the deployment may exceed this size limit if necessary to shelter the antenna from inclement weather or to connect the antenna to the tower via cable); or

(4) involve excavation outside the current site, defined as the area that is within the boundaries of the leased or owned property surrounding the deployment or that is in proximity to the structure and within the boundaries of the utility easement on which the facility is to be deployed, whichever is more restrictive.

Such wireless facilities are subject to § 1.1307(b) and require EAs if their construction would result in human exposure to radiofrequency radiation in excess of the applicable health and safety guidelines cited in § 1.1307(b).

* * * * *

3. Section 1.1307 is amended by adding a NOTE to paragraph (a)(4) to read as follows:

§ 1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.

* * * * *

NOTE: The requirements in paragraph (a)(4) of this section do not apply to:

(a) The mounting of antennas (including associated equipment such as wiring, cabling, cabinets, or backup-power) on existing utility structures (including utility poles and electric transmission towers in active use by a "utility" as defined in Section 224 of the Communications Act, 47 U.S.C. 224, but not including light poles, lamp posts, and other structures whose primary purpose is to provide public lighting) where the deployment meets the following conditions:

(1) All antennas that are part of the deployment fit within enclosures (or if the antennas are exposed, within imaginary enclosures) that are individually no more than three cubic feet in volume, and all antennas on the structure, including any pre-existing antennas on the structure, fit within enclosures (or if the antennas are exposed, within imaginary enclosures) that total no more than six cubic feet in volume;

(2) All other wireless equipment associated with the structure, including pre-existing enclosures and including equipment on the ground associated with antennas on the structure, are cumulatively no more than seventeen cubic feet in volume, exclusive of

(i) Vertical cable runs for the connection of power and other services;

(ii) Ancillary equipment installed by other entities that is outside of the applicant's ownership or control, and

(iii) Comparable equipment from pre-existing wireless deployments on the structure;

(3) The deployment will involve no new ground disturbance; and

(4) The deployment would otherwise require the preparation of an EA under paragraph (a)(4) of this section solely because of the age of the structure; or

(b) The mounting of antennas (including associated equipment such as wiring, cabling, cabinets, or backup-power) on buildings or other non-tower structures where the deployment meets the following conditions:

(1) There is an existing antenna on the building or structure;

(2) One of the following criteria is met:

(i) *Non-Visible Antennas.* The new antenna is not visible from any adjacent streets or surrounding public spaces and is added in the same vicinity as a pre-existing antenna;

(ii) *Visible Replacement Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that (A) it is a replacement for a pre-existing antenna, (B) the new antenna will be located in the same vicinity as the pre-existing antenna, (C) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (D) the new antenna is not more than 3 feet larger in height or width (including all protuberances) than the pre-existing antenna, and (E) no new equipment cabinets are visible from the adjacent streets or surrounding public spaces; or

(iii) *Other Visible Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that (A) it is located in the same vicinity as a pre-existing antenna, (B) the new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna, (C) the pre-existing antenna was not deployed pursuant to the exclusion in this subsection (§ 1.1307(a)(4), Note (b)(2)(iii)), (D) the new antenna is not more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and (E) no new equipment cabinets are visible from the adjacent streets or surrounding public spaces;

(3) The new antenna complies with all zoning conditions and historic preservation conditions applicable to existing antennas in the same vicinity that directly mitigate or prevent effects, such as camouflage or concealment requirements;

(4) The deployment of the new antenna involves no new ground disturbance; and

(5) The deployment would otherwise require the preparation of an EA under paragraph (a)(4) of this section solely because of the age of the structure.

For purposes of this Note, a non-visible new antenna is in the "same vicinity" as a pre-existing antenna if it will be collocated on the same rooftop, façade or other surface. For purposes of this Note, a visible new

antenna is in the "same vicinity" as a pre-existing antenna if it is on the same rooftop, façade, or other surface and the centerpoint of the new antenna is within ten feet of the centerpoint of the pre-existing antenna. For purposes of this Note, a deployment causes no new ground disturbance when the depth and width of previous disturbance exceeds the proposed construction depth and width by at least two feet.

* * * * *

4. Part 1 is amended by adding Subpart CC as follows:

Subpart CC—State and Local Review of Applications for Wireless Service Facility Modification

§ 1.40001 Wireless Facility Modifications

(a) *Purpose*. These rules implement § 6409 of the Spectrum Act (codified at 47 U.S.C. 1455), which requires a State or local government to approve any eligible facilities request for a modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station.

(b) *Definitions*. Terms used in this section have the following meanings.

(1) *Base Station.* A structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower as defined in this subpart or any equipment associated with a tower.

(i) The term includes, but is not limited to, equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(ii) The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including Distributed Antenna Systems and small-cell networks).

(iii) The term includes any structure other than a tower that, at the time the relevant application is filed with the State or local government under this section, supports or houses equipment described in paragraphs (b)(1)(i)-(ii) of this section that has been

reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.

(iv) The term does not include any structure that, at the time the relevant application is filed with the State or local government under this section, does not support or house equipment described in paragraphs (b)(1)(i)-(ii) of this section.

(2) *Collocation.* The mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

(3) *Eligible Facilities Request*. Any request for modification of an existing tower or base station that does not substantially change the physical dimensions of such tower or base station, involving:

(i) collocation of new transmission equipment;

(ii) removal of transmission equipment; or

(iii) replacement of transmission equipment.

(4) *Eligible Support Structure*. Any tower or base station as defined in this section, provided that it is existing at the time the relevant application is filed with the State or local government under this section.

(5) *Existing.* A constructed tower or base station is existing for purposes of this section if it has been reviewed and approved under the applicable zoning or siting process, or under another State or local regulatory review process, provided that a tower that has not been reviewed and approved because it was not in a zoned area when it was built, but was lawfully constructed, is existing for purposes of this definition.

(6) *Site.* For towers other than towers in the public rights-of-way, the current boundaries of the leased or owned property surrounding the tower and any access or utility easements currently related to the site, and, for other eligible support structures, further restricted to that area in proximity to the structure and to other transmission equipment already deployed on the ground.

(7) *Substantial Change*. A modification substantially changes the physical dimensions of an eligible support structure if it meets any of the following criteria:

(i) for towers other than towers in the public rights-of-way, it increases the height of the tower by more than 10% or by the height of one additional antenna array with separation from the nearest existing antenna not to exceed twenty feet, whichever is greater; for other eligible support structures, it increases the height of the structure by more than 10% or more than ten feet, whichever is greater;

(A) Changes in height should be measured from the original support structure in cases where deployments are or will be separated horizontally, such as on buildings' rooftops; in other circumstances, changes in height should be measured from the dimensions of the tower or base station, inclusive of originally approved appurtenances and any modifications that were approved prior to the passage of the Spectrum Act.

(ii) for towers other than towers in the public rights-of-way, it involves adding an appurtenance to the body of the tower that would protrude from the edge of the tower more than twenty feet, or more than the width of the tower structure at the level of the appurtenance, whichever is greater; for other eligible support structures, it involves adding an appurtenance to the body of the structure that would protrude from the edge of the structure by more than six feet;

(iii) for any eligible support structure, it involves installation of more than the standard number of new equipment cabinets for the technology involved, but not to exceed four cabinets; or, for towers in the public rights-of-way and base stations, it involves installation of any new equipment cabinets on the ground if there are no pre-existing ground cabinets associated with the structure, or else involves installation of ground cabinets that are more than 10% larger in height or overall volume than any other ground cabinets associated with the structure;

(iv) it entails any excavation or deployment outside the current site;

(v) it would defeat the concealment elements of the eligible support structure; or

(vi) it does not comply with conditions associated with the siting approval of the construction or modification of the eligible support structure or base station equipment, provided however that this limitation does not apply to any modification that is non-compliant only in a manner that would not exceed the thresholds identified in § 1.40001(b)(7)(i)-(iv).

(8) *Transmission Equipment*. Equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

(9) *Tower*. Any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

(c) *Review of Applications*. A State or local government may not deny and shall approve any eligible facilities request for modification of an eligible support structure that does not substantially change the physical dimensions of such structure.

(1) *Documentation Requirement for Review.* When an applicant asserts in writing that a request for modification is covered by this section, a State or local government may require the applicant to provide documentation or information only to the extent reasonably related to determining whether the request meets the requirements of this section. A State or local government may not require an applicant to submit any other documentation, including but not limited to documentation intended to illustrate the need for such wireless facilities or to justify the business decision to modify such wireless facilities.

(2) *Timeframe for Review.* Within 60 days of the date on which an applicant submits a request seeking approval under this section, the State or local government shall approve the application unless it determines that the application is not covered by this section.

(3) *Tolling of the Timeframe for Review.* The 60-day period begins to run when the application is filed, and may be tolled only by mutual agreement or in cases where the reviewing State or local government determines that the application is incomplete. The timeframe for review is not tolled by a moratorium on the review of applications.

(i) To toll the timeframe for incompleteness, the reviewing State or local government must provide written notice to the applicant within 30 days of receipt of the application, clearly and specifically delineating all missing documents or information. Such delineated information is limited to documents or information meeting the standard under paragraph (c)(1) of this section.

(ii) The timeframe for review begins running again when the applicant makes a supplemental submission in response to the State or local government's notice of incompleteness.

(iii) Following a supplemental submission, the State or local government will have 10 days to notify the applicant that the supplemental submission did not provide the information identified in the original notice delineating missing information. The timeframe is tolled in the case of second or subsequent notices pursuant to the procedures identified in this paragraph (c)(3). Second or subsequent notices of incompleteness may not specify missing documents or information that were not delineated in the original notice of incompleteness.

(4) *Failure to Act.* In the event the reviewing State or local government fails to approve or deny a request seeking approval under this section within the timeframe for review (accounting for any tolling), the request shall be deemed granted. The deemed grant does not become effective until the applicant notifies the applicable reviewing authority in writing after the review period has expired (accounting for any tolling) that the application has been deemed granted.

(5) *Remedies*. Applicants and reviewing authorities may bring claims related to Section 6409(a) to any court of competent jurisdiction.

PART 17 – CONSTRUCTION, MARKING, AND LIGHTING OF ANTENNA STRUCTURES

5. The authority citation for Part 17 continues to read as follows:

AUTHORITY: Secs. 4, 303, 48 Stat. 1066, 1082, as amended; 47 U.S.C. 154, 303. Interpret or apply secs. 301, 309, 48 Stat. 1081, 1085 as amended; 47 U.S.C. 301, 309.

6. Section 17.4 is amended by revising paragraphs (c)(1)(v) and (c)(1)(vi), and adding paragraph (c)(1)(vii) to read as follows:

§ 17.4 Antenna structure registration.

* * * * *

(c) * * *

(1) * * *

* * * * *

(v) For any other change that does not alter the physical structure, lighting, or geographic location of an existing structure;

(vi) For construction, modification, or replacement of an antenna structure on Federal land where another Federal agency has assumed responsibility for evaluating the potentially significant environmental effect of the proposed antenna structure on the quality of the human environment and for invoking any required environmental impact statement process, or for any other structure where another Federal agency has assumed such responsibilities pursuant to a written agreement with the Commission (*see* §1.1311(e) of this chapter); or

(vii) For the construction or deployment of an antenna structure that will (A) be in place for no more than 60 days, (B) requires notice of construction to the FAA, (C) does not require marking or lighting under FAA regulations, (D) will be less than 200 feet in height above ground level, and (E) will either involve no excavation or involve

excavation only where the depth of previous disturbance exceeds the proposed construction depth (excluding footings and other anchoring mechanisms) by at least two feet. An applicant that relies on this exception must wait 30 days after removal of the antenna structure before relying on this exception to deploy another antenna structure covering substantially the same service area.

APPENDIX C

Final Regulatory Flexibility Analysis

1. As required by the Regulatory Flexibility Act of 1980, as amended (RFA),[1] the Commission incorporated an Initial Regulatory Flexibility Analysis (IRFA) of the possible significant economic impact on a substantial number of small entities by the clarifications and rules proposed in the Notice of Proposed Rulemaking in this proceeding *(Infrastructure NPRM*).[2] The Commission sought written public comment on the proposals in the *Infrastructure NPRM*, including comment on the IRFA. None of the comments filed in the proceeding addressed the IRFA. Because we amend our rules in this Report and Order, we have included this Final Regulatory Flexibility Analysis (FRFA) which conforms to the RFA.[3] To the extent that any statement contained in this FRFA is perceived as creating ambiguity with respect to our rules, or statements made in preceding sections of this Report and Order, the rules and statements set forth in those preceding sections shall be controlling.

A. Need for, and Objectives of, the Report and Order

2. In this Report and Order, we take important steps to promote the deployment of wireless infrastructure, recognizing that it is the physical foundation that supports all wireless communications. The Report and Order adopts and clarifies rules in four specific areas in an effort to reduce regulatory obstacles and bring efficiency to wireless facility siting and construction. We do this by eliminating unnecessary reviews, thus reducing the burden on State and local jurisdictions and also on industry, including small businesses. In particular, we update and tailor the manner in which we evaluate the impact of proposed deployments on the environment and historic properties. We also adopt rules to clarify and implement statutory requirements related to State and local government review of infrastructure siting applications, and we adopt an exemption from our environmental public notification process for towers that are in place for only short periods of time. Taken together, these steps will further facilitate the delivery of more wireless capacity in more locations to consumers throughout the United States. Our actions will expedite the deployment of equipment that does not harm the environment or historic properties, as well as recognize the limits on Federal, State, Tribal, and municipal resources available to review those cases that may adversely affect the environment or historic properties.

3. First, we adopt measures to refine our environmental and historic preservation review processes under NEPA and NHPA to account for new wireless technologies, including physically small facilities like those used in Distributed Antenna System (DAS) networks and small-cell systems that are a fraction of the size of macrocell installations. Among these, we expand an existing categorical exclusion from NEPA review so that it applies not only to collocations on buildings and towers, but also to collocations on other structures like utility poles. We also adopt a new categorical exclusion from NEPA review for some kinds of deployments in utilities or communications rights-of-way. With respect to NHPA, we create new exclusions from Section 106 review to address certain collocations that are currently subject to review only because of the age of the supporting structure. We take these steps to assure that, as we continue to meet our responsibilities under NEPA and NHPA, we also fulfill our

[1] *See* 5 U.S.C. § 603. The RFA, *see* 5 U.S.C. §§ 601-612, has been amended by the Small Business Regulatory Enforcement Fairness Act of 1996 (SBREFA), Pub. L. No. 104-121, Title II, 110 Stat. 857 (1996).

[2] *See* Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, Amendment of Parts 1 and 17 of the Commission's Rules Regarding Public Notice Procedures for Processing Antenna Structure Registration Applications for Certain Temporary Towers, 2012 Biennial Review of Telecommunications Regulations, WT Docket Nos. 13-238, 13-32, WC Docket No. 11-59, *Notice of Proposed Rulemaking*, 28 FCC Rcd 14238, 14240, 14304-17 App. B (2013) (*Infrastructure NPRM*)

[3] *See* 5 U.S.C. § 604.

obligation under the Communications Act to ensure that rapid, efficient, and affordable radio communications services are available to all Americans.[4]

4. Second, regarding temporary towers, we adopt a narrow exemption from the Commission's requirement that owners of proposed towers requiring antenna structure registration (ASR) provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption from notification requirements applies only to proposed temporary towers meeting defined criteria, including limits on the size and duration of the installation, that greatly reduce the likelihood of any significant environmental effects. Allowing licensees to deploy temporary towers meeting these criteria without first having to complete the Commission's environmental notification process will enable them to more effectively respond to emergencies, natural disasters, and other planned and unplanned short-term spikes in demand without undermining the purposes of the notification process. This exemption will "remove an administrative obstacle to the availability of broadband and other wireless services during major events and unanticipated periods of localized high demand" where expanded or substitute service is needed quickly.[5]

5. Third, we adopt rules to implement and enforce Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012 (Spectrum Act).[6] Section 6409(a) provides, in part, that "a State or local government may not deny, and shall approve, any eligible facilities request for a modification of an existing wireless tower or base station that does not substantially change the physical dimensions of such tower or base station."[7] By requiring timely approval of eligible requests, Congress intended to advance wireless broadband service for both public safety and commercial users.[8] Section 6409(a) includes a number of undefined terms, however, that bear directly on how the provision applies to infrastructure deployments, and the record confirms that there are substantial disputes on a wide range of interpretive issues under the provision. We accordingly adopt rules that clarify many of these terms and enforce their requirements, thus advancing Congress's goal of facilitating rapid deployment. These rules will serve the public interest by providing guidance to all stakeholders on their rights and responsibilities under the provision, reducing delays in the review process for wireless infrastructure modifications, and facilitating the rapid deployment of wireless infrastructure and promoting advanced wireless broadband services.

6. Finally, we clarify issues related to Section 332(c)(7) of the Communications Act and the Commission's *2009 Declaratory Ruling*.[9] Among other things, we explain when a siting application is

[4] 47 U.S.C. § 151.

[5] *See* Amendment of Parts 1 and 17 of the Commission's Rules Regarding Public Notice Procedures for Processing Antenna Structure Registration Applications for Certain Temporary Towers; 2012 Biennial Review of Telecommunications Regulations, RM-11688, WT Docket No. 13-32, *Order*, 28 FCC Rcd 7758 para. 1 (2013) (*Waiver Order*).

[6] *See* Middle Class Tax Relief and Job Creation Act of 2012, Pub. L. No. 112-96, § 6409(a), 126 Stat. 156 (2012). We refer hereinafter to the Middle Class Tax Relief and Job Creation Act of 2012 as the "Spectrum Act." We note that Section 6409(a) has since been codified in the Communications Act as 47 U.S.C. § 1455(a). However, for consistency with the *Infrastructure NPRM*, we will continue to refer to it as Section 6409(a).

[7] Spectrum Act § 6409(a)(1).

[8] *See* H.R. Rep. 112-399, at 136 (2012) (Conference Report). We note that much of the Conference Report describes provisions in the House or Senate bills, and is not necessarily representative of Congressional intent in passing the Spectrum Act. The portions of the Conference Report that are cited in this Report and Order pertain expressly to the Act as passed.

[9] 47 U.S.C. § 332(c)(7); Petition for Declaratory Ruling to Clarify Provisions of Section 332(c)(7)(b) to Ensure Timely Siting Review & to Preempt Under Section 253 State & Local Ordinances That Classify All Wireless Siting Proposals As Requiring A Variance, WT Docket No. 08-165, *Declaratory Ruling*, 24 FCC Rcd 13994 (2009) (*2009 Declaratory Ruling*). Because our clarifications of the *2009 Declaratory Ruling* are themselves merely interpretive rulings, we note that the RFA does not apply to them. *See Central Texas Telephone Co-op., Inc. v. F.C.C.*, 402 F.3d 205, 211 (2005). Nevertheless, we address them in this analysis.

complete so as to trigger the presumptively reasonable timeframes for local and State review of siting applications under the *2009 Declaratory Ruling*, and how the shot clock timeframes apply to local moratoria and DAS or small-cell facilities. These clarifications will eliminate many disputes under Section 332(c)(7), provide certainty about timing related to siting applications (including the time at which applicants may seek judicial relief), and preserve State and municipal governments' critical role in the siting application process.

7. Taken together, the actions we take in this Report and Order will enable more rapid deployment of vital wireless facilities, delivering broadband and wireless innovations to consumers across the country. At the same time, they will safeguard the environment, preserve historic properties, protect the interest of Tribal Nations in their ancestral lands and cultural legacies, and address municipalities' concerns over impacts to aesthetics and other local values.

B. Summary of Significant Issues Raised by Public Comments in Response to the IRFA

8. No commenters directly responded to the IRFA. Some commenters raised issues of particular relevance to small entities, and we address those issues in this FRFA.

C. Response to Comments by the Chief Counsel for Advocacy of the Small Business Administration

9. Pursuant to the Small Business Jobs Act of 2010, the Commission is required to respond to any comments filed by the Chief Counsel for Advocacy of the Small Business Administration (SBA), and to provide a detailed statement of any change made to the proposed rules as a result of those comments. The Chief Counsel did not file any comments in response to the proposed rules in this proceeding.

D. Description and Estimate of the Number of Small Entities to Which Rules Will Apply

10. The RFA directs the Commission to provide a description of and, where feasible, an estimate of the number of small entities that will be affected by the rules, if adopted.[10] The RFA generally defines the term "small entity" as having the same meaning as the terms "small business," "small organization," and "small government jurisdiction."[11] In addition, the term "small business" has the same meaning as the term "small business concern" under the Small Business Act.[12] A small business concern is one which: (1) is independently owned and operated; (2) is not dominant in its field of operation; and (3) satisfies any additional criteria established by the SBA.[13]

11. The Report and Order adopts rule changes regarding local and Federal regulation of the siting and deployment of communications towers and other wireless facilities. Due to the number and diversity of owners of such infrastructure and other responsible parties, including small entities that are Commission licensees as well as non-licensees, we classify and quantify them in the remainder of this section.

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[10] 5 U.S.C. § 603(b)(3).

[11] *Id*. § 601(6).

[12] *Id*. § 601(3) (incorporating by reference the definition of "small business concern" in 15 U.S.C. § 632). Pursuant to 5 U.S.C. § 601(3), the statutory definition of a small business applies "unless an agency, after consultation with the Office of Advocacy of the Small Business Administration and after opportunity for public comment, establishes one or more definitions of such term which are appropriate to the activities of the agency and publishes such definition(s) in the Federal Register." 5 U.S.C. § 601(3).

[13] 15 U.S.C. § 632. Application of the statutory criteria of dominance in its field of operation and independence are sometimes difficult to apply in the context of broadcast television. Accordingly, the Commission's statistical account of television stations may be over-inclusive.

12. *Small Businesses, Small Organizations, and Small Governmental Jurisdictions.* Our action may, over time, affect a variety of small entities. To assist in assessing the Report and Order's effect on these entities, we describe three comprehensive categories—small businesses, small organizations, and small governmental jurisdictions— that encompass entities that could be directly affected by the rules we adopt.[14] As of 2010, there were 27.9 million small businesses in the United States, according to the SBA.[15] A "small organization" is generally "any not-for-profit enterprise which is independently owned and operated and is not dominant in its field."[16] Nationwide, as of 2007, there were approximately 1,621,315 small organizations.[17] Finally, the term "small governmental jurisdiction" is defined generally as "governments of cities, counties, towns, townships, villages, school districts, or special districts, with a population of less than fifty thousand."[18] Census Bureau data for 2007 indicate that there were 89,527 governmental jurisdictions in the United States.[19] We estimate that, of this total, as many as 88,761 entities may qualify as "small governmental jurisdictions."[20] Thus, we estimate that most governmental jurisdictions are small.

13. *Wireless Telecommunications Carriers (except satellite).* The Census Bureau defines this category as follows: "This industry comprises establishments engaged in operating and maintaining switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services."[21] The appropriate size standard under SBA rules is for the category Wireless Telecommunications Carriers (except Satellite). In this category, a business is small if it has 1,500 or fewer employees.[22] For this category, census data for 2007 show that there were 1,383 firms that operated for the entire year.[23] Of this total, 1,368 firms had employment of 999 or fewer employees and 15 had employment of 1000 employees or more.[24]

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[14] *See* 5 U.S.C. § 601(3)–(6).

[15] *See* Small Business Administration, Office of Advocacy, "Frequently Asked Questions," *available at* http://www.sba.gov/sites/default/files/FAQ_Sept_2012.pdf.

[16] 5 U.S.C. § 601(4).

[17] INDEPENDENT SECTOR, THE NEW NONPROFIT ALMANAC & DESK REFERENCE (2010).

[18] 5 U.S.C. § 601(5).

[19] U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Table 426 (2007).

[20] The 2007 U.S. Census data for small governmental organizations are not presented based on the size of the population in each such organization. There were 89,476 local governmental organizations in 2007. If we assume that county, municipal, township, and school district organizations are more likely than larger governmental organizations to have populations of 50,000 or less, the total of these organizations is 52,095. As a basis of estimating how many of these 89,476 local government organizations were small, in 2011, we note that there were a total of 715 cities and towns (incorporated places and minor civil divisions) with populations over 50,000. CITY AND TOWN TOTALS: VINTAGE 2011 – U.S. Census Bureau, *available at* http://www.census.gov/popest/data/cities/totals/2011/index.html. If we subtract the 715 cities and towns that meet or exceed the 50,000 population threshold, we conclude that approximately 88,761 are small. U.S. CENSUS BUREAU, STATISTICAL ABSTRACT OF THE UNITED STATES: 2011, Tables 426, 427 (data cited therein are from 2007).

[21] U.S. Census Bureau, *2012 NAICS Definitions: 517210 Wireless Telecommunications Carriers (except Satellite)*, http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2012.

[22] 13 C.F.R. § 121.201 (NAICS code 517210).

[23] U.S. Census Bureau, Table No. EC0751SSSZ5, *Information: Subject Series - Establishment and Firm Size: Employment Size of Firms for the United States: 2007* (NAICS code 517210), http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ5.

[24] *Id*. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with 1000 employees or more.

According to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, PCS, and Specialized Mobile Radio (SMR) telephony services.[25] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[26] Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

14. *Personal Radio Services.* Personal radio services provide short-range, low-power radio for personal communications, radio signaling, and business communications not provided for in other services. Personal radio services include services operating in spectrum licensed under Part 95 of our rules.[27] These services include Citizen Band Radio Service, General Mobile Radio Service, Radio Control Radio Service, Family Radio Service, Wireless Medical Telemetry Service, Medical Implant Communications Service, Low Power Radio Service, and Multi-Use Radio Service.[28] There are a variety of methods used to license the spectrum in these rule parts, from licensing by rule, to conditioning operation on successful completion of a required test, to site-based licensing, to geographic area licensing. Under the RFA, the Commission is required to make a determination of which small entities are directly affected by the rules we adopt. Since all such entities are wireless, we apply the definition of Wireless Telecommunications Carriers (except Satellite), pursuant to which a small entity is defined as employing 1,500 or fewer persons.[29] Many of the licensees in these services are individuals, and thus are not small entities. In addition, due to the mostly unlicensed and shared nature of the spectrum utilized in many of these services, the Commission lacks direct information upon which to base an estimation of the number of small entities under an SBA definition that might be directly affected by the Report and Order.

15. *Public Safety Radio Services.* Public safety radio services include police, fire, local government, forestry conservation, highway maintenance, and emergency medical services. There are a total of approximately 127,540 licensees within these services. Governmental entities[30] as well as private businesses comprise the licensees for these services. All governmental entities in jurisdictions with populations of less than 50,000 fall within the definition of a small entity.[31]

16. *Private Land Mobile Radio.* Private Land Mobile Radio (PLMR) systems serve an essential role in a range of industrial, business, land transportation, and public safety activities. These radios are used by companies of all sizes operating in all U.S. business categories that operate and maintain switching and transmission facilities to provide communications via the airwaves. Establishments in this industry have spectrum licenses and provide services using that spectrum, such as cellular phone services, paging services, wireless Internet access, and wireless video services.[32] The SBA has not developed a definition of small entity specifically applicable to PLMR licensees due to the vast array of PLMR users. However, the Commission believes that the most appropriate classification for

[25] *See* Federal Communications Commission, *Trends in Telephone Service* (Sep. 2010) at Table 5.3, *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-301823A1.pdf (*Trends in Telephone Service*).

[26] *See id*.

[27] 47 C.F.R. Part 90.

[28] The Citizens Band Radio Service, General Mobile Radio Service, Radio Control Radio Service, Family Radio Service, Wireless Medical Telemetry Service, Medical Implant Communications Service, Low Power Radio Service, and Multi-Use Radio Service are governed by subpart D, subpart A, subpart C, subpart B, subpart H, subpart I, subpart G, and subpart J, respectively, of Part 95 of the Commission's rules. *See*, *generally*, 47 C.F.R. Part 95.

[29] 13 C.F.R. § 121.201, NAICS Code 517210.

[30] 47 C.F.R. § 1.1162.

[31] 5 U.S.C. § 601(5)-(6).

[32] http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517210&search=2007%20NAICS%20Search.

PLMR is Wireless Communications Carriers (except satellite). The size standard for that category is that a business is small if it has 1,500 or fewer employees.[33] For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year.[34] Of this total, 10,791 establishments had employment of 999 or fewer employees and 372 had employment of 1000 employees or more.[35] Thus under this category and the associated small business size standard, the Commission estimates that the majority of PLMR licensees are small entities that may be affected by our action.[36]

17. Similarly, according to Commission data, 413 carriers reported that they were engaged in the provision of wireless telephony, including cellular service, PCS, and SMR telephony services.[37] Of these, an estimated 261 have 1,500 or fewer employees and 152 have more than 1,500 employees.[38] Consequently, the Commission estimates that approximately half or more of these firms can be considered small. Thus, using available data, we estimate that the majority of wireless firms can be considered small.

18. The Commission's 1994 Annual Report on PLMRs[39] indicates that at the end of fiscal year 1994 there were 1,087,267 licensees operating 12,481,989 transmitters in the PLMR bands below 512 MHz. Because any entity engaged in a commercial activity is eligible to hold a PLMR license, the rules we adopt could potentially impact every small business in the United States.

19. *Multiple Address Systems*. Entities using Multiple Address Systems (MAS) spectrum, in general, fall into two categories: (1) those using the spectrum for profit-based uses, and (2) those using the spectrum for private internal uses. With respect to the first category, the Commission defines "small entity" for MAS licensees as an entity that has average annual gross revenues of less than $15 million over the three previous calendar years.[40] "Very small business" is defined as an entity that, together with its affiliates, has average annual gross revenues of not more than $3 million over the preceding three calendar years.[41] The SBA has approved these definitions.[42] The majority of MAS operators are licensed in bands where the Commission has implemented a geographic area licensing approach that requires the use of competitive bidding procedures to resolve mutually exclusive applications. The Commission's licensing database indicates that, as of April 16, 2010, there were a total of 11,653 site-based MAS station authorizations. Of these, 58 authorizations were associated with common carrier service. In addition, the Commission's licensing database indicates that, as of April 16, 2010, there were a total of 3,330 Economic Area market area MAS authorizations. The Commission's licensing database indicates that, as

[33] 13 C.F.R. § 121.201, NAICS Code 517210.

[34] U.S. Census Bureau, Subject Series: Information, Table 5, "Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210" (issued Nov. 2010).

[35] *See* http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ2&prodType=table. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "1000 employees or more."

[36] *See id.*

[37] *See Trends in Telephone Service* at Table 5.3.

[38] *See id*.

[39] Federal Communications Commission, 60th Annual Report, Fiscal Year 1994.

[40] *See* Amendment of the Commission's Rules Regarding Multiple Address Systems, WT Docket No. 97-81, *Report and Order*, 15 FCC Rcd 11956, 12008 para. 123 (2000).

[41] *Id*.

[42] *See* Letter from Aida Alvarez, Administrator, Small Business Administration, to Thomas Sugrue, Chief, Wireless Telecommunications Bureau, FCC (June 4, 1999).

of April 16, 2010, of the 11,653 total MAS station authorizations, 10,773 authorizations were for private radio service. In addition, an auction for 5,104 MAS licenses in 176 EAs was conducted in 2001.[43] Seven winning bidders claimed status as small or very small businesses and won 611 licenses. In 2005, the Commission completed an auction (Auction 59) of 4,226 MAS licenses in the Fixed Microwave Services from the 928/959 and 932/941 MHz bands. Twenty-six winning bidders won a total of 2,323 licenses. Of the 26 winning bidders in this auction, five claimed small business status and won 1,891 licenses.

20. With respect to the second category, which consists of entities that use, or seek to use, MAS spectrum to accommodate their own internal communications needs, MAS serves an essential role in a range of industrial, safety, business, and land transportation activities. MAS radios are used by companies of all sizes, operating in virtually all U.S. business categories, and by all types of public safety entities. For the majority of private internal users, the definition developed by the SBA would be more appropriate than the Commission's definition. The applicable definition of small entity in this instance appears to be the "Wireless Telecommunications Carriers (except satellite)" definition under the SBA rules.[44] Under that SBA category, a business is small if it has 1,500 or fewer employees.[45] For this category, census data for 2007 show that there were 11,163 establishments that operated for the entire year.[46] Of this total, 10,791 establishments had employment of 99 or fewer employees and 372 had employment of 100 employees or more.[47] Thus under this category and the associated small business size standard, the Commission estimates that the majority of wireless telecommunications carriers (except satellite) are small entities that may be affected by our action.[48]

21. *Broadband Radio Service and Educational Broadband Service.* Broadband Radio Service systems—previously referred to as Multipoint Distribution Service (MDS) and Multichannel Multipoint Distribution Service systems, and "wireless cable"—transmit video programming to subscribers and provide two-way high speed data operations using the microwave frequencies of the Broadband Radio Service (BRS) and Educational Broadband Service (EBS) (previously referred to as the Instructional Television Fixed Service).[49] In connection with the 1996 BRS auction, the Commission established a small business size standard as an entity that had annual average annual gross revenues of no more than $40 million over the previous three calendar years.[50] The BRS auctions resulted in 67 successful bidders obtaining licensing opportunities for 493 Basic Trading Areas (BTAs). Of the 67 auction winners, 61 met the definition of a small business. BRS also includes licensees of stations authorized prior to the auction. We previously estimated that of the 61 small business BRS auction winners, based on our review of licensing records, 48 remain small business licensees. In addition to the

[43] *See* "Multiple Address Systems Spectrum Auction Closes," *Public Notice*, 16 FCC Rcd 21011 (2001).

[44] 13 C.F.R. § 121.201, NAICS Code 517210.

[45] *Id*.

[46] U.S. Census Bureau, Subject Series: Information, Table 5, "Establishment and Firm Size: Employment Size of Firms for the United States: 2007 NAICS Code 517210" (issued Nov. 2010).

[47] *See* http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ2&prodType=table. Available census data do not provide a more precise estimate of the number of firms that have employment of 1,500 or fewer employees; the largest category provided is for firms with "100 employees or more."

[48] *See id.*

[49] Amendment of Parts 21 and 74 of the Commission's Rules with Regard to Filing Procedures in the Multipoint Distribution Service and in the Instructional Television Fixed Service and Implementation of Section 309(j) of the Communications Act—Competitive Bidding, MM Docket No. 94-131, PP Docket No. 93-253, *Report and Order*, 10 FCC Rcd 9589, 9593 para. 7 (1995).

[50] 47 C.F.R. § 21.961(b)(1) (1996).

48 small businesses that hold BTA authorizations, there are approximately 86 incumbent BRS licensees that are considered small entities; 18 incumbent BRS licensees do not meet the small business size standard.[51] After adding the number of small business auction licensees to the number of incumbent licensees not already counted, there are currently approximately 133 BRS licensees that are defined as small businesses under either the SBA's rules or the Commission's rules. In 2009, the Commission conducted Auction 86, which involved the sale of 78 licenses in the BRS areas.[52] The Commission established three small business size standards that were used in Auction 86: (i) an entity with attributed average annual gross revenues that exceeded $15 million and did not exceed $40 million for the preceding three years was considered a small business; (ii) an entity with attributed average annual gross revenues that exceeded $3 million and did not exceed $15 million for the preceding three years was considered a very small business; and (iii) an entity with attributed average annual gross revenues that did not exceed $3 million for the preceding three years was considered an entrepreneur.[53] Auction 86 concluded in 2009 with the sale of 61 licenses.[54] Of the 10 winning bidders, two bidders that claimed small business status won four licenses; one bidder that claimed very small business status won three licenses; and two bidders that claimed entrepreneur status won six licenses. We note that, as a general matter, the number of winning bidders that qualify as small businesses at the close of an auction does not necessarily represent the number of small businesses currently in service.

22. In addition, the SBA's placement of Cable Television Distribution Services in the category of Wired Telecommunications Carriers is applicable to cable-based educational broadcasting services. Since 2007, Wired Telecommunications Carriers have been defined as follows: "This industry comprises establishments primarily engaged in operating and/or providing access to transmission facilities and infrastructure that they own and/or lease for the transmission of voice, data, text, sound, and video using wired telecommunications networks. Transmission facilities may be based on a single technology or a combination of technologies."[55] Establishments in this industry use the wired telecommunications network facilities that they operate to provide a variety of services, such as wired telephony services, including VoIP services; wired (cable) audio and video programming distribution; and wired broadband Internet services. Establishments providing satellite television distribution services using facilities and infrastructure that they operate are included in this industry.[56] The SBA has determined that a business in this category is a small business if it has 1,500 or fewer employees.[57] Census data for 2007 shows that there were 3,188 firms in this category that operated for the duration of that year.[58] Of those, 3,144 had fewer than 1000 employees, and 44 firms had more than 1000 employees.

[51] 47 U.S.C. § 309(j). Hundreds of stations were licensed to incumbent MDS licensees prior to implementation of Section 309(j) of the Communications Act of 1934, 47 U.S.C. § 309(j). For these pre-auction licenses, the applicable standard is SBA's small business size standard of 1500 or fewer employees.

[52] Auction of Broadband Radio Service (BRS) Licenses, Scheduled for October 27, 2009, Notice and Filing Requirements, Minimum Opening Bids, Upfront Payments, and Other Procedures for Auction 86, AU Docket No. 09-56, *Public Notice*, 24 FCC Rcd 8277 (2009).

[53] *Id.* at 8296.

[54] Auction of Broadband Radio Service Licenses Closes, Winning Bidders Announced for Auction 86, Down Payments Due November 23, 2009, Final Payments Due December 8, 2009, Ten-Day Petition to Deny Period, *Public Notice*, 24 FCC Rcd 13572 (2009).

[55] U.S. Census Bureau, *2012 NAICS Definitions: 517110 Wired Telecommunications Carriers*, http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517110&search=2012.

[56] *Id.*

[57] *See* 13 C.F.R. § 121.201 (NAICS code 517110).

[58] U.S. Census Bureau, Table No. EC0751SSSZ5, *Information: Subject Series - Establishment and Firm Size: Employment Size of Firms for the United States: 2007* (NAICS code 517110), http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ5.

Thus under this category and the associated small business size standard, the majority of such firms can be considered small. In addition to Census data, the Commission's Universal Licensing System indicates that as of July 2013, there are 2,236 active EBS licenses. The Commission estimates that of these 2,236 licenses, the majority are held by non-profit educational institutions and school districts, which are by statute defined as small businesses.[59]

23. *Location and Monitoring Service (LMS).* LMS systems use non-voice radio techniques to determine the location and status of mobile radio units. For purposes of auctioning LMS licenses, the Commission has defined a "small business" as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed $15 million.[60] A "very small business" is defined as an entity that, together with controlling interests and affiliates, has average annual gross revenues for the preceding three years not to exceed $3 million.[61] These definitions have been approved by the SBA.[62] An auction for LMS licenses commenced on February 23, 1999 and closed on March 5, 1999. Of the 528 licenses auctioned, 289 licenses were sold to four small businesses.

24. *Television Broadcasting.* This Economic Census category "comprises establishments primarily engaged in broadcasting images together with sound. These establishments operate television broadcasting studios and facilities for the programming and transmission of programs to the public."[63] The SBA has created the following small business size standard for such businesses: those having $38.5 million or less in annual receipts.[64] The 2007 U.S. Census indicates that 2,076 television stations operated in that year. Of that number, 1,515 had annual receipts of $10,000,000 dollars or less, and 561 had annual receipts of more than $10,000,000. Since the Census has no additional classifications on the basis of which to identify the number of stations whose receipts exceeded $38.5 million in that year, the Commission concludes that the majority of television stations were small under the applicable SBA size standard.

25. Apart from the U.S. Census, the Commission has estimated the number of licensed commercial television stations to be 1,387.[65] In addition, according to Commission staff review of the BIA Advisory Services, LLC's *Media Access Pro Television Database* on March 28, 2012, about 950 of an estimated 1,300 commercial television stations (or approximately 73 percent) had revenues of $14 million or less.[66] We therefore estimate that the majority of commercial television broadcasters are small entities.

[59] The term "small entity" within SBREFA applies to small organizations (nonprofits) and to small governmental jurisdictions (cities, counties, towns, townships, villages, school districts, and special districts with populations of less than 50,000). 5 U.S.C. §§ 601(4)-(6).

[60] Amendment of Part 90 of the Commission's Rules to Adopt Regulations for Automatic Vehicle Monitoring Systems, PR Docket No. 93-61, *Second Report and Order*, 13 FCC Rcd 15182, 15192 para. 20 (1998); *see also* 47 C.F.R. § 90.1103.

[61] *Id*.

[62] *See* Letter from Aida Alvarez, Administrator, Small Business Administration to Thomas J. Sugrue, Chief, Wireless Telecommunications Bureau, FCC (Feb. 22, 1999).

[63] U.S. Census Bureau, 2012 NAICS Definitions, "515120 Television Broadcasting," at http://www.census.gov./cgi-bin/sssd/naics/naicsrch.

[64] 13 C.F.R. § 121.201; 2012 NAICS code 515120.

[65] *See Broadcast Station Totals as of June 30, 2014*, Press Release (MB rel. July 9, 2014) ("*July 9, 2014 Broadcast Station Totals Press Release*"), at https://apps.fcc.gov/edocs_public/attachmatch/DOC-328096A1.pdf.

[66] We recognize that BIA's estimate differs slightly from the FCC total given *supra*.

26. We note, however, that in assessing whether a business concern qualifies as small under the above definition, business (control) affiliations[67] must be included. Our estimate, therefore, likely overstates the number of small entities that might be affected by our action because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies. In addition, an element of the definition of "small business" is that the entity not be dominant in its field of operation. We are unable at this time to define or quantify the criteria that would establish whether a specific television station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply does not exclude any television station from the definition of a small business on this basis and is therefore possibly over-inclusive to that extent.

27. In addition, the Commission has estimated the number of licensed noncommercial educational (NCE) television stations to be 395.[68] These stations are non-profit, and therefore considered to be small entities.[69]

28. There are also 2,414 LPTV stations, including Class A stations, and 4,046 TV translator stations.[70] Given the nature of these services, we will presume that all of these entities qualify as small entities under the above SBA small business size standard.

29. *Radio Broadcasting.* The SBA defines a radio broadcast station as a small business if it has no more than $35.5 million in annual receipts.[71] Business concerns included in this category are those "primarily engaged in broadcasting aural programs by radio to the public."[72] According to review of the BIA Publications, Inc. Master Access Radio Analyzer Database as of November 26, 2013, about 11,331 (or about 99.9 percent) of 11,341 commercial radio stations have revenues of $38.5 million or less and thus qualify as small entities under the SBA definition. The Commission notes, however, that, in assessing whether a business concern qualifies as small under the above definition, revenues from business (control) affiliations[73] must be included. This estimate, therefore, likely overstates the number of small entities that might be affected, because the revenue figure on which it is based does not include or aggregate revenues from affiliated companies.

30. In addition, an element of the definition of "small business" is that the entity not be dominant in its field of operation. The Commission is unable at this time to define or quantify the criteria that would establish whether a specific radio station is dominant in its field of operation. Accordingly, the estimate of small businesses to which rules may apply does not exclude any radio station from the definition of a small business on this basis and therefore may be over-inclusive to that extent. Also, as noted, an additional element of the definition of "small business" is that the entity must be independently owned and operated. The Commission notes that it can be difficult to assess this criterion in the context of media entities and the estimates of small businesses to which they apply may be over-inclusive to this extent.

31. *FM translator stations and low power FM stations.* The rules and clarifications we adopt could affect licensees of FM translator and booster stations and low power FM (LPFM) stations, as well

[67] "[Business concerns] are affiliates of each other when one concern controls or has the power to control the other or a third party or parties controls or has to power to control both." 13 C.F.R. § 21.103(a)(1).

[68] *See July 9, 2014 Broadcast Station Totals Press Release*.

[69] *See*, *generally*, 5 U.S.C. §§ 601(4), (6).

[70] *See* FCC News Release, Broadcast Station Totals as of December 31, 2013 (rel. January 8, 2014), http://transition.fcc.gov/Daily_Releases/Daily_Business/2014/db0108/DOC-325039A1.pdf.

[71] 13 C.F.R § 121.201, 2012 NAICS code 515112.

[72] U.S. Census Bureau, *2012 NAICS Definitions: 515112 Radio Broadcasting*, http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=515112&search=2012.

[73] *See* n.14.

as potential licensees in these radio services. The same SBA definition that applies to radio broadcast licensees would apply to these stations. The SBA defines a radio broadcast station as a small business if such station has no more than $38.5 million in annual receipts.[74] Currently, there are approximately 6,155 licensed FM translator and booster stations and 864 licensed LPFM stations.[75] Given the nature of these services, we will presume that all of these licensees qualify as small entities under the SBA definition.

32. *Multichannel Video Distribution and Data Service (MVDDS).* MVDDS is a terrestrial fixed microwave service operating in the 12.2-12.7 GHz band. The Commission adopted criteria for defining three groups of small businesses for purposes of determining their eligibility for special provisions such as bidding credits. It defined a very small business as an entity with average annual gross revenues not exceeding $3 million for the preceding three years; a small business as an entity with average annual gross revenues not exceeding $15 million for the preceding three years; and an entrepreneur as an entity with average annual gross revenues not exceeding $40 million for the preceding three years.[76] These definitions were approved by the SBA.[77] On January 27, 2004, the Commission completed an auction of 214 MVDDS licenses (Auction No. 53). In this auction, ten winning bidders won a total of 192 MVDDS licenses.[78] Eight of the ten winning bidders claimed small business status and won 144 of the licenses. The Commission also held an auction of MVDDS licenses on December 7, 2005 (Auction 63). Of the three winning bidders who won 22 licenses, two winning bidders, winning 21 of the licenses, claimed small business status.[79]

33. *Satellite Telecommunications.* Two economic census categories address the satellite industry. Both establish a small business size standard of $32.54 million or less in annual receipts.[80]

34. The first category, "Satellite Telecommunications," "comprises establishments primarily engaged in providing telecommunications services to other establishments in the telecommunications and broadcasting industries by forwarding and receiving communications signals via a system of satellites or reselling satellite telecommunications."[81] Census Bureau data for 2007 show that 607 Satellite Telecommunications establishments operated for that entire year.[82] Of this total, 533 had annual receipts of under $10 million, and 74 establishments had receipts of $10 million or more.[83] Consequently, the

[74] *See* 13 C.F.R. § 121.201, NAICS Code 515112.

[75] *See* News Release, "Broadcast Station Totals as of December 31, 2009" (rel. Feb. 26, 2010), *available at* http://hraunfoss.fcc.gov/edocs_public/attachmatch/DOC-296538A1.pdf269784A1.doc.

[76] Amendment of Parts 2 and 25 of the Commission's Rules to Permit Operation of NGSO FSS Systems Co-Frequency with GSO and Terrestrial Systems in the Ku-Band Frequency Range; Amendment of the Commission's Rules to Authorize Subsidiary Terrestrial Use of the 12.2–12.7 GHz Band by Direct Broadcast Satellite Licensees and their Affiliates; and Applications of Broadwave USA, PDC Broadband Corporation, and Satellite Receivers, Ltd. to Provide A Fixed Service in the 12.2–12.7 GHz Band, ET Docket No. 98-206, *Memorandum Opinion and Order and Second Report and Order*, 17 FCC Rcd 9614, 9711 para. 252 (2002).

[77] *See* Letter from Hector V. Barreto, Administrator, U.S. Small Business Administration, to Margaret W. Wiener, Chief, Auctions and Industry Analysis Division, Wireless Telecommunications Bureau, FCC (Feb. 13, 2002).

[78] *See* "Multichannel Video Distribution and Data Service Spectrum Auction Closes," *Public Notice*, 19 FCC Rcd 1834 (2004).

[79] *See* "Auction of Multichannel Video Distribution and Data Service Licenses Closes; Winning Bidders Announced for Auction No. 63," *Public Notice*, 20 FCC Rcd 19807 (2005).

[80] 13 C.F.R. § 121.201, NAICS Codes 517410, 517919.

[81] U.S. Census Bureau, 2007 NAICS Definition, 517410 Satellite Telecommunications.

[82] *See* http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ1&prodType=table.

[83] *See id*.

Commission estimates that the majority of Satellite Telecommunications firms are small entities that might be affected by our action.

35. The second category, "All Other Telecommunications," comprises "establishments primarily engaged in providing specialized telecommunications services, such as satellite tracking, communications telemetry, and radar station operation. This industry also includes establishments primarily engaged in providing satellite terminal stations and associated facilities connected with one or more terrestrial systems and capable of transmitting telecommunications to, and receiving telecommunications from, satellite systems. Establishments providing Internet services or voice over Internet protocol (VoIP) services via client-supplied telecommunications connections are also included in this industry."[84] For this category, Census data for 2007 shows that there were a total of 2,639 establishments that operated for the entire year.[85] Of those, 2,333 operated with annual receipts of less than $10 million and 306 with annual receipts of $10 million or more.[86] Consequently, the Commission estimates that a majority of All Other Telecommunications establishments are small entities that might be affected by our action.

36. *Non-Licensee Tower Owners*. Although at one time most communications towers were owned by the licensee using the tower to provide communications service, many towers are now owned by third-party businesses that do not provide communications services themselves but lease space on their towers to other companies that provide communications services. The Commission's rules require that any entity, including a non-licensee, proposing to construct a tower over 200 feet in height or within the glide slope of an airport must register the tower with the Commission on FCC Form 854.[87] Thus, non-licensee tower owners may be subject to the environmental notification requirements associated with ASR registration, and may benefit from the exemption for certain temporary antenna structures that we adopt in the Report and Order. In addition, non-licensee tower owners may be affected by our interpretations of Section 6409(a) of the Spectrum Act or by our revisions to our interpretation of Section 332(c)(7) of the Communications Act.[88]

37. As of September 5, 2014, the ASR database includes approximately 116,643 registration records reflecting a "Constructed" status and 13,972 registration records reflecting a "Granted, Not Constructed" status. These figures include both towers registered to licensees and towers registered to non-licensee tower owners. The Commission does not keep information from which we can easily determine how many of these towers are registered to non-licensees or how many non-licensees have registered towers.[89] Regarding towers that do not require ASR registration, we do not collect information as to the number of such towers in use and therefore cannot estimate the number of tower owners that would be subject to the rules we adopt. Moreover, the SBA has not developed a size standard for small businesses in the category "Tower Owners." Therefore, we are unable to determine the number of non-licensee tower owners that are small entities. We believe, however, that when all entities owning 10 or fewer towers and leasing space for collocation are included, non-licensee tower owners number in the thousands, and that nearly all of these qualify as small businesses under the SBA's definition for "All

[84] *See* http://www.census.gov/cgi-bin/sssd/naics/naicsrch?code=517919&search=2007%20NAICS%20Search.

[85] *See* http://factfinder2.census.gov/faces/tableservices/jsf/pages/productview.xhtml?pid=ECN_2007_US_51SSSZ4&prodType=table.

[86] *See id*.

[87] 47 C.F.R. §§ 17.4(a), 17.7(a)-(b).

[88] *See supra*, Sections IV, V.

[89] We note, however, that approximately 13,000 towers are registered to 10 cellular carriers with 1,000 or more employees.

Other Telecommunications."[90] In addition, there may be other non-licensee owners of other wireless infrastructure, including DAS and small cells, that might be affected by the regulatory measures we adopt. We do not have any basis for estimating the number of such non-licensee owners that are small entities.

E. Description of Projected Reporting, Recordkeeping, and Other Compliance Requirements for Small Entities

38. This Report and Order adopts a narrow exemption from the Commission's requirement that owners of proposed towers requiring ASR registration provide 30 days of national and local notice to give members of the public an opportunity to comment on the proposed tower's potential environmental effects. The exemption from the notice requirements applies only to applicants seeking to register temporary antenna structures meeting certain criteria that greatly reduce the likelihood of any significant environmental effects. Specifically, proposed towers exempted from the Commission's local and national environmental notification requirement are those that (i) will be in use for 60 days or less, (ii) require notice of construction to the Federal Aviation Administration (FAA), (iii) do not require marking or lighting pursuant to FAA regulations, (iv) will be less than 200 feet in height, and (v) will involve minimal or no excavation.

39. As noted above, the Commission's rules require that any entity, including a non-licensee, proposing to construct a tower over 200 feet in height or within the glide slope of an airport must register the tower with the Commission on FCC Form 854.[91] An applicant seeking to claim the temporary towers exemption from the environmental notification process must indicate on its FCC Form 854 that it is claiming the exemption for a new, proposed temporary tower and demonstrate that the proposed tower satisfies the applicable criteria.[92] While small entities must comply with these requirements in order to take advantage of the exemption, on balance, the relief from compliance with local and national environmental notification requirements provided by the exemption greatly reduces burdens and economic impacts on small entities.

40. The applicant may seek an extension of the exemption from the Commission's local and national environmental notification requirement of up to sixty days through another filing of Form 854, if the applicant can demonstrate that the extension of the exemption period is warranted due to changed circumstances or information that emerged after the exempted tower was deployed. The exemption adopted in this Report and Order is intended specifically for proposed towers that are intended and expected to be deployed for no more than 60 days, and the option to apply for an extension is intended only for cases of unforeseen or changed circumstances or information. Small entities, like all applicants, are expected to seek extensions of the exemption period only rarely and therefore, any burdens or economic impacts incurred by applying for such extensions should be minimal.

F. Steps Taken to Minimize the Significant Economic Impact on Small Entities, and Significant Alternatives Considered

41. The RFA requires an agency to describe any significant alternatives that it has considered in developing its approach, which may include the following four alternatives (among others): "(1) the establishment of differing compliance or reporting requirements or timetables that take into account the resources available to small entities; (2) the clarification, consolidation, or simplification of compliance and reporting requirements under the rule for such small entities; (3) the use of performance rather than design standards; and (4) an exemption from coverage of the rule, or any part thereof, for such small

[90] 13 C.F.R. § 121.201, NAICS Code 517919. Under this category, a business is small if it has $30 million or less in annual receipts.

[91] 47 C.F.R. §§ 17.4(a), 17.7(a)-(b).

[92] *See* 47 C.F.R. § 17.4(c)(vii).

entities."[93] This FRFA incorporates by reference all discussion in the Report and Order that considers the impact on small entities of the rules adopted by the Commission. In addition, the Commission's consideration of those issues as to which the impact on small entities was specifically discussed in the record is summarized below.

42. The actions taken in this Report and Order encourage and promote the deployment of advanced wireless broadband and other services by tailoring the regulatory review of new wireless network infrastructure consistent with the law and the public interest. We anticipate that the steps taken in this Report and Order will not impose any significant economic impacts on small entities, and will in fact help reduce burdens on small entities by reducing the cost and delay associated with the deployment of such infrastructure.

43. In this Report and Order, the Commission takes action in four major areas relating to the regulation of wireless facility siting and construction. In each area, the rules we adopt and clarifications we make will not increase burdens or costs on small entities. To the contrary, our actions will reduce costs and burdens associated with deploying wireless infrastructure.

44. First, we adopt measures with regard to our NEPA process for review of environmental effects regarding wireless broadband deployment that should reduce existing regulatory costs for small entities that construct or deploy wireless infrastructure, and will not impose any additional costs on such entities. Specifically, we clarify that the existing NEPA categorical exclusion for antenna collocations on buildings and towers includes equipment associated with the antennas (such as wiring, cabling, cabinets, or backup-power), and that it also covers collocations in a building's interior. We also expand the NEPA collocation categorical exclusion to cover collocations on structures other than buildings and towers, and adopt a new NEPA categorical exclusion for deployments, including deployments of new poles, in utility or communications rights-of-way that are in active use for such purposes, where the deployment does not constitute a substantial increase in size over the existing utility or communications uses. We also adopt measures concerning our Section 106 process for review of impact on historic properties. First, we adopt certain exclusions from Section 106 review, and we clarify that the existing exclusions for certain collocations on buildings under the Commission's programmatic agreements extend to collocations inside buildings. These new exclusions and clarifications will reduce environmental compliance costs of small entities by providing that eligible proposed deployments of small wireless facilities do not require the preparation of an Environmental Assessment.

45. Second, we adopt an exemption from the Commission's requirement that ASR applicants must provide local and national environmental notification prior to submitting a completed ASR application for certain temporary antenna structures meeting criteria that makes them unlikely to have significant environmental effects. Specifically, we exempt antenna structures that (1) will be in place for 60 days or less; (2) require notice of construction to the FAA; (3) do not require marking or lighting under FAA regulations; (4) will be less than 200 feet above ground level; and (5) will involve minimal or no ground excavation. This exemption will reduce the burden on wireless broadband providers and other wireless service providers, including small entities.

46. Third, we adopt several rules to clarify and implement the requirements of Section 6409(a) of the Spectrum Act. In interpreting the statutory terms of this provision, such as "wireless tower or base station," "transmission equipment," and "substantially change the physical dimensions," we generally do not distinguish between large and small entities, as the statute provides no indication that such distinctions were intended, and such distinctions have been proposed. Further, these clarifications will help limit potential ambiguities within the rule and thus reduce the burden associated with complying with this statutory provision, including the burden on small entities. Generally, however, we clarify that Section 6409(a) applies only to State and local governments acting in their regulatory role and does not apply to such entities acting in their proprietary capacities.

[93] 5 U.S.C. § 603(c).

47. With regard to the process for reviewing an application under Section 6409(a), we provide that a State or local government may only require applicants to provide documentation that is reasonably related to determining whether the eligible facility request meets the requirements of Section 6409(a) and that, within 60 days from the date of filing (accounting for tolling), a State or local government shall approve an application covered by Section 6409(a). Where a State or local government fails to act on an application covered under Section 6409(a) within the requisite time period, the application is deemed granted. Parties may bring claims under Section 6409(a) to a court of competent jurisdiction. We decline to entertain such disputes in a Commission adjudication, which would impose significant burdens on localities, many of which are small entities with no representation in Washington, D.C. or experience before the Commission. Limiting relief to court adjudication lessens the burden on applicants in general, and small entities specifically.

48. Lastly, we adopt clarifications of our *2009 Declaratory Ruling*, which established the time periods after which a State or local government has presumptively failed to act on a facilities siting application "within a reasonable period of time" under Section 332(c)(7) of the Act. Specifically, we clarify that the timeframe begins to run when an application is first submitted, not when it is deemed complete by the reviewing government. Further, a determination of incompleteness tolls the shot clock only if the State or local government provides notice to the applicant in writing within 30 days of the application's submission, specifically delineating all missing information. Following a submission in response to a determination of incompleteness, any subsequent determination that an application remains incomplete must be based solely on the applicant's failure to supply missing information that was identified within the first 30 days. These clarifications will provide greater certainty in the application process and reduce the potential or need for serial requests for more information. Accordingly, these clarifications will facilitate faster application processing, reduce unreasonable delay, and reduce the burden on regulated entities, including small businesses.

49. We also clarify that to the extent DAS or small-cell facilities, including third-party facilities such as neutral host DAS deployments, are or will be used for the provision of personal wireless services, their siting applications are subject to the same presumptively reasonable timeframes that apply to applications related to other personal wireless service facilities under Section 332(c)(7). We clarify further that the presumptively reasonable timeframes run regardless of any applicable moratoria, and that municipal property preferences are not *per se* unreasonably discriminatory or otherwise unlawful under Section 332(c)(7). Finally, we conclude that the explicit remedies under Section 332(c)(7) preclude adoption of a deemed granted remedy for failures to act. These clarifications reduce confusion and delay within the siting process which in turn reduces the burden on industry and State and local jurisdictions alike, which may include small entities.

G. Federal Rules that Might Duplicate, Overlap, or Conflict with the Rules

50. None.

H. Report to Congress

51. The Commission will send a copy of the Report and Order, including this FRFA, in a report to be sent to Congress and the Government Accountability Office pursuant to the Congressional Review Act. A copy of the Report and Order and FRFA (or summaries thereof) will also be published in the *Federal Register*.

I. Report to Small Business Administration

52. The Commission's Consumer and Governmental Affairs Bureau, Reference Information Center, will send a copy of this Report and Order, including this FRFA, to the Chief Counsel for Advocacy of the SBA.

STATEMENT OF
CHAIRMAN TOM WHEELER

Re: ***In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WC Docket No. 11-59; 2012 Biennial Review of Telecommunications Regulations, WT Docket No. 13-32.***

Last month's record-setting launch of the new iPhone is just the latest reminder that our appetite for new mobile technologies appears to be insatiable. Mobile innovation is not only delighting U.S. consumers, it's a major force in driving economic growth, boosting U.S. competitiveness, and enabling solutions to challenges like education and health care.

As the demand for wireless technologies increases, so does the need for greater coverage and wireless network capacity. According to recent reports from the wireless industry, wireless data consumption has grown 732 percent since 2010. And Cisco forecasts that global mobile data traffic will increase 11-fold between 2013 and 2018.

The Commission has been hard at work to make more licensed and unlicensed spectrum available to keep up with the growing demand.

But making more spectrum available for broadband is just part of the Commission's wireless agenda.

High-speed mobile broadband also requires high-speed broadband buildout. However, the regulatory burdens associated with deployments can be expensive and time-consuming. This Order takes concrete steps to immediately and substantially ease those burdens.

The Order recognizes that a technological revolution with regard to infrastructure deployment has changed the landscape.

The current rules for deploying infrastructure were drafted at a time when antennas were huge and bolted to the top of enormous towers that were designed and built for the purpose of supporting those big antennas.

Today, new Distributed Antenna System (DAS) networks and other small-cell systems use components that are a fraction of the size and can be installed – unobtrusively – on utility poles, buildings, and other existing structures.

The Order we adopt today accounts for that change by crafting a more efficient process for small deployments and other installations that do not trigger concerns about environmental protection or historic preservation.

The Order also implements federal statutory directives that are intended to make State and local review more efficient for wireless deployments and modifications.

At the same time, the Order preserves our commitment to safeguard the essential roles that State, local, and Tribal governments play in this process.

For instance, the Order preserves local governments' authority to adopt and apply the zoning, safety, and concealment requirements that are appropriate for their communities.

Taken together, the rules we adopt today lay the groundwork for delivering more wireless capacity in more locations to consumers throughout the United States—while staying true to our statutory obligations to protect the environment and historic properties, and with sufficient safeguards to protect local land-use priorities as well as safety and aesthetic interests.

This Order builds on previous Commission efforts to make the regulatory approval processes for wireless infrastructure more efficient and effective.

In August, we substantially reformed tower lighting and marking requirements, which greatly eased compliance burdens for tower owners without any adverse impact on aviation safety.

And we have already started additional discussions with government and non-governmental stakeholders to further facilitate review processes and encourage collocations on existing towers. In particular, we intend to further tailor our historic preservation review process by working with the Advisory Council on Historic Preservation (ACHP) to implement broader fast-track federal reviews for small-scale wireless deployments.

Thank you to the Wireless Bureau for your continued dedication to promoting broadband infrastructure deployment.

STATEMENT OF
COMMISSIONER MIGNON L. CLYBURN

Re: In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WC Docket No. 11-59; 2012 Biennial Review of Telecommunications Regulations, WT Docket No. 13-32.

When considering how best to help wireless companies meet the explosive consumer demand for mobile services, the FCC focuses a lot on its upcoming AWS-3 and incentive auctions. The reality is that, in order to meet our ever growing communications needs, carriers cannot just acquire spectrum. They must also deploy that spectrum using a hardened, robust mobile infrastructure, which includes antennas and base stations.

Too often, the process of obtaining the necessary approvals from federal, state, and local governments to deploy can be both expensive and time-consuming. Today's Order seeks to address these shortcomings by bringing about more efficiency to the process of approving wireless facilities. Since 1974, the FCC's environmental and historical review procedures have excluded collocations of antennas from most of the requirements, recognizing the benefits of using existing structures over constructing new ones. Today, in order to facilitate faster deployment of wireless infrastructure, we expand that categorical exclusion to include: equipment associated with the antennas (such as wires, cables, and backup-power equipment), utility poles and electric transmission towers that meet certain conditions, and collocations within a building. We also adopt a 60-day period of review, before a collocation application can be deemed granted, pursuant to Section 6409(a) of the Middle Class Tax Relief and Job Creation Act of 2012. I was able to support this time period for two reasons. First, my colleagues agreed to move the effective date for the rules adopted here, from 30 days to 90 days after Federal Register publication. Second, last night, CTIA and PCIA agreed to make a number of commitments that could help resource constrained municipalities, transition to the new streamlined rules we are adopting today. Specifically, those associations will work in good faith towards the following goals:

Informing resource-constrained municipalities of best practices, used by other jurisdictions that are able to review and approve applications in fewer than 60 days;

Providing webinars and contacts to provide education and assistance, to these municipalities regarding the application process;

Providing assistance in drafting a model ordinance and application, for reviewing eligible facilities requests under Section 6409(a); and

Creating a checklist, that local government officials can use, to help streamline review processes.

I commend those organizations for making those commitments.

By making these changes to our rules, we anticipate spurring greater deployment of new technologies, such as small cells and Distributed Antenna Systems, which multiply wireless capacity within existing spectrum resources. For example, deploying ten small cells in a coverage area that can be served by a single macrocell could result in a tenfold increase in capacity. Small cells can also be deployed relatively easily on utility poles, street lamps, water towers, or rooftops -- a big reason why they are becoming so popular.

We also adopt an exemption from the rule, that tower owners must give the public 30 days' notice to comment on a proposed tower's potential effects to the environment and to historic sites. This exemption

applies only to proposed temporary towers that meet certain criteria. Specifically, those towers must be in use for 60 days or less; be shorter than 200 feet in height; involve minimal or no excavation; and not require FAA marking or lighting. This exemption will allow communications companies, to respond more effectively to emergencies, and other planned and unplanned short-term spikes in demand.

Finally, I wish to thank Roger Sherman, Chad Breckinridge, Patty Robbins, Peter Trachtenberg, Won Kim, Mania Baghdadi, and Michael Smith as well as my wireless legal advisor Louis Peraertz for providing us with such an excellent item.

STATEMENT OF
COMMISSIONER JESSICA ROSENWORCEL

Re: ***In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WC Docket No. 11-59; 2012 Biennial Review of Telecommunications Regulations, WT Docket No. 13-32.***

If you want a wireless revolution, you need an evolution—in infrastructure.

Mindful of this truth, today the Commission significantly evolves its policies for wireless facilities siting. That means we streamline many aspects of our tower siting rules to help encourage the deployment of wireless infrastructure. But what we do goes well beyond traditional towers. That's because the rules we put in place today are our first steps to encourage deployment of infrastructure that is absolutely critical for the next generation of wireless service—5G.

This is a good thing. Because the race to 5G is on. And in the next generation of wireless networks, traffic will change. We will see more data traveling wirelessly than ever before—between people, between people and machines, and between machines themselves. To accommodate all of this traffic, we will need to look anew at spectrum that is way, way up there—well beyond our traditional 3 GHz boundary for mobile broadband. But the physics of these far-off frequencies are different. They have smaller waves, multiplying our need for antenna systems. That means we need different infrastructure here on the ground. That means exploring new technologies like massive multiple-input, multiple output antenna arrays and hetnets that could change how we think about network topology. That means we need to start with new policies to support deployment of Distributed Antenna Systems and small cells.

That is a critical part of what we do here today—and I am pleased to support it. Some revolutions begin with a bang—but this one starts with the heavy lift of hard work. So thank you to the Wireless Telecommunications Bureau for your efforts to evolve our wireless siting policies and for your commitment to support infrastructure deployment—both in this generation of technology and the next.

STATEMENT OF
COMMISSIONER AJIT PAI

Re: In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WC Docket No. 11-59; 2012 Biennial Review of Telecommunications Regulations, WT Docket No. 13-32.

Removing barriers to wireless infrastructure deployment has been one of my top priorities since joining the Commission. Two years ago, I laid out a plan to do just that. It called on the Commission to modernize our environmental and historic preservation rules by exempting most distributed antenna systems (DAS) and small cell technologies, curb local moratoria on the approval of new infrastructure, and make clear that our shot-clock rules apply to DAS and small cells.[1] Five months ago, I reiterated those proposals and urged the Commission to adopt a deemed-granted remedy for violations of section 6409 of the Spectrum Act and objective standards for determining the types of modifications that qualify for treatment under that section.[2]

Now, I'll be the first to admit that infrastructure isn't always the most glamorous issue. Discussing categorical exclusions under the National Environmental Policy Act isn't as exciting as thinking about multi-billion dollar spectrum auctions. But wireless infrastructure is just as important as spectrum.

Consider one figure: $35 billion. That's how much, on average, wireless operators are expected to invest on an annual basis in mobile broadband infrastructure.[3] That translates into hundreds of towers, thousands of base stations, and a vast network of microcells, picocells, and DAS. And with today's *Order*, we're going to stretch those dollars farther. That will mean broader coverage, greater capacity, and ultimately better wireless broadband services for consumers.

It's a simple relationship, really. Lower costs mean greater deployment. But for far too long and in far too many places, a web of municipal, state, and federal regulations has entangled those trying to build infrastructure. Delays, needless paperwork, and moratoria all mean higher costs and accordingly less deployment. Additionally, many of these regulations ignore the realities of modern wireless technology, so some places apply the rules for constructing a 200-foot tower to swapping out a 3G antenna for a 4G one. That disserves the public interest. And if left in place, rules like this could delay the use of the AWS-3 and 600 MHz spectrum we'll soon be auctioning off and slow the build-out of FirstNet.

That's why I'm pleased we're removing some of these barriers today, and I'm grateful that the *Order* includes many of my initial proposals. For example, the *Order* amends our environmental and historic preservation rules to make it easier to deploy small cells and collocate antennas on existing structures. The *Order* also makes it clear that our shot-clock rules apply to small cells and DAS and that local moratoria cannot be used to make an end run around those rules. And it adopts a bright-line test for determining which equipment modifications qualify for section 6409's deemed-grant remedy and makes clear that an applicant can start building on day 61 if a municipality doesn't act on its application.

[1] *See* Remarks of Commissioner Ajit Pai at CTIA's MobileCon (2012), http://go.usa.gov/wMG9.

[2] *See* Remarks of Commissioner Ajit Pai at PCIA's 2014 Wireless Infrastructure Show (2014), https://apps.fcc.gov/edocs_public/attachmatch/DOC-327172A1.pdf.

[3] Alan Pearce, Ph.D., J. Richard Carlson, MBA, Michael Pagano, Ph.D., *Wireless Broadband Infrastructure: A Catalyst For GDP And Job Growth 2013–2017* (Sept. 2013).

These are no small changes. American consumers stand to benefit in a big way. Today's *Order* will make it easier for carriers both large and small to maintain, upgrade, and expand their coverage and capacity.

I would also like to thank my colleagues for agreeing to accept some of my suggested changes that have improved the item. For example, the *Order* now provides greater relief to those seeking to deploy small-scale technology by expanding the permitted size of collocations that qualify under the categorical exclusions we adopt today. Similarly, the *Order* now provides that cabling and other non-telecom equipment do not count against providers when they collocate on a utility structure. And I appreciate the *Order*'s discussion of the benefit of injunctive relief in cases where localities don't comply with the Commission's shot clock. I also would like to thank Commissioner O'Rielly in particular for the important role he played in securing other positive changes to the item.

Critically, the actions we take today lie well within our statutory authority. For example, in both section 332(c)(7) of the Communications Act and section 6409 of the Spectrum Act, Congress has clearly and specifically granted the Commission the power to remove barriers to wireless infrastructure deployment.

Moving forward, there is more to be done. In 18 to 24 months—but I hope sooner—we'll have a new programmatic agreement that will further streamline the process for deploying small cell technologies. And once we have some experience in the field with a deemed-granted remedy for infrastructure deployment, I hope we consider extending that remedy to our section 332 shot clock. But this does not obscure the fact that today's *Order* is a solid step in the right direction.

Finally, I would like to thank the FCC's talented staff for all of their hard work on this item, most especially: Mania Baghdadi, Chad Breckinridge, Saurbh Chhabra, Monica DeLong, Stephen Delsordo, Jennifer Flynn, Ivy Harris, David Horowitz, Don Johnson, Aliza Katz, Won Kim, Lee Martin, Sade Oshinubi, Bill Richardson, Patty Robbins, Roger Sherman, Michael Smith, Jeff Steinberg, Joel Taubenblatt, Peter Trachtenberg, and Morasha Younger. I also want to acknowledge the dedicated efforts that PCIA, CTIA, and many players in the infrastructure industry have made to bring these issues to the fore. Finding ways to make it easier to deploy wireless infrastructure is not the easiest of tasks, but it is essential so that all Americans can enjoy the benefits of wireless broadband.

STATEMENT OF
COMMISSIONER MICHAEL O'RIELLY

Re: In the Matter of Acceleration of Broadband Deployment by Improving Wireless Facilities Siting Policies, WT Docket No. 13-238; Acceleration of Broadband Deployment: Expanding the Reach and Reducing the Cost of Broadband Deployment by Improving Policies Regarding Public Rights of Way and Wireless Facilities Siting, WC Docket No. 11-59; 2012 Biennial Review of Telecommunications Regulations, WT Docket No. 13-32.

I am very pleased to support the item before us to facilitate the deployment of wireless infrastructure. It is disappointing, however, that we had to go to such great lengths to get where we are today. But that is not a slight on the Chairman or the Commission.

By way of background, section 704 of the Telecommunications Act of 1996 was designed to ensure a thoughtful process to deal with disagreements between local and state governments and wireless communications providers.[1] Many weeks of negotiations between interested parties resulted in a statutory provision that many thought provided a reasonable compromise and outcome. It balanced the market demands of wireless companies—and their then predominately voice consumers—with the interests of localities.

Unfortunately, as soon as the ink was dry on the Telecom Act, some state and local governments went to work to undermine, and in some cases, completely ignore the siting provisions in the statute. The same entities that previously struck a deal continued to impede the placement of wireless towers in their jurisdictions. We saw some impose siting moratoria, claiming that such restrictions were not a violation of the statute. We saw certain localities stretch out zoning meetings for months, require excessive documentation, intentionally delay decisions, fail to provide written rejections based on the facts, and generally do everything possible to maintain barriers to siting. And the scope of the blocking did not just focus on larger or new towers; it also extended to adjustments or additions of antennas to existing towers.

I have observed years of court filings and cases containing weak arguments as to why action on a particular siting application was unnecessary or not required. On point, the Supreme Court is expected to soon consider what qualifies as "in writing" under the statute and the timing for providing the reasons for denying an application.[2] Is it really too much to ask for a locality to provide written justification for denying an application at the same time it provides the reasons for denying the application? Or for a locality to spell out the exact reasons for a denial? Must an applicant get a denial one day and be forced to fish through a record issued on another to find the reasons? Of course not.

Such disruptive practices did not go unnoticed. After years of excuses, Congress acted as part of what is commonly referred to as the Spectrum Act.[3] The provisions of the law, which we act upon today, provide extensive responses to lessons learned from the practices of certain state and local governments. The overall message delivered was the gig is up. Congress provided what I believed to be very clear direction to remove barriers to the siting, installation and modification process.

The benefits of today's item will be great, and our action is essential to the development of the future of wireless communications. As wireless data continues to grow annually at a furious pace,[4] more

[1] Telecommunications Act of 1996 § 704, 47 U.S.C. § 332(c)(7).

[2] T-Mobile South, LLC v. City of Roswell, 731 F. 3d 1213 (11th Cir. 2013), *cert. granted* 134 S. Ct. 2136 (2014).

[3] Middle Class Tax Relief and Job Creation Act of 2012 § 6409(a), 47 U.S.C. § 1455.

[4] One wireless provider calculated its mobile data traffic growth at 30,000 percent between 2006 and 2012. HetNet Forum Seminar Presentation, Small Cell Acceleration, at 21 (July 29, 2013), http://www.thedasforum.org/wp-

(continued….)

wireless infrastructure is needed to carry such traffic and deploy new wireless services. By removing specific practices that are unnecessary obstacles, simplifying numerous provisions in our rules and providing clarity on exactly how the Commission will implement the statutory provisions, we set the stage for an easier wireless antenna siting process. This will facilitate the hundreds of thousands of sitings in the future and greatly expand wireless service capacity and coverage. To put this in perspective, comments in the record by PCIA suggest that one provider is in the process of trying to deploy 10,000 new macro-cells, 40,000 small cells and 1,000 distributed antenna systems (DAS).[5]

Our action today is especially important for unlicensed spectrum use, and small cell and DAS siting. I have been promoting more unlicensed spectrum allocations in a number of spectrum bands. Licensed spectrum networks unload a large portion of traffic onto unlicensed networks, which also must receive approvals to place equipment. Small cell and DAS deployments are also crucial because they can expand capacity and coverage of existing wireless networks. The growth of unlicensed use and small cells means more wireless infrastructure is going to be needed. Simply put, we are going to need more towers and more antennas, and fewer legal obstacles by state and local governments.

More importantly, we need to keep in mind the types of wireless communications that can be aided by our action. As we know from other proceedings, today's wireless devices are used to communicate in times of emergency, keep in touch with friends and families, expand broadband options for an array of people, among other purposes. The Commission must remain focused on the needs of the American consumer.

Lastly, let me be clear that I see a great deal of difference between the action we take today and the effort to override state and local protections on municipal-owned and operated networks. The most important distinction is that Congress spoke directly to wireless infrastructure but not to muni-broadband. Over the years, there have been numerous efforts in Congress to address the muni-broadband issue, but those efforts were never enacted.

I thank the Chairman for moving this item and incorporating many of my edits and the staff for all of their hard work.

(Continued from previous page)
content/uploads/2013/07/HetNet-Forum-Small-Cell-Acceleration-Seminar-Presentations.pdf, *cited in* Comments of PCIA – The Wireless Infrastructure Association and the HetNet Forum, WT Docket No. 13-238, at 3 n.7 (Feb. 3, 2014) ("Comments of PCIA"). Mobile data traffic in the U.S. in 2013 was 51 times the amount in 2008. *See* Cisco, *VNI Mobile Forecast Highlights, 2013-2018, United States – 2013 Year in Review*, http://www.cisco.com/assets/sol/sp/vni/forecast_highlights_mobile/index.html#~Country (filtering by United States and 2013 Year in Review) (last visited Oct. 16, 2014). Annual wireless data usage more than doubled between 2012 and 2013 from approximately 1.47 trillion Megabytes to 3.23 trillion Megabytes. CTIA-The Wireless Association, Your Wireless Life, Annual Wireless Industry Survey, http://www.ctia.org/your-wireless-life/how-wireless-works/annual-wireless-industry-survey (last visited Oct. 16, 2014).

[5] Comments of PCIA at 3.

Exhibit 5
MC16-05

Advocacy

Welcome to AWC's online library of *Legislative Bulletin* and *CityVoice* news articles and other updates.

Published on Friday, January 06, 2017

Legislation expected on regulation of small cell networks

AWC staff and representatives from a number of cities have held several meetings with Verizon in response to Verizon's expressed intent to introduce legislation aimed at facilitating the rollout of small cell networks and 5G wireless technology. Verizon has said they would like to address issues related to land use regulations and access to rights-of-way, costs and fees charged by local governments and the need for streamlined permitting processes. All of these issues are important to cities and potentially controversial as legislation could result in pre-emption of current city authority. The aim of the meetings has been to discuss these issues and to try to find common ground.

Cities recognize that new wireless technology and facilities are coming. At least three cities have already adopted new ordinances in response (Kirkland, Kenmore and Spokane). Another group of more than 20 cities is working together, examining and discussing regulatory options to get themselves ready for the rollout of new small cell facilities. In AWC's opinion, this is the right approach and legislation that preempts city authority is not necessary. At this point we believe Verizon intends to push forward with legislation nevertheless. We may learn more at a work session on 5G wireless technology in the Senate Energy, Environment & Telecommunications committee on January 11 at 8 am.

This could be an issue that we'll need to engage on for all of the 2017 legislative session. Stay tuned. If you would like more information or would like to be part of our work group on the issue please contact Victoria Lincoln or Dave Catterson.

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Exhibit 6
MC 16-05

5G

For other uses, see 5G (disambiguation).

5th generation mobile networks or **5th generation wireless systems**, abbreviated **5G**, are the proposed next telecommunications standards beyond the current 4G/IMT-Advanced standards. Rather than faster peak Internet connection speeds, 5G planning aims at higher capacity than current 4G, allowing higher number of mobile broadband users per area unit, and allowing consumption of higher or unlimited data quantities in gigabyte per month and user. This would make it feasible for a large portion of the population to stream high-definition media many hours per day with their mobile devices, when out of reach of Wi-Fi hotspots. 5G research and development also aims at improved support of Device-to-device communication, aiming at lower cost, lower latency than 4G equipment and lower battery consumption, for better implementation of the Internet of things.

5G logo

There is currently no standard for 5G deployments. The Next Generation Mobile Networks Alliance defines the following requirements that a 5G standard should fulfill:[1]

- Data rates of tens of megabits per second for tens of thousands of users
- Data rates of 100 megabits per second for metropolitan areas
- 1 Gb per second simultaneously to many workers on the same office floor
- Several hundreds of thousands of simultaneous connections for massive wireless sensor network
- Spectral efficiency significantly enhanced compared to 4G
- Coverage improved
- Signaling efficiency enhanced
- 1-10 ms latency (limited by speed of light)
- Latency reduced significantly compared to LTE.[2]

The Next Generation Mobile Networks Alliance feels that 5G should be rolled out by 2020 to meet business and consumer demands.[3] In addition to providing simply faster speeds, they predict that 5G networks also will need to meet new use cases,[4] such as the Internet of Things (internet connected devices) as well as broadcast-like services and lifeline communication in times of natural disaster. Carriers, chipmakers, OEMS and OSATs, such as Advanced Semiconductor Engineering (ASE), have been preparing for this next-generation (5G) wireless standard, as mobile systems and base stations will require new and faster application processors, basebands and RF devices.[5]

Although updated standards that define capabilities beyond those defined in the current 4G standards are under consideration, those new capabilities have been grouped under the current ITU-T 4G standards. The U.S. Federal Communications Commission (FCC) approved the spectrum for 5G, including the 28 Gigahertz, 37 GHz and 39 GHz bands, on July 14, 2016.[6][7]

1 Background

A new mobile generation has appeared approximately every 10 years since the first 1G system, Nordic Mobile Telephone, was introduced in 1982. The first '2G' system was commercially deployed in 1992, and the 3G system appeared in 2001. 4G systems fully compliant with IMT Advanced were first standardized in 2012. The development of the 2G (GSM) and 3G (IMT-2000 and UMTS) standards took about 10 years from the official start of the R&D projects, and development of 4G systems began in 2001 or 2002.[8][9] Predecessor technologies have been on the market a few years before the new mobile generation, for example the pre-3G system CdmaOne/IS95 in

the US in 1995, and the pre-4G systems Mobile WiMAX in South-Korea 2006, and first release-LTE in Scandinavia 2009. In April 2008, NASA partnered with Machine-to-Machine Intelligence (M2Mi) Corp to develop 5G communication technology.[10]

Mobile generations typically refer to non–backward-compatible cellular standards following requirements stated by ITU-R, such as IMT-2000 for 3G and IMT-Advanced for 4G. In parallel with the development of the ITU-R mobile generations, IEEE and other standardization bodies also develop wireless communication technologies, often for higher data rates, higher frequencies, shorter transmission ranges, no support for roaming between access points and a relatively limited multiple access scheme. The first gigabit IEEE standard was IEEE 802.11ac, commercially available since 2013, soon to be followed by the multigigabit standard WiGig or IEEE 802.11ad.

2 Debate

Based on the above observations, some sources suggest that a new generation of 5G standards may be introduced in the early 2020s.[11][12] However, significant debate continued, on what 5G is about exactly. Prior to 2012, some industry representatives expressed skepticism toward 5G.[13] 3GPP held a conference in September 2015 to plan development of the new standard.[14]

New mobile generations are typically assigned new frequency bands and wider spectral bandwidth per frequency channel (1G up to 30 kHz, 2G up to 200 kHz, 3G up to 5 MHz, and 4G up to 20 MHz), but skeptics argue that there is little room for larger channel bandwidths and new frequency bands suitable for land-mobile radio.[13] The higher frequencies would overlap with K-band transmissions of communication satellites.[15] From users' point of view, previous mobile generations have implied substantial increase in peak bitrate (i.e. physical layer net bitrates for short-distance communication), up to 1 gigabit per second to be offered by 4G.

If 5G appears and reflects these prognoses, then the major difference, from a user point of view, between 4G and 5G must be something other than faster speed (increased peak bit rate). For example, higher number of simultaneously connected devices, higher system spectral efficiency (data volume per area unit), lower battery consumption, lower outage probability (better coverage), high bit rates in larger portions of the coverage area, lower latencies, higher number of supported devices, lower infrastructure deployment costs, higher versatility and scalability, or higher reliability of communication. Those are the objectives in several of the research papers and projects below.

GSMHistory.com[16] has recorded three very distinct 5G network visions that had emerged by 2014:

- **A super-efficient mobile network** that delivers a better performing network for lower investment cost. It addresses the mobile network operators' pressing need to see the unit cost of data transport falling at roughly the same rate as the volume of data demand is rising. It would be a leap forward in efficiency based on the IET Demand Attentive Network (DAN) philosophy.[17]
- **A super-fast mobile network** comprising the next generation of small cells densely clustered to give a contiguous coverage over at least urban areas and getting the world to the final frontier of true "wide-area mobility." It would require access to spectrum under 4 GHz perhaps via the world's first global implementation of Dynamic Spectrum Access.
- **A converged fiber-wireless network** that uses, for the first time for wireless Internet access, the millimeter wave bands (20 – 60 GHz) so as to allow very-wide-bandwidth radio channels able to support data-access speeds of up to 10 Gbit/s. The connection essentially comprises "short" wireless links on the end of local fiber optic cable. It would be more a "nomadic" service (like Wi-Fi) rather than a wide-area "mobile" service.

In its white paper, *5G Empowering Vertical Industries*, 5G PPP, the collaborative research programme organized as part of the European Commission's Horizon 2020 programme, suggests that to support the main vertical sectors in Europe - namely automotive, transportation, healthcare, energy, manufacturing, and media and entertainment - the most important 5G infrastructure performance requirements are a latency below 5 ms, support for device densities of up to 100 devices/m^2 and reliable coverage area, and that a successful 5G deployment will integrate telecommunication technologies including mobile, fixed, optical and satellite (both GEO and MEO).[18]

3 Research and development projects

In 2008, the South Korean IT R&D program of "5G mobile communication systems based on beam-division multiple access and relays with group cooperation" was formed.[19]

In 2012, the UK Government announced the establishment of a 5G Innovation Centre at the University of Surrey – the world's first research center set up specifically for 5G mobile research.[20]

In 2012, NYU WIRELESS was established as a multidisciplinary research center, with a focus on 5G wireless research, as well as its use in the medical and computer-science fields. The center is funded by the National Science Foundation and a board of 10 major wireless

companies (as of July 2014) that serve on the Industrial Affiliates board of the center. NYU WIRELESS has conducted and published channel measurements that show that millimeter wave frequencies will be viable for multigigabit-per-second data rates for future 5G networks.

In 2012, the European Commission, under the lead of Neelie Kroes, committed 50 million euros for research to deliver 5G mobile technology by 2020.[21] In particular, The METIS 2020 Project was the flagship project that allowed reaching a worldwide consensus on the requirements and key technology components of the 5G. Driven by several telecommunication companies, the METIS overall technical goal was to provide a system concept that supports 1,000 times higher mobile system spectral efficiency, compared to current LTE deployments.[4][12] In addition, in 2013, another project has started, called 5GrEEn,[22] linked to project METIS and focusing on the design of green 5G mobile networks. Here the goal is to develop guidelines for the definition of a new-generation network with particular emphasis on energy efficiency, sustainability and affordability.

In November 2012, a research project funded by the European Union under the ICT Programme FP7 was launched under the coordination of IMDEA Networks Institute (Madrid, Spain): i-JOIN (Interworking and JOINt Design of an Open Access and Backhaul Network Architecture for Small Cells based on Cloud Networks). iJOIN introduces the novel concept of the radio access network (RAN) as a service (RANaaS), where RAN functionality is flexibly centralized through an open IT platform based on a cloud infrastructure. iJOIN aims for a joint design and optimization of access and backhaul, operation and management algorithms, and architectural elements, integrating small cells, heterogeneous backhaul and centralized processing. Additionally to the development of technology candidates across PHY, MAC, and the network layer, iJOIN will study the requirements, constraints and implications for existing mobile networks, specifically 3GPP LTE-A.

In January 2013, a new EU project named CROWD (Connectivity management for eneRgy Optimised Wireless Dense networks) was launched under the technical supervision of IMDEA Networks Institute, to design sustainable networking and software solutions for the deployment of very dense, heterogeneous wireless networks. The project targets sustainability targeted in terms of cost effectiveness and energy efficiency. Very high density means 1000x higher than current density (users per square meter). Heterogeneity involves multiple dimensions, from coverage radius to technologies (4G/LTE vs. Wi-Fi), to deployments (planned vs. unplanned distribution of radio base stations and hot spots).

In September 2013, the Cyber-Physical System (CPS) Lab at Rutgers University, NJ, started to work on dynamic provisioning and allocation under the emerging cloud radio-access network (C-RAN). They have shown that the dynamic demand-aware provisioning in the cloud will decrease the energy consumption while increasing the resource utilization.[23] They also have implemented a test bed for feasibility of C-RAN and developed new cloud-based techniques for interference cancellation. Their project is funded by the National Science Foundation.

In November 2013, Chinese telecom equipment vendor Huawei said it will invest $600 million in research for 5G technologies in the next five years.[24] The company's 5G research initiative does not include investment to productize 5G technologies for global telecom operators. Huawei will be testing 5G technology in Malta.[25][26]

In 2015, Huawei and Ericsson are testing 5G-related technologies in rural areas in northern Netherlands.[27]

In July 2015, the METIS-II and 5GNORMA European projects were launched. The METIS-II project [28] builds on the successful METIS project and will develop the overall 5G radio access network design and to provide the technical enablers needed for an efficient integration and use of the various 5G technologies and components currently developed. METIS-II will also provide the 5G collaboration framework within 5G-PPP for a common evaluation of 5G radio access network concepts and prepare concerted action towards regulatory and standardisation bodies. On the other hand, the key objective of 5G NORMA is to develop a conceptually novel, adaptive and future-proof 5G mobile network architecture. The architecture is enabling unprecedented levels of network customisability, ensuring stringent performance, security, cost and energy requirements to be met; as well as providing an API-driven architectural openness, fuelling economic growth through over-the-top innovation. With 5G NORMA, leading players in the mobile ecosystem aim to underpin Europe's leadership position in 5G.[29]

Additionally, in July 2015, the European research project mmMAGIC was launched. The mmMAGIC project will develop new concepts for mobile radio access technology (RAT) for mmwave band deployment. This is a key component in the 5G multi-RAT ecosystem and will be used as a foundation for global standardization. The project will enable ultrafast mobile broadband services for mobile users, supporting UHD/3D streaming, immersive applications and ultra-responsive cloud services. A new radio interface, including novel network management functions and architecture components will be designed taking as guidance 5G PPP's KPI and exploiting the use of novel adaptive and cooperative beam-forming and tracking techniques to address the specific challenges of mm-wave mobile propagation. The ambition of the project is to pave the way for a European head start in 5G standards and to strengthen European competitiveness. The consortium brings together major infrastructure vendors, major European operators, leading research institutes and universities, measurement equipment vendors and one SME.

mmMAGIC is led and coordinated by Samsung. Ericsson acts as technical manager while Intel, Fraunhofer HHI, Nokia, Huawei and Samsung will each lead one of the five technical work packages of the project. [30]

In July 2015, IMDEA Networks launched the Xhaul project, as part of the European H2020 5G Public-Private Partnership (5G PPP). Xhaul will develop an adaptive, sharable, cost-efficient 5G transport network solution integrating the fronthaul and backhaul segments of the network. This transport network will flexibly interconnect distributed 5G radio access and core network functions, hosted on in-network cloud nodes. Xhaul will greatly simplify network operations despite growing technological diversity. It will hence enable system-wide optimisation of Quality of Service (QoS) and energy usage as well as network-aware application development. The Xhaul consortium comprises 21 partners including leading telecom industry vendors, operators, IT companies, small and medium-sized enterprises and academic institutions. [31]

In July 2015, the European 5G research project Flex5Gware was launched. The objective of Flex5Gware is to deliver highly reconfigurable hardware (HW) platforms together with HW-agnostic software (SW) platforms targeting both network elements and devices and taking into account increased capacity, reduced energy footprint, as well as scalability and modularity, to enable a smooth transition from 4G mobile wireless systems to 5G. This will enable that 5G HW/SW platforms can meet the requirements imposed by the anticipated exponential growth in mobile data traffic (1000 fold increase) together with the large diversity of applications (from low bit-rate/power for M2M to interactive and high resolution applications).[32]

In July 2015, the SUPERFLUIDITY project, part of the European H2020 Public-Private Partnership (5G PPP) and led by CNIT, an Italian inter-university consortium, was started. The SUPERFLUIDITY consortium comprises telcos and IT players for a total of 18 partners. In physics, superfluidity is a state in which matter behaves like a fluid with zero viscosity. The SUPERFLUIDITY project aims at achieving superfluidity in the Internet: the ability to instantiate services on-the-fly, run them anywhere in the network (core, aggregation, edge) and shift them transparently to different locations. The project tackles crucial shortcomings in today's networks: long provisioning times, with wasteful over-provisioning used to meet variable demand; reliance on rigid and cost-ineffective hardware devices; daunting complexity emerging from three forms of heterogeneity: heterogeneous traffic and sources; heterogeneous services and needs; and heterogeneous access technologies, with multi-vendor network components. SUPERFLUIDITY will provide a converged cloud-based 5G concept that will enable innovative use cases in the mobile edge, empower new business models, and reduce investment and operational costs. [33]

In September 2016, China's Ministry of Industry and Information Technology announced that the government-led 5G Phase-1 tests of key wireless technologies for future 5G networks were completed with satisfactory results.[34] The tests were carried out in 100 cities and involved seven companies – Datang Telecom, Ericsson, Huawei, Intel, Nokia Shanghai Bell, Samsung and ZTE. The next step in 5G technology development involving trials is under way, with planned commercial deployment in 2022 or 2023.

4 Research

The first widely cited proposal for the use of millimeter wave spectrum for cellular/mobile communications appeared in the IEEE Communications Magazine in June 2011.[35] The first reports of radio channel measurements that validated the ability to use millimeter wave frequencies for urban mobile communication were published in April and May 2013 in the *IEEE Access Journal* and *IEEE Transactions on Antennas and Propagation*, respectively.[36][37]

The *IEEE Journal on Selected Areas in Communications* published a special issue on 5G in June 2014, including, a comprehensive survey of 5G enabling technologies and solutions.[38] *IEEE Spectrum* has a story about millimeter-wave wireless communications as a viable means to support 5G in its September 2014 issue.[39]

- Radio propagation measurements and channel models for millimeter-wave wireless communication in both outdoor and indoor scenarioes in the 28, 38, 60 and 72–73 GHz bands were published in 2014.[40][41]

- Massive MIMO: This is a transmission point equipped with a very large number of antennas that simultaneously serve multiple users. With massive MIMO multiple messages for several terminals can be transmitted on the same time-frequency resource, maximizing beamforming gain while minimizing interference.[42][43][44][45][46][47]

- Three Dimensional Beamforming (3DBF): utilizing hundreds of antennas at base station which performs in millimeter wave spectrum results in a highly directional antenna beam that can be steered to a desired direction which optimizes some performance metric of the network.[48]

- Proactive content caching at the edge: While network densification (i.e., adding more cells) is one way to achieve higher capacity and coverage, it becomes evident that the cost of this operation might not be sustainable as the dense deployment of base stations also requires high-speed expensive backhauls. In this regard, assuming that the backhaul is

capacity-limited, caching users' contents at the edge of the network (namely at the base stations and user terminals) holds as a solution to offload the backhaul and reduce the access delays to the contents.[49][50] In any case, caching contents at the edge aim to solve the problem of reducing the end-to-end delay, which is one of the requirements of 5G. Caching can be particularly enabled by leveraging user context information from sources such as mobility and social metrics.[51][52][53] The upcoming special issue of IEEE Communications Magazine aims to argue massive content delivery techniques in cache-enabled 5G wireless networks.[54][55]

- Advanced interference and mobility management, achieved with the cooperation of different transmission points with overlapped coverage, and encompassing the option of a flexible use of resources for uplink and downlink transmission in each cell, the option of direct device-to-device[55] transmission and advanced interference cancellation techniques.[56][57][58][59]

- Efficient support of machine-type devices to enable the Internet of Things with potentially higher numbers of connected devices, as well as novel applications, such as mission-critical control or traffic safety, requiring reduced latency and enhanced reliability.[4]

- Use of millimeter-wave frequencies (e.g. up to 90 GHz) for wireless backhaul and/or access (IEEE rather than ITU generations).[4]

- Pervasive networks providing Internet of things, wireless sensor networks and *ubiquitous computing*: The user can be connected simultaneously to several wireless access technologies and can move seamlessly between them (See Media independent handover or vertical handover, IEEE 802.21, also expected to be provided by future 4G releases. See also multihoming.). These access technologies can be 2.5G, 3G, 4G, or 5G mobile networks, Wi-Fi, WPAN, or any other future access technology. In 5G, the concept may be further developed into multiple concurrent data-transfer paths.[60]

- Multiple-hop networks: A major issue in systems beyond 4G is to make the high bit rates available in a larger portion of the cell, especially to users in an exposed position in between several base stations. In current research, this issue is addressed by cellular repeaters and macro-diversity techniques, also known as group cooperative relay, where users also could be potential cooperative nodes, thanks to the use of direct device-to-device (D2D) communication.[55]

- Wireless network virtualization: Virtualization will be extended to 5G mobile wireless networks. With wireless network virtualization, network infrastructure can be decoupled from the services that it provides, where differentiated services can coexist on the same infrastructure, maximizing its utilization. Consequently, multiple wireless virtual networks operated by different service providers (SPs) can dynamically share the physical substrate wireless networks operated by mobile network operators (MNOs). Since wireless network virtualization enables the sharing of infrastructure and radio spectrum resources, the capital expenses (CapEx) and operation expenses (OpEx) of wireless (radio) access networks (RANs), as well as core networks (CNs), can be reduced significantly. Moreover, mobile virtual network operators (MVNOs) who may provide some specific telecom services (e.g., VoIP, video call, over-the-top services) can help MNOs attract more users, while MNOs can produce more revenue by leasing the isolated virtualized networks to them and evaluating some new services.[61]

- Cognitive radio technology, also known as smart radio. This allows different radio technologies to share the same spectrum efficiently by adaptively finding unused spectrum and adapting the transmission scheme to the requirements of the technologies currently sharing the spectrum. This dynamic radio resource management is achieved in a distributed fashion and relies on software-defined radio.[62][63] See also the IEEE 802.22 standard for Wireless Regional Area Networks.

- Dynamic Adhoc Wireless Networks (DAWN),[8] essentially identical to Mobile ad hoc network (MANET), Wireless mesh network (WMN) or wireless grids, combined with smart antennas, cooperative diversity and flexible modulation.

- Vandermonde-subspace frequency division multiplexing (VFDM): a modulation scheme to allow the co-existence of macro cells and cognitive radio small cells in a two-tiered LTE/4G network.[64]

- IPv6, where a visiting mobile IP care-of address is assigned according to location and connected network.[60]

- Wearable devices with AI capabilities.[8] such as smartwatches and optical head-mounted displays for augmented reality

- One unified global standard.[8]

- *Real wireless world* with no more limitation with access and zone issues.[60]

- *User centric* (or *cell phone developer initiated*) network concept instead of operator-initiated (as in 1G) or system developer initiated (as in 2G, 3G and 4G) standards[65]

- Li-Fi (a portmanteau of *light* and *Wi-Fi*) is a massive MIMO visible light communication network to advance 5G. Li-Fi uses light-emitting diodes to transmit data, rather than radio waves like Wi-Fi.[66]
- *Worldwide wireless web* (WWWW), i.e. comprehensive wireless-based web applications that include full multimedia capability beyond 4G speeds.[8]

5 History

- In April 2008, NASA partnered with Geoff Brown and Machine-to-Machine Intelligence (M2Mi) Corp to develop 5G communication technology[10]
- In 2008, the South Korean IbjngT R&D program of "5G mobile communication systems based on beam-division multiple access and relays with group cooperation" was formed.[19]
- In August 2012, New York University founded NYU WIRELESS, a multi-disciplinary academic research center that has conducted pioneering work in 5G wireless communications.[67][68][69]
- On October 8, 2012, the UK's University of Surrey secured £35M for a new 5G research center, jointly funded by the British government's UK Research Partnership Investment Fund (UKRPIF) and a consortium of key international mobile operators and infrastructure providers, including Huawei, Samsung, Telefonica Europe, Fujitsu Laboratories Europe, Rohde & Schwarz, and Aircom International. It will offer testing facilities to mobile operators keen to develop a mobile standard that uses less energy and less radio spectrum while delivering speeds faster than current 4G with aspirations for the new technology to be ready within a decade.[70][71][72][73]
- On November 1, 2012, the EU project "Mobile and wireless communications Enablers for the Twenty-twenty Information Society" (METIS) starts its activity towards the definition of 5G. METIS achieved an early global consensus on these systems. In this sense, METIS played an important role of building consensus among other external major stakeholders prior to global standardization activities. This was done by initiating and addressing work in relevant global fora (e.g. ITU-R), as well as in national and regional regulatory bodies.[74]
- Also in November 2012, the iJOIN EU project was launched, focusing on "small cell" technology, which is of key importance for taking advantage of limited and strategic resources, such as the radio wave spectrum. According to Günther Oettinger, the European Commissioner for Digital Economy and Society (2014–19), "an innovative utilization of spectrum" is one of the key factors at the heart of 5G success. Oettinger further described it as "the essential resource for the wireless connectivity of which 5G will be the main driver".[75] iJOIN was selected by the European Commission as one of the pioneering 5G research projects to showcase early results on this technology at the Mobile World Congress 2015 (Barcelona, Spain).
- In February 2013, ITU-R Working Party 5D (WP 5D) started two study items: (1) Study on IMT Vision for 2020 and beyond, and; (2) Study on future technology trends for terrestrial IMT systems. Both aiming at having a better understanding of future technical aspects of mobile communications towards the definition of the next generation mobile.
- On May 12, 2013, Samsung Electronics stated that they have developed a "5G" system. The core technology has a maximum speed of tens of Gbit/s (gigabits per second). In testing, the transfer speeds for the "5G" network sent data at 1.056 Gbit/s to a distance of up to 2 kilometres.with the use of an 8*8 MIMO.[76][77]
- In July 2013, India and Israel have agreed to work jointly on development of fifth generation (5G) telecom technologies.[78]
- On October 1, 2013, NTT (Nippon Telegraph and Telephone), the same company to launch world's first 5G network in Japan, wins Minister of Internal Affairs and Communications Award at CEATEC for 5G R&D efforts[79]
- On November 6, 2013, Huawei announced plans to invest a minimum of $600 million into R&D for next generation 5G networks capable of speeds 100 times faster than modern LTE networks.[80]
- On May 8, 2014, NTT DoCoMo start testing 5G mobile networks with Alcatel Lucent, Ericsson, Fujitsu, NEC, Nokia and Samsung.[81]
- In June 2014, the EU research project CROWD was selected by the European Commission to join the group of "early 5G precursor projects". These projects contribute to the early showcasing of potential technologies for the future ubiquitous, ultra-high bandwidth "5G" infrastructure. CROWD was included in the list of demonstrations at the European Conference on Networks and Communications (EuCNC) organized by the EC in June 2014 (Italy).
- In October 2014, the research project TIGRE5-CM (Integrated technologies for management and operation of 5G networks) is launched with the aim to design an architecture for future generation mobile networks, based on the SDN (Software Defined Networking) paradigm. IMDEA Networks Institute is the project coordinator.

- In November 2014, it was announced that Megafon and Huawei will be developing a 5G network in Russia. A trial network will be available by the end of 2017, just in time for the 2018 World Cup.[82][83]
- On November 19, 2014, Huawei and SingTel announced the signing of a MoU to launch a joint 5G innovation program.[84]
- On June 22, 2015, Greek government announced to Euro-group council talks that potential licensing 5G and 4G technology would offer 350 million euros earnings, as a result they were criticized for misleading European leaders in producing potential earnings from a technology that is supposed to roll-out after 2020.[85]
- On July 1, 2015, METIS-II project was launched. This project aims at designing the 5G radio access network, building the basis for the multi-service allocation on an holistic cross-layer and cross-air interface framework.[28]
- On September 8, 2015, Verizon announced a roadmap to begin testing 5G in field trials in the United States in 2016.[86]
- On October 1, 2015, the French Operator Orange announced to be about to deploy 5G technologies to begin the first trial in January 2016 in Belfort, a City of Eastern France.[87]
- On January 22, 2016, the Swedish mobile network equipment maker Ericsson said it had partnered with TeliaSonera to develop 5G services based on TeliaSonera's network and Ericsson's 5G technology. The partnership aims to provide 5G services to TeliaSonera customers in Stockholm, Sweden and Tallinn, Estonia in 2018. Sweden has long been a pioneer ICT nation and notably Ericsson and TeliaSonera launched the world's first commercial 4G network in Sweden in 2009.[88]
- On February 22, 2016, NTT DoCoMo and Ericsson succeed in World's first trial to achieve a cumulative 20Gbit/s with two simultaneously connected mobile devices in 5G outdoor trial.[89]
- Also on February 22, 2016, Samsung and Verizon joined to begin trial for 5G.[90]
- On January 29, 2016, Google revealed that they are developing a 5G network called SkyBender. They planned to distribute this connection through sun-powered drones.[91]
- In mid-March 2016, the UK government confirmed plans to make the UK a world leader in 5G. Plans for 5G are little more than a footnote in the country's 2016 budget, but it seems the UK government wants it to be a big focus going forward.[92]
- On June 2, 2016, the first comprehensive book on 5G was launched. The book "5G Mobile and Wireless Communications Technology" by Cambridge University Press is edited by Afif Osseiran (Ericsson), Jose F. Monserrat (UPV) and Patrick Marsch (Nokia Bell Labs) and covers everything from the most likely use cases, spectrum aspects, and a wide range of technology options to potential 5G system architectures.[4]
- On October 17, 2016, Qualcomm announced the first 5G modem, the Snapdragon X50, as the first commercial 5G mobile chipset.[93][94]

6 See also

- List of mobile phone generations
- Femtocell
- IEEE 802.11u authentication
- IEEE P1905 hybrid networking
- Ka band
- OpenFlow/OpenRadio for sharing backhaul.
- Picocell
- Ultra-wideband (UWB)
- 3GPP (Mobile standards for 5G will start in 3GPP Release 15 of the standard)

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8 Further reading

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- Osseiran, Afif; Monserrat, Jose F., Marsch, Patrick (2 June 2016). *5G Mobile and Wireless Communications Technology* (1 ed.). Cambridge University Press. p 410. ISBN 9781107130098. Written by leading experts in 5G research, this book is a comprehensive overview of the current state of 5G.
- Madhusanka Liyanage, Mika Ylianttila, Andrei Gurtov (August 2016), Software Defined Mobile Networks (SDMN) : Beyond LTE Network Architecture, Wiley Publishers, p 438. ISBN 978-1-118-90028-4. This book describes the concept of a Software Defined Mobile Network (SDMN), which provide the baseline for 5G networks. The reader will be introduced to cutting-edge knowledge in areas such as network virtualization, as well as SDN concepts relevant to next generation mobile networks. [Liyanage, Madhusanka (2015). *Software Defined Mobile Networks (SDMN): Beyond LTE Network Architecture*. UK: Wiley Publishers. pp. 1–438. ISBN 978-1-118-90028-4.]

9 External links

- 5G Technology Technical Paper
- Information About Generation 5G
- Applications of 5G
- 2016 -- the year testing of 5G wireless really took off

10 Text and image sources, contributors, and licenses

10.1 Text

- **5G** *Source:* https://en.wikipedia.org/wiki/5G?oldid=764527729 *Contributors:* Michael Hardy, Topbanana, Macrakis, DmitryKo, Discospinster, Andros 1337, StephanKetz, Jlin, Etrigan, Mduvekot, Wiki-uk, Wtmitchell, Mindmatrix, DePiep, Rjwilmsi, Trlovejoy, Naraht, Nihiltres, Bgwhite, Bhny, Cwlq, Stephenb, Bachrach44, Arthur Rubin, Mhenriday, SmackBot, Alistair9210, Jenny MacKinnon, Frap, KevM, Khazar, Oioisaveloy, Swellesley, Kashmiri, Melody Concerto, Mark999, Kvng, Wikid77, Hollomis, Headbomb, Dawkeye, Ice Ardor, Widefox, MER-C, Acroterion, Magioladitis, XAKxRUSx, Hekerui, David Eppstein, DGG, An Sealgair, Jim.henderson, Drewmutt, R'n'B, Mange01, Acalamari, Shadowaltar, Psheld, Jpgs, Oshwah, GcSwRhIc, Lordvolton, WereSpielChequers, Flyer22 Reborn, Jimthing, RSStockdale, Sfan00 IMG, Plastikspork, Supremedemency, Muhandes, Arjayay, InternetMeme, Amitnaik, XLinkBot, Dthomsen8, MystBot, Cabayi, Addbot, Satbuff, MrOllie, C933103, Luckas-bot, Yobot, Ptbotgourou, KamikazeBot, Langthorne, AnomieBOT, Jim1138, Jo3sampl, Ulric1313, Materialscientist, Citation bot, DynamoDegsy, Xqbot, Anna Frodesiak, Omnipaedista, SilverSurfer477, Shadowjams, A.amitkumar, FrescoBot, Ch Th Jo, Nageh, Sanpitch, SpacemanSpiff, Jonesey95, Hessamnia, Robvanvee, Trappist the monk, Mean as custard, RjwilmsiBot, EmausBot, John of Reading, WikitanvirBot, Dewritech, Primefac, RA0808, ZéroBot, Illegitimate Barrister, Thayora, Daveburstein, Donner60, Ftprinc, ChuispastonBot, Marcelocantos, Cgt, ClueBot NG, Widr, Damionpaulhart, Helpful Pixie Bot, Novusuna, Privatechef, Ejder.bastug, Imthiyaz5g, BG19bot, AvocatoBot, Mytelecom, Civeel, Suryaips, Andreas.kagedal, Piano1900, Demsiti, Hamish59, Sni56996, Klilidiplomus, Theemstra, MeanMotherJr, BattyBot, 3enix, Cleliasayswhat, John from Idegon, Jules Brunet, EuroCarGT, Alxsnc12, TomoK12, Mogism, Digitalcrowd, Yoshiman6464, Frosty, MrCellular, Freshman404, Vanamonde93, Melonkelon, Ffclr1, Biogeographist, Psatsankhya, Jakec, Kevin Thomas 3G, DavidLeighEllis, DRLWorthington, Comp.arch, Nightwalker-87, Wiskica, Melody Lavender, Acc12345acc, D Eaketts, Jomondel, SJ Defender, Dario.sabella, Fixuture, Wow560, Tamersaadeh, Drvipinlalt, Wyn.junior, Ogunasek, 22merlin, Melcous, Jackiecsq123, DrBoris1, Ebonelm, Cheval55, A Great Catholic Person, Alex1961, Quantumofthought, Manunamboodiri, Shahzad.tut, Dorivaldo de C. M. dos Santos, Aytk, Jtxxtj, Alimxd1, Alexm38, DiscantX, Enkakad, Infopaktel, Sunilkumargc, Jerodlycett, Sridhar vasanth sri, Srednuas Lenoroc, Hafiz Badar Zubair, Hajisamik, Crazy crayon, Jbmorman, PHPN, H.dryad, Harmon758, IAmJefferson, Chillatulit, Vec3243, Massoune, Nyanya999, IOSHAM, Bender the Bot, Jaroslav Holoubek, Isbenson, Onyx Delta, Elenaneira, WikiUser2211, Iadmc, Politics Guy, Vinayrana420, Sep Pels, Math junky and Anonymous: 251

10.2 Images

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EXHIBIT 7
MC16-05

From: Friends of Prune Hill [mailto:friendsofprunehill@gmail.com]
Sent: Monday, October 03, 2016 3:48 PM
To: City Council Members (GRP) <CityCouncilGRP@cityofcamas.us>; Community Development Email <communitydevelopment@cityofcamas.us>
Subject: 16-015 (Cell Tower Moratorium) Public Comment

Hello,

As I will be unable to attend the meeting this evening, I am submitting comments on behalf of the Friends of Prune Hill in writing.

The attached document was previously submitted to the City of Camas, and is being submitted again under 16-015, for review by the council.

We request a working group, comprised of city staff and public volunteers, be created to conduct further research regarding the best next steps to take to update the current Camas municipal code(s) associated with cell towers. The working group should be provided with an appropriate amount of time (i.e., 60 days minimum) to complete their work.

The work (by city staff) should include, but not be limited to, contacting other cities and obtaining information on the steps taken (by those cities) to address the issues we are presently faced with.

At a minimum, the updated code(s) should:

1. Prohibit cell towers in residential zones except through a rigid process, such as a variance, as required to comply with federal law;
2. Tighten up application requirements and approval criteria to better address a significant gap in service;
3. Include a requirement that all applications for new cell towers include an alternative configuration analysis;
4. Include a requirement that applicants for new cell towers include must perform an alternative sites analysis to study alternative locations to ensure there are no other sites more suitable (i.e., available sites with preferable commercial or industrial zoning);
5. Adjust height limits to clearly prohibit heights greater than necessary to fill the identified service gap;
6. Address new and emerging cell technology, including, but not limited to Distributed Antenna Systems (DAS), and Micro Cells.

Additionally, the city should obtain an evaluation by an electrical engineering consultant of the City's topography and provider cell phone coverage areas. Areas which have the potential to address any potential gaps in service could be identified. The consultant could identify specific locations for larger scale towers and recommend coverage options for mid-scale development (smaller towers) or attached panels. Having laid the appropriate technical foundation, the City and its citizens would not then need to rely on the experts provided by a development permit

applicant in the process but would have laid its own scientific and professional evaluation basis for regulation.

Again, we appreciate the city council's efforts to date. We look forward to working with the city on this important issue.

Regards,

Glenn Watson
On Behalf of the Friends of Prune Hill

AGENDA ITEM SUMMARY
February 22, 2016

To: Eugene Planning Commission

From: Anne C. Davies, City Attorney's Office

Subject: Cell Tower Code Changes

ACTION REQUESTED
This work session is an opportunity to provide the Planning Commission with an introduction to a package of land use code changes to the City's requirements for siting cell towers.

BRIEFING STATEMENT
Late last year, City Council directed staff to initiate code changes to the city's telecommunications ordinance. The proposed changes are intended to provide further protections to residential areas from the adverse impacts of cell towers, while complying with federal regulations designed to protect telecommunications companies from certain local government regulations. In particular, local government regulations may not prohibit or have the effect of profiting the provision of wireless services. That is, the telecommunications companies must be allowed to construct facilities where such facilities are needed to fill a "significant gap in service."

The City Council identified four specific areas for revision, based on the City Attorney's review of recent changes to the City of Glendale, California's cell tower regulations. Those four areas are outlined in the City Attorney's memo to the City Council, dated October 21, 2015, provided as part of Attachment A. In summary, the Council directed staff to revise the cell tower provisions to:

1. Prohibit cell towers in residential zones except through a process, such as a variance, as required to comply with federal law;
2. Tighten up application requirements and approval criteria to better address a significant gap in service;
3. Include a requirement that all applications for new cell towers include an alternative configuration analysis;
4. Adjust height limits to clearly prohibit heights greater than necessary to fill the identified service gap.

FOR MORE INFORMATION
Anne C. Davies: 541-682-8447, anne.c.davies@ci.eugene.or.us

ATTACHMENT
A. City Council Agenda Item Summary (AIS) for November 9, 2015

EUGENE CITY COUNCIL
AGENDA ITEM SUMMARY

Work Session: Cell Towers

Meeting Date: November 9, 2015 | Agenda Item Number: A
Department: Planning and Development | Staff Contact: Steve Nystrom
www.eugene-or.gov | Contact Telephone Number: 541-682-8385

ISSUE STATEMENT
This work session is an opportunity for the City Council to discuss a memo from the City Attorney's office concerning cell tower regulations.

BACKGROUND
This item is a follow-up to the work session the council previously held to discuss cell towers. That work session focused on the City's regulations, federal telecommunications standards and regulations of other select cities. At the conclusion of that work session, the council asked whether there was anything more the City could do, particularly within residential areas. The City Attorney offered to discuss this matter with the City's telecommunications consultant in Washington D.C. Based on his feedback, the City Attorney's office provided additional research and prepared a memo discussing those findings. Planning staff and legal counsel will be available at the work session to discuss this memo further.

While Eugene's ordinance has generally achieved the primary goal of minimizing the construction of new towers on residential lands (none built to date), there has been more recent interest from a couple of cell providers to locate a few towers in residential areas. As staff understands it, the cell providers have established the majority of their cell tower networks. However, a few pockets of poor service remain. It is this circumstance that has prompted the council to discuss whether there is more the City can do to regulate new towers in residential areas (primarily the R-1, Low-Density Residential zone).

As was discussed at the previous work session, the Federal Telecommunications Act stipulates the extent to which a local government may regulate telecommunication facilities. One of the key provisions of this federal act states that local government regulations may not prohibit, or "have the effect of prohibiting," the provision of personal wireless services. The City was successful in prohibiting cell towers in all residential zones except R-1 when it first adopted its ordinance. Given that the R-1 zoning district comprises the majority of land in the City, it was not legally possible to prohibit new towers in this zone as well.

Given these circumstances, the City Attorney's memo attempts to identify other possible actions

the City could consider. These suggestions generally include measures requiring cell providers to provide further analysis and justification that a proposed tower is necessary in the R-1 zone, and that all reasonable design alternatives have been considered. The memo also discusses other efforts underway by staff to encourage the use of emerging technologies which could help reduce visual impacts to neighborhoods.

Staff would note that while there currently is no capacity to undertake a code amendment process at this time, the City has begun a process of identifying potential amendments such as this which can be prioritized by the council in the future, as staff resources become available.

COUNCIL OPTIONS
This matter is before the City Council as a discussion item. No action is required.

CITY MANAGER'S RECOMMENDATION
No recommendation is necessary as this is a discussion item.

SUGGESTED MOTION
None.

ATTACHMENTS
A. Memo from City Attorney

FOR MORE INFORMATION
Staff Contact: Steve Nystrom
Telephone: 541-682-8385
Staff Email: steven.a.nystrom@ci.eugene.or.us

Eugene City Attorney's Office

Memorandum

Date: **October 21, 2015**

To: **Mayor and City Council**

From: **Anne C. Davies**

Subject: **Cell Tower Update**

In December of last year, staff provided council with a brief summary of the City's regulations related to siting cell towers. Staff outlined the limitations that federal law places on the City and what measures are embodied in the current Eugene Code that serve to protect residential neighborhoods from the impacts of cell towers. Councilor Taylor requested that staff outline measures that are not currently in the code that could be added to provide further protections. Interested citizens pointed to the City of Glendale in California for possible guidance.

As suggested in that December 8th work session, we contacted the City's consultant in Washington D.C. to inquire whether he was aware of any other local jurisdictions, nationwide, that had regulations that Eugene could adopt that would provide greater protections to residential neighborhoods. The consultant was not aware of any specific local governments that stood out, but commented that generally New York and California were viewed as the states with local governments that had the most protective regulations. We have also reviewed relevant code provisions from Palo Alto and Davis, California.

Summary of Eugene's existing regulations

Before addressing the possible changes that might be made to Eugene's code, it is worth summarizing briefly the measures that Eugene already has in place to limit impacts from cell towers in residential areas. The Eugene Code currently creates a preference for collocation. Collocation on existing buildings, structures and utilities is favored over citing new cell towers in the code because collocations generally require less restrictive processes and approval criteria. In general, new towers are not allowed if cell service can be accommodated by collocation on existing towers. Where a new tower is necessary, the applicant must demonstrate that the new tower has the ability to accommodate future collocated antenna in order to minimize the need for additional towers.

The Eugene Code also has a strong preference for siting new towers in commercial and industrial zones over residential zones. New towers are not permitted at all in R-2, R-3 and R-4 zones. New towers are permitted outright in E-1, E-2, I-2 and I-3 zones, and are allowed in the R-1 zone with a conditional use permit. New towers are currently not allowed within 2,000 feet

of an existing tower. Further restrictions, including height limits, required buffering and camouflage, are intended to limit the adverse visual effects of cell towers.

As explained by staff, federal regulations do create some road blocks to the City's attempts to impose significant restrictions on the siting of new cell towers. Most importantly, under federal law, local regulations cannot have the effect of prohibiting the provision of wireless service. The City's current code addresses this federal prohibition – both the site review and conditional use permit criteria require an applicant that is proposing a new tower to demonstrate that collocation is impractical and fails to meet the needs of the service area before a new tower can be added.

Summary of Glendale's provisions

The City of Glendale's code was mentioned as a potential good example to consider. In reviewing Glendale's recent code revisions, a few points stand out. Glendale sought to strengthen the application requirements and limit new towers as much as possible to those towers and the characteristics of towers that were required to fill a service gap. The following are some elements of Glendale's code that are not present in Eugene's code.

1) Stronger application requirements: In Glendale, an applicant proposing to site a new tower must identify the geographic service area for the subject installation, including a map showing all of the applicant's existing sites in the local service network associated with coverage gap that the proposed tower is meant to close. The application must describe how the proposal will close that service gap.
2) Least intrusive means: In Glendale, a proposed tower cannot be taller than is necessary to serve the gap. In other jurisdictions, an applicant must demonstrate that the proposed tower is necessary to fill a significant gap in coverage or capacity shortfall and is the "least intrusive means of doing so."
3) Maintenance and Monitoring Program: Glendale's monitoring program includes the ability to require maintenance of landscaping and other mitigation measures.
4) Alternative Designs: In Eugene, an applicant for a new tower must perform an alternative sites analysis to study alternative locations to ensure there are no other sites more suitable; *i.e.*, available sites with preferable zoning. In Glendale, the alternatives analysis does not only include alternative sites, it requires the applicant to demonstrate that it has considered alternative configurations (*i.e.*, system and tower designs) so that the proposed tower is the least intrusive possible.

Possible revisions to strengthen Eugene's wireless regulation

1) Towers in residential zones: New towers are allowed in the R-1, Low Density Residential zone under Eugene's code, although they are disfavored, as explained above. Davis, California prohibits new towers in residential zones. Given the amount of City land zoned R-1, if Eugene were to prohibit siting new towers in this zone, it would have to

provide a variance process to allow new towers where necessary to fill a significant gap in service.

2) Application requirements: Although an absolute prohibition in residential areas is not possible, the application requirements and approval criteria could be amended to clearly require a demonstration of a significant service gap and how the proposed tower is needed to fill that gap. However, it should be noted that the few recent proposals submitted for residential areas did demonstrate a significant gap in service. Therefore, it's not clear that such an amendment would affect future proposals in residential areas.
3) Alternatives analysis: Eugene could add a clearer requirement that the applicant include an alternative configuration analysis.
4) Tower Height: In Eugene's code, the height of a tower is merely limited to the maximum height allowed in the particular zone. Both Davis and Glendale require the tower to be no taller than is necessary to fill the service gap.

Additional Measures

In addition to reviewing the telecommunication regulations of other cities, staff is currently exploring other emerging technologies which may help minimize the need for new towers in the future. "Small Cell" technologies is a newer strategy for accommodating ever increasing data demands. These facilities are much smaller in size and can be collocated on a variety of structures and utilities, with minimal visual impact. While small cell facilities don't completely replace the need for towers, they do help augment telecommunication services which can help minimize the need for future towers. Staff believes these new technologies offer a positive alternative to the typical antenna designs.

Conclusion

Federal regulations do limit to some degree the steps local governments can take in prohibiting cell towers. However, technologies continue to improve – many carriers now prefer smaller equipment (small cells) that do not completely replace the need for towers, but that do provide an alternative for filling certain gaps in coverage. It is arguable that Eugene's code is adequate to address those changes in technology, but there may be updates and revisions that could be made to strengthen and make the code more clear.

EXHIBIT 8
MC16-05

From: Friends of Prune Hill [mailto:friendsofprunehill@gmail.com]
Sent: Monday, October 03, 2016 4:02 PM
To: City Council Members (GRP) <CityCouncilGRP@cityofcamas.us>; Community Development Email <communitydevelopment@cityofcamas.us>
Subject: Re: 16-015 (Cell Tower Moratorium) Public Comment

And, as the purpose of tonight's hearing is associated with the continuation of the moratorium, the Friends of Prune Hill strongly request and support the continued moratorium. We recommend the city to move ahead with the proposed work plan as described in ordinance 16-015.

Regards,

Glenn Watson

EXHIBIT 9
MC16-05

From: Phil Bourquin
Sent: Tuesday, October 04, 2016 9:14 AM
To: 'friendsofprunehill@gmail.com'
Subject: RE: 16-015 (Cell Tower Moratorium) Public Comment

Mr. Watson – This email is to confirm receipt of the two emails and that they have been included in the record on the Moratorium.

The next step as identified in the work plan will involve a hearing before the Planning Commission on November 15, 2016, at 7 PM in the City Council Chamber, 616 NE Fourth Avenue. The testimony received at the Planning Commission hearing will help in forming the issues and scope of work -- Your email and attached exhibit from the City of Eugene will be included in the packet to the Planning Commission for consideration on November 15th and are helpful to that end.

Sincerely,

Phil Bourquin
Community Development Director
City of Camas

From: Community Development Email
Sent: Tuesday, October 04, 2016 8:17 AM
To: Phil Bourquin
Subject: FW: 16-015 (Cell Tower Moratorium) Public Comment

2nd email..

From: Friends of Prune Hill [mailto:friendsofprunehill@gmail.com]
Sent: Monday, October 03, 2016 4:02 PM
To: City Council Members (GRP) <CityCouncilGRP@cityofcamas.us>; Community Development Email <communitydevelopment@cityofcamas.us>
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Regards,

Glenn Watson

On Mon, Oct 3, 2016 at 3:48 PM, Friends of Prune Hill <friendsofprunehill@gmail.com> wrote:
Hello,

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The attached document was previously submitted to the City of Camas, and is being submitted again under 16-015, for review by the council.

We request a working group, comprised of city staff and public volunteers, be created to conduct further research regarding the best next steps to take to update the current Camas municipal code(s) associated with cell towers. The working group should be provided with an appropriate amount of time (i.e., 60 days minimum) to complete their work.

The work (by city staff) should include, but not be limited to, contacting other cities and obtaining information on the steps taken (by those cities) to address the issues we are presently faced with.

At a minimum, the updated code(s) should:

1. Prohibit cell towers in residential zones except through a rigid process, such as a variance, as required to comply with federal law;
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Additionally, the city should obtain an evaluation by an electrical engineering consultant of the City's topography and provider cell phone coverage areas. Areas which have the potential to address any potential gaps in service could be identified. The consultant could identify specific locations for larger scale towers and recommend coverage options for mid-scale development (smaller towers) or attached panels. Having laid the appropriate technical foundation, the City and its citizens would not then need to rely on the experts provided by a development permit applicant in the process but would have laid its own scientific and professional evaluation basis for regulation.

Again, we appreciate the city council's efforts to date. We look forward to working with the city on this important issue.

Regards,

Glenn Watson

On Behalf of the Friends of Prune Hill

Exhibit 10
MC16-05

November 15, 2016

Scott Higgins
Mayor
City of Camas
616 N.E. 4th Avenue
Camas, WA 98607

Re: Ordinance No. 16-015 and
Amendments to City Municipal Code

Dear Mr. Mayor:

This letter is written pursuant to the City Council's action on September 6, 2016 to adopt Ordinance No. 16-015 to declare an emergency moratorium on further land use authorization, thereby prohibiting Wireless Communication Facilities as defined in RCW36.70A.390 and RCW 35.63.200, and to the further action on October 3, 2016 to confirm the extension of the moratorium. We address ourselves to the call in the Ordinance for consideration of amendments to the Camas Municipal Code Section 18.35.

We request that input from Camas residents, such as that which is contained herein, be duly considered by the staff and Planning Commission during the public hearing scheduled for November 15, 2016 and its workshop scheduled for February 22, 2017 and during the City Council workshop scheduled for March 6, 2017. We also request that all further input delivered to the City Council and staff after March 6, 2017 be duly considered prior to the staff's completion of its report and its recommendations for amendments on May 5, 2017.

INTRODUCTION

The recent staff approval of CUP 15-01, authrorizing a 175 foot tall telecommunications tower on Prune Hill created a perfect storm for the forthcoming discussions about the revision of the Camas Municipal Code ("Code").

There must at the outset be an awareness that the myth that has seemed to have permeated the minds of some City employees, namely that federal law preempts any local regulation of the telecommunication facilities, needs to be put to rest. It is difficult to understand why else there was (a) no objective scientific evidence required by the staff that a height of 175 feet was minimally required by the applicants' business, especially since the base of the proposed tower would begin at the highest point in the City and (b) no attempt was made by the staff to require employment of concealment technology, which Section 18-35 of the Code clearly authorizes. It is difficult to understand the staff's mind-set, but we note the staffer in this case is not a resident of

Camas. The foregoing is only part of the rationale for a substantial revision of the Code. Another goal should be to emphasize objectivity and the elimination of subjectivity in the decision-making process. A further goal is to document accountability at all levels of the City's government.

It is regrettable that the City Council heretofore saw fit to repeal former Section 18-34 of the Code. Section 18-34 had originally been adopted in 1992 after substantial community input, resulting in a protective measure that would have gone far to prevent the tragedy we Prune Hill residents now face. We seriously question the motivation for the repeal and the way it was accomplished.The result was the adoption of a woefully deficient Section 18-35. The deficiency has been compunded by the absence of periodic reviews of Section 18-35 by the City Council for the protection of the residents.The thinking embodied in former Section 18-34, therefore, must be fleshed out in the forthcoming review process.The logical times for review of the history of the legislation and germane ideas for the revisions would appear to be the Planning Commission hearing scheduled for November 15, 2016 and the subsequent workshops scheduled for the Planning Commission on February 22, 2017 and the City Council on March 6, 2017.

DISCUSSION

It is urgent that a comprehensive revision of Section 18-35 of the Code be accomplished, incorporating minimum objective standards for evaluating applications for telecommunication facilities and the criteria for approval.The CUP 15-01 approval revealed how painfully such decisions can impact the health, safety, welfare, views and property values of the nearby residents. If in fact the CUP 15-01 approved tower is to be constructed, the effect will be to render Prune Hill Estates and the surrounding developments into an industrial eyesore.

RECOMMENDATIONS

We offer the following concepts for developing a regime of rules for Section 18-35 as minimum standards:

1. We believe that the impacts of constructing telecommunication towers in residential areas can be so traumatic for the residents, that both Planning Commission and City Council reviews need to be required in the approval process.The rationale is two-fold: (a) The measure would alleviate the pressure on the staffer, who is at the least level of authority, and (b) it would establish accountability of the City Council to the community. In the case of the CUP 15-01 approval, despite the availability of remedial measures in Section 18-35, such as height restriction, concealment technology availability and mast restriction, the applications were approved as made. Moreover, despite our written pleas prior to the CUP-15-01 approval for the City Council to elevate consideration of the application to its level for a full airing of all the issues, we were

ignored and left with the damaging outcome. The accountability of the City Council should be built right into the ordinance. We the homeowners should not have to use our personal resources to seek relief through judicial proceedings, as we now have, to protect our interests when the protection we seek can be afforded by local law.

2. Applicants should be required to present documentary objective scientific evidence justifying the construction of a telecommunication facility in a given residential area. Of particular moment would be the justification for the applied-for tower height. Justification should also be required for the number and design of the masts and antennae to be affixed to the tower.

3. Justification should be required for the construction of towers closer to neighboring dwellings than 600 feet.

4. Objective documentary evidence should be required for justifying construction within wetlands and wildlife protection areas and within historically significant areas.

5. Objective evidence should be required as to how the health, safety, welfare, vews and property values will be protected. In the case of the CUP 15-1 approval, it was obvious that the areas on the east side of N.W. Astor Street, south of N.W. 16th Avenue were available and far more suitable from the standpoint of the affected residents. Everything about CUP 15-01 made it patently obvious that the applicants sought approval on the cheap. The municipalities as well as developers and other business owners have long been aware that business must pay its way in light of the long term rewards that are achieved by the enterprises.

The desire of the applicants in CUP 15-01 to save pennies by refusing to limit the tower to a reasonable height, to employ concelment technology or to seek a site less invasive to the residents should not have fallen as a burden upon the affected nearby residents.This was especially egregious inasmuch as the facility will not even serve Camas, but only other cities. It is not the residents of those other cities who will have to live with the approved monstrosity; we will.

6. Protective measures, such as the employment of specific plans or overlays in the residential zones can be used, which would document where in the zones telecommunication facilities are justified and where not. That approach is particularly needed on Prune Hill, where the CUP 15-01 approval should not be permitted to act as a precedent for the proliferation of towers anywhere else on the hill applicants choose without proper regulation.

7. Consideration should be given to the incorporation into the local historical register of areas of the City to be protected by including such areas within the jurisdiction of the Clark County Historic Preservation Commission.

We respecfully offer the foregoing thoughts for due consideration as the final language for the revision of Section 18.35 is conceived. We will be pleased to make ourselves available for any information, clarification or other assistance the staff or the Planning Manager might request. We repectfully request that copies of this letter be distributed to each of the persons enumerated below for copy recipients. We thank you in advance for this courtesy.

Robert I. Behar

Josephine Behar
Residence: 2120 N.W. Douglas Loop,Camas, WA
Mailing: P.O. Box 1010, Camas, WA 98607
(360) 834-2385

cc:Members of the City Council
Members of the Planning Commission
Peter Capell, City Administrator
Robert Maul, Planning Director
City Attorney

EXHIBIT 11
MC16-05

AGENDA ITEM SUMMARY
February 22, 2016

To: Eugene Planning Commission

From: Anne C. Davies, City Attorney's Office

Subject: Cell Tower Code Changes

ACTION REQUESTED
This work session is an opportunity to provide the Planning Commission with an introduction to a package of land use code changes to the City's requirements for siting cell towers.

BRIEFING STATEMENT
Late last year, City Council directed staff to initiate code changes to the city's telecommunications ordinance. The proposed changes are intended to provide further protections to residential areas from the adverse impacts of cell towers, while complying with federal regulations designed to protect telecommunications companies from certain local government regulations. In particular, local government regulations may not prohibit or have the effect of profiting the provision of wireless services. That is, the telecommunications companies must be allowed to construct facilities where such facilities are needed to fill a "significant gap in service."

The City Council identified four specific areas for revision, based on the City Attorney's review of recent changes to the City of Glendale, California's cell tower regulations. Those four areas are outlined in the City Attorney's memo to the City Council, dated October 21, 2015, provided as part of Attachment A. In summary, the Council directed staff to revise the cell tower provisions to:

1. Prohibit cell towers in residential zones except through a process, such as a variance, as required to comply with federal law;
2. Tighten up application requirements and approval criteria to better address a significant gap in service;
3. Include a requirement that all applications for new cell towers include an alternative configuration analysis;
4. Adjust height limits to clearly prohibit heights greater than necessary to fill the identified service gap.

FOR MORE INFORMATION
Anne C. Davies: 541-682-8447, anne.c.davies@ci.eugene.or.us

ATTACHMENT
A. City Council Agenda Item Summary (AIS) for November 9, 2015

EUGENE CITY COUNCIL
AGENDA ITEM SUMMARY

Work Session: Cell Towers

Meeting Date: November 9, 2015 | Agenda Item Number: A
Department: Planning and Development | Staff Contact: Steve Nystrom
www.eugene-or.gov | Contact Telephone Number: 541-682-8385

ISSUE STATEMENT
This work session is an opportunity for the City Council to discuss a memo from the City Attorney's office concerning cell tower regulations.

BACKGROUND
This item is a follow-up to the work session the council previously held to discuss cell towers. That work session focused on the City's regulations, federal telecommunications standards and regulations of other select cities. At the conclusion of that work session, the council asked whether there was anything more the City could do, particularly within residential areas. The City Attorney offered to discuss this matter with the City's telecommunications consultant in Washington D.C. Based on his feedback, the City Attorney's office provided additional research and prepared a memo discussing those findings. Planning staff and legal counsel will be available at the work session to discuss this memo further.

While Eugene's ordinance has generally achieved the primary goal of minimizing the construction of new towers on residential lands (none built to date), there has been more recent interest from a couple of cell providers to locate a few towers in residential areas. As staff understands it, the cell providers have established the majority of their cell tower networks. However, a few pockets of poor service remain. It is this circumstance that has prompted the council to discuss whether there is more the City can do to regulate new towers in residential areas (primarily the R-1, Low-Density Residential zone).

As was discussed at the previous work session, the Federal Telecommunications Act stipulates the extent to which a local government may regulate telecommunication facilities. One of the key provisions of this federal act states that local government regulations may not prohibit, or "have the effect of prohibiting," the provision of personal wireless services. The City was successful in prohibiting cell towers in all residential zones except R-1 when it first adopted its ordinance. Given that the R-1 zoning district comprises the majority of land in the City, it was not legally possible to prohibit new towers in this zone as well.

Given these circumstances, the City Attorney's memo attempts to identify other possible actions

the City could consider. These suggestions generally include measures requiring cell providers to provide further analysis and justification that a proposed tower is necessary in the R-1 zone, and that all reasonable design alternatives have been considered. The memo also discusses other efforts underway by staff to encourage the use of emerging technologies which could help reduce visual impacts to neighborhoods.

Staff would note that while there currently is no capacity to undertake a code amendment process at this time, the City has begun a process of identifying potential amendments such as this which can be prioritized by the council in the future, as staff resources become available.

COUNCIL OPTIONS
This matter is before the City Council as a discussion item. No action is required.

CITY MANAGER'S RECOMMENDATION
No recommendation is necessary as this is a discussion item.

SUGGESTED MOTION
None.

ATTACHMENTS
A. Memo from City Attorney

FOR MORE INFORMATION
Staff Contact: Steve Nystrom
Telephone: 541-682-8385
Staff Email: steven.a.nystrom@ci.eugene.or.us

Eugene City Attorney's Office

Memorandum

Date: **October 21, 2015**

To: **Mayor and City Council**

From: **Anne C. Davies**

Subject: **Cell Tower Update**

In December of last year, staff provided council with a brief summary of the City's regulations related to siting cell towers. Staff outlined the limitations that federal law places on the City and what measures are embodied in the current Eugene Code that serve to protect residential neighborhoods from the impacts of cell towers. Councilor Taylor requested that staff outline measures that are not currently in the code that could be added to provide further protections. Interested citizens pointed to the City of Glendale in California for possible guidance.

As suggested in that December 8th work session, we contacted the City's consultant in Washington D.C. to inquire whether he was aware of any other local jurisdictions, nationwide, that had regulations that Eugene could adopt that would provide greater protections to residential neighborhoods. The consultant was not aware of any specific local governments that stood out, but commented that generally New York and California were viewed as the states with local governments that had the most protective regulations. We have also reviewed relevant code provisions from Palo Alto and Davis, California.

Summary of Eugene's existing regulations

Before addressing the possible changes that might be made to Eugene's code, it is worth summarizing briefly the measures that Eugene already has in place to limit impacts from cell towers in residential areas. The Eugene Code currently creates a preference for collocation. Collocation on existing buildings, structures and utilities is favored over citing new cell towers in the code because collocations generally require less restrictive processes and approval criteria. In general, new towers are not allowed if cell service can be accommodated by collocation on existing towers. Where a new tower is necessary, the applicant must demonstrate that the new tower has the ability to accommodate future collocated antenna in order to minimize the need for additional towers.

The Eugene Code also has a strong preference for siting new towers in commercial and industrial zones over residential zones. New towers are not permitted at all in R-2, R-3 and R-4 zones. New towers are permitted outright in E-1, E-2, I-2 and I-3 zones, and are allowed in the R-1 zone with a conditional use permit. New towers are currently not allowed within 2,000 feet

of an existing tower. Further restrictions, including height limits, required buffering and camouflage, are intended to limit the adverse visual effects of cell towers.

As explained by staff, federal regulations do create some road blocks to the City's attempts to impose significant restrictions on the siting of new cell towers. Most importantly, under federal law, local regulations cannot have the effect of prohibiting the provision of wireless service. The City's current code addresses this federal prohibition – both the site review and conditional use permit criteria require an applicant that is proposing a new tower to demonstrate that collocation is impractical and fails to meet the needs of the service area before a new tower can be added.

Summary of Glendale's provisions

The City of Glendale's code was mentioned as a potential good example to consider. In reviewing Glendale's recent code revisions, a few points stand out. Glendale sought to strengthen the application requirements and limit new towers as much as possible to those towers and the characteristics of towers that were required to fill a service gap. The following are some elements of Glendale's code that are not present in Eugene's code.

1) Stronger application requirements: In Glendale, an applicant proposing to site a new tower must identify the geographic service area for the subject installation, including a map showing all of the applicant's existing sites in the local service network associated with coverage gap that the proposed tower is meant to close. The application must describe how the proposal will close that service gap.
2) Least intrusive means: In Glendale, a proposed tower cannot be taller than is necessary to serve the gap. In other jurisdictions, an applicant must demonstrate that the proposed tower is necessary to fill a significant gap in coverage or capacity shortfall and is the "least intrusive means of doing so."
3) Maintenance and Monitoring Program: Glendale's monitoring program includes the ability to require maintenance of landscaping and other mitigation measures.
4) Alternative Designs: In Eugene, an applicant for a new tower must perform an alternative sites analysis to study alternative locations to ensure there are no other sites more suitable; *i.e.*, available sites with preferable zoning. In Glendale, the alternatives analysis does not only include alternative sites, it requires the applicant to demonstrate that it has considered alternative configurations (*i.e.*, system and tower designs) so that the proposed tower is the least intrusive possible.

Possible revisions to strengthen Eugene's wireless regulation

1) Towers in residential zones: New towers are allowed in the R-1, Low Density Residential zone under Eugene's code, although they are disfavored, as explained above. Davis, California prohibits new towers in residential zones. Given the amount of City land zoned R-1, if Eugene were to prohibit siting new towers in this zone, it would have to

provide a variance process to allow new towers where necessary to fill a significant gap in service.

2) Application requirements: Although an absolute prohibition in residential areas is not possible, the application requirements and approval criteria could be amended to clearly require a demonstration of a significant service gap and how the proposed tower is needed to fill that gap. However, it should be noted that the few recent proposals submitted for residential areas did demonstrate a significant gap in service. Therefore, it's not clear that such an amendment would affect future proposals in residential areas.
3) Alternatives analysis: Eugene could add a clearer requirement that the applicant include an alternative configuration analysis.
4) Tower Height: In Eugene's code, the height of a tower is merely limited to the maximum height allowed in the particular zone. Both Davis and Glendale require the tower to be no taller than is necessary to fill the service gap.

Additional Measures

In addition to reviewing the telecommunication regulations of other cities, staff is currently exploring other emerging technologies which may help minimize the need for new towers in the future. "Small Cell" technologies is a newer strategy for accommodating ever increasing data demands. These facilities are much smaller in size and can be collocated on a variety of structures and utilities, with minimal visual impact. While small cell facilities don't completely replace the need for towers, they do help augment telecommunication services which can help minimize the need for future towers. Staff believes these new technologies offer a positive alternative to the typical antenna designs.

Conclusion

Federal regulations do limit to some degree the steps local governments can take in prohibiting cell towers. However, technologies continue to improve – many carriers now prefer smaller equipment (small cells) that do not completely replace the need for towers, but that do provide an alternative for filling certain gaps in coverage. It is arguable that Eugene's code is adequate to address those changes in technology, but there may be updates and revisions that could be made to strengthen and make the code more clear.

Exhibit 12
MC 16-05

CITY OF SPOKANE
ORDINANCE NO. C35312

An Ordinance Relating to Wireless Communication Facilities; repealing Chapter 17C.355 SMC; adopting a New Chapter 17C.355A SMC; amending SMC Section 17C.110.110, Table 17C.110-1, 17C.320.080, 17C.130.220, 17C.120.220, 17C.110.215, 17C.124.220, 17A.020.010, 17A.020.200, 17C.120.110, Table 17C.120-1, 17C.124.110, 17C.130.110, Table 17C.130-1, and 01.05.160, as those sections relate to wireless communications facilities; and Declaring an Emergency.

WHEREAS, Chapter 17C.355 SMC currently governs the City's regulation of wireless communication facilities; and

WHEREAS, some of the existing regulations for wireless communication facilities are more than ten years old and federal laws, regulations and court decisions, wireless technology and consumer usage have reshaped the environment within which Wireless Communications Facilities are permitted and regulated; and

WHEREAS, federal laws and regulations that govern local zoning standards and procedures for wireless communications have substantially changed since the City adopted Chapter 17C.355; and

WHEREAS, on March 9, 2015, the City Council adopted Ordinance No. C35243 imposing a moratorium on applications for new wireless communications support towers in the City's residential zones; and

WHEREAS, following the adoption of the moratorium, the City has been engaged in an extensive stakeholder process that has resulted in a substantial re-write of the City's regulations relating to wireless communications facilities; and

WHEREAS, following appropriate procedures and public notice, on October 14, 2015, the Spokane Plan Commission conducted a hearing on proposed amendments to the City's wireless communication facility regulations and recommended that the City Council approved the proposed amendments; and

WHEREAS, at the conclusion of its public hearing, the Plan Commission approved written findings, conclusions, and recommendation (the "Plan Commission Recommendation") which is incorporated into this Ordinance as if set forth fully herein; and

WHEREAS, on October 26, 2015, the City Council conducted a lawfully-noticed public hearing and received the report and recommendation of the Plan Commission regarding the Ordinance which modifies the code sections relating to wireless communication facilities; and

WHEREAS, the City Council of the City of Spokane desires to update its local standards and procedures to protect and promote the public health, safety and welfare of the City of Spokane community, to reasonably regulate wireless communication facilities aesthetics, to protect and promote the City's unique character in a manner consistent with State and federal laws and regulations; and

NOW, THEREFORE, THE CITY OF SPOKANE DOES ORDAIN:

SECTION 1. That Chapter 17C.355 of the Spokane Municipal Code is hereby repealed.

SECTION 2. That there is adopted a new Chapter 17C.355A of the Spokane Municipal Code to read as follows:

Chapter 17C.355A

Wireless Communication Facilities

Section 17C.355A.010 Purpose

The purpose of this Chapter is:

A. To protect the community's natural beauty, visual quality and safety while facilitating the reasonable and balanced provision of wireless communication services. More specifically, it is the City's goal to minimize the visual impact of wireless communication facilities on the community, particularly in and near residential zones;

B. To promote and protect the public health, safety and welfare, preserve the aesthetic character of the Spokane community, and to reasonably regulate the development and operation of wireless communication facilities within the City to the extent permitted under State and federal law;

C. To minimize the impact of WCFs by establishing standards for siting design and screening;

D. To encourage the collocation of antennas on existing structures, thereby minimizing new visual impacts and reducing the potential need for new towers that are built in or near residential zones by encouraging that WCFs first be located on buildings, existing towers or utility poles in public rights-of-way;

E. To protect residential zones from excessive development of WCFs;

F. To ensure that towers in or near residential zones are only sited when alternative facility locations are not feasible;

G. To preserve the quality of living in residential areas which are in close proximity to WCFs;

H. To preserve the opportunity for continued and growing service from the wireless industry;

I. To preserve neighborhood harmony and scenic viewsheds and corridors;

J. To accommodate the growing need and demand for wireless communication services;

K. To establish clear guidelines and standards and an orderly process for expedited permit application review intended to facilitate the deployment of wireless transmission equipment, to provide advanced communication services to the City, its residents, businesses and community at large;

L. To ensure City zoning regulations are applied consistently with federal telecommunications laws, rules, regulations and controlling court decisions;

M. To encourage the use of Distributed Antenna Systems (DAS) and other small cell systems that use components that are a small fraction of the size of macrocell deployments, and can be installed with little or no impact on utility support structures, buildings, and other existing structures; and

N. To provide regulations which are specifically not intended to, and shall not be interpreted or applied to, (1) prohibit or effectively prohibit the provision of personal wireless services, (2) unreasonably discriminate among functionally equivalent service providers, or (3) regulate WCFs and wireless transmission equipment on the basis of the environmental effects of radio frequency emissions to the extent that such emissions comply with the standards established by the Federal Communications Commission.

Section 17C.355A.020 Definitions

A. “Antenna” means one or more rods, panels, discs or similar devices used for wireless communication, which may include, but is not limited to, omni-directional antenna (whip), directional antenna (panel), and parabolic antenna (dish).

B. “Antenna Array” means a single or group of antenna elements and associated mounting hardware, transmission lines, or other appurtenances which share a common attachment device such as a mounting frame or mounting support structure for the sole purpose of transmitting or receiving electromagnetic waves.

C. “Base Station” means a structure or equipment at a fixed location that enables Commission-licensed or authorized wireless communications between user equipment and a communications network. The term does not encompass a tower as defined in this chapter or any equipment associated with a tower.

1. The term includes, but is not limited to, equipment associated with wireless communications services such as private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

2. The term includes, but is not limited to, radio transceivers, antennas, coaxial or fiber-optic cable, regular and backup power supplies, and comparable equipment, regardless of technological configuration (including Distributed Antenna Systems and small cell networks).

3. The term includes any structure other than a tower that, at the time the relevant application is filed with the City under this section, supports or houses equipment described in this section that has been reviewed and approved under the applicable

zoning or siting process, or under Washington or local regulatory review process, even if the structure was not built for the sole or primary purpose of providing such support.

4. The term does not include any structure that, at the time the relevant application is filed with Washington or the City under this section, does not support or house equipment described in this section.

D. "Collocation" means the mounting or installation of transmission equipment on an eligible support structure for the purpose of transmitting and/or receiving radio frequency signals for communications purposes.

E. "Commission" means the Federal Communications Commission ("FCC").

F. "Distributed Antenna System" or "DAS" means a network consisting of transceiver equipment at a central hub site to support multiple antenna locations throughout the desired coverage area.

G. "Small Cells" mean compact wireless base stations containing their own transceiver equipment and function like cells in a mobile network but provide a smaller coverage area than traditional macrocells. Small cells will meet the two parameters in subsections (a) and (b). For purposes of these definitions, volume is a measure of the exterior displacement, not the interior volume of the enclosures. Antennas or equipment concealed from public view in or behind an otherwise approved structure or concealment are not included in calculating volume.

(a) Small Cell Antenna: Each antenna shall be no more than three (3) cubic feet in volume.

(b) Small Cell Equipment: Each equipment enclosure shall be no larger than seventeen (17) cubic feet in volume. Associated conduit, mounting bracket or extension arm, electric meter, concealment, telecommunications demarcation box, ground-based enclosures, battery back-up power systems, grounding equipment, power transfer switch, and cut-off switch may be located outside the primary equipment enclosure(s) and are not included in the calculation of equipment volume.

H. "Stealth design" means technology that minimizes the visual impact of wireless communications facilities by camouflaging, disguising, screening, and/or blending into the surrounding environment. Examples of stealth design include but are not limited to facilities disguised as trees, flagpoles, bell towers, and architecturally screened roof-mounted antennas.

I. "Tower" means any structure built for the sole or primary purpose of supporting any Commission-licensed or authorized antennas and their associated facilities, including structures that are constructed for wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul, and the associated site.

J. "Tower Height" means the vertical distance measured from the base of the tower structure at grade to the highest point of the structure including the antenna.

K. "Transmission Equipment" means equipment that facilitates transmission for any Commission-licensed or authorized wireless communication service, including, but not

limited to, radio transceivers, antennas, coaxial or fiber-optic cable, and regular and backup power supply. The term includes equipment associated with wireless communications services including, but not limited to, private, broadcast, and public safety services, as well as unlicensed wireless services and fixed wireless services such as microwave backhaul.

L. “Utility Support Structure” means utility poles or utility towers supporting electrical, telephone, cable or other similar facilities; street light standards; pedestrian light standards; traffic light structures; traffic sign structures; or water towers.

M. “Wireless Communication Facilities” or “WCF” means a staffed or unstaffed facility or location for the transmission and/or reception of radio frequency (RF) signals or other wireless communications or other signals for commercial communications purposes, typically consisting of one or more antennas or group of antennas, a tower or attachment support structure, transmission cables and other transmission equipment, and an equipment enclosure or cabinets.

Section 17C.355A.030 Towers

A. Towers shall be located only in those areas and pursuant to the process described in SMC Tables 17C.355A-1 and 17C.355A-2, provided that towers that are proposed to be located in a residential zone or within 150 feet of a residential zone shall be subject to the siting priorities set forth for preferred tower locations in SMC 17C.355A.050.

Table 17C.355A-1
New Wireless Communication Tower Criteria
Allowed by Type II Permit

Zone Category	Located in Public Right-of-way (ROW)	Maximum Tower Height	Stealth Design	Setback from Property Lines (does not apply within ROW)[2]
O & OR[1]	Yes	60'	Optional[1]	N/A
	No	60'	Optional[1]	20'
NR, NMU CC & CA[1]	Yes	60'	Optional[1]	N/A
	No	60'	Optional[1]	20'
CB & GC[1]	Yes or No	70'	Optional[1]	20'
All DT[1]	Yes or No (allowed in ROW only if less than or equal to 70')	150'	Optional[1]	20'
Industrial[1]	Yes or No (allowed in ROW only if less than or equal to 70')	150'	Optional[1]	20'

[1] If an applicant wants to construct a tower in a residential zone or within 50’ of a residential zone, then a Type III process and stealth design are required. If an applicant wants to construct a tower

within 51’ - 150’ of a residential zone, then a Type II process and stealth design are required. If an applicant wants to construct a tower beyond 150’ of a residential zone, then the review process is that which is required in the zone in which the tower is to be located.
[2] See exception for locations adjacent to a residence in SMC 17C.355A.070(B).

Table SMC 17C.355A-2 New Wireless Communication Tower Criteria Allowed by Type III Conditional Use Permit				
Zone Category	**Located in Public Right-of-way (ROW)**	**Maximum Tower Height**	**Stealth Design**	**Setback from Property Lines[2] (does not apply within ROW)**
All R[1]	Yes or No	60’	Required	20’
O, OR, NR, NMU, CC & CA[1]	Yes or No	61' - 70'[3]	Optional[1]	20'
CB & GC[1]	Yes or No	71' - 90'[4]	Optional[1]	20'

[1] If an applicant wants to construct a tower in a residential zone or within 50’ of a residential zone, then stealth design is required.
[2] See exceptions for locations adjacent to a residence in SMC 17C.355A.070(B).
[3] An additional 20 feet in height is allowed if applicant uses stealth design.
[4] An additional 30 feet in height is allowed if applicant uses stealth design.

Section 17C.355A.040 Collocation of Antennas, DAS, and Small Cells

A. To the extent not otherwise covered by Chapter 17C.356 (Eligible Facilities Requests), collocation and new wireless communication antenna arrays are permitted in all zones via administrative approval provided that they are attached to or inside of an existing structure (except on the exterior of pole signs or anywhere on a billboard) that provides the required clearances for the array’s operation without the necessity of constructing a tower or other apparatus to extend the antenna array more than 15 feet above the structure.

B. Installation requires the granting of development permits prescribed by chapters 17G.010 and 17G.060 SMC.

C. For antenna arrays on City-owned property, the execution of necessary agreements is also required.

D. If any support structure must be constructed to achieve the needed elevation or if the attachment adds more than 15 feet above the existing structure, the proposal is subject to Type II review. The limitation to15 feet applies to cumulative increases and any previously approved additions to height made under this section must be included in its measurement.

E. Any equipment shelter or cabinet and other ancillary equipment are subject to the general development standards of SMC 17C.355A.070.

F. Distributed Antenna Systems and Small Cells.

1. Distributed Antenna Systems (DAS) and Small Cells are allowed in all land use zones, regardless of the siting preferences listed in SMC 17C.355A.050.

2. DAS and small cells are subject to approval via administrative review only unless their installation requires the construction of a new utility support structure or building. Type II review is required when the applicant proposes a new utility support structure or building.

3. Multiple Site DAS and Small Cells.

   a. A single permit may be used for multiple distributed antennas that are part of a larger overall DAS network.

   b. A single permit may be used for multiple small cells spaced to provide wireless coverage in a contiguous area.

Section 17C.355A.050 Tower Sharing, Collocation and Preferred Tower Locations

A. Tower Sharing and Collocation. New WCF facilities must, to the maximum extent feasible, collocate on existing towers or other structures of a similar height to avoid construction of new towers, unless precluded by zoning constraints such as height, structural limitations, inability to obtain authorization by the owner of an alternative location, or where an alternative location will not meet the service coverage objectives of the applicant. Applications for a new tower must address all existing towers or structures of a similar height within 1/2 mile of the proposed site as follows: (a) by providing evidence that a request was made to locate on the existing tower or other structure, with no success; or (b) by showing that locating on the existing tower or other structure is infeasible.

B. Preferred Tower Locations. All new towers proposed to be located in a residential zone or within 150 feet of a residential zone are permitted only after application of the following siting priorities, ordered from most-preferred (1) to least-preferred (8);

   1. City-owned or operated property and facilities, not including right-of-way and right-of-way facilities, that are not in residential zones or located within 150 feet of residential zones;

   2. industrial zones and downtown zones;

   3. City-owned or operated property and facilities in any zone, as long as the tower is inconspicuous from a public street, public open areas, or property that is being used for residential purposes;

   4. Community Business and General Commercial zones (CB & GC);

   5. office and other commercial zones;

   6. other City-owned or operated property and facilities;

   7. parcels of land in residential zones;

   8. sites in residential zones on or within 150 feet of a designated historic structure or district.

   The applicant for a tower located in a residential zone or within 150 feet of a residential zone shall address these preferences in an alternative sites analysis meeting the requirements of section 17C.355A.060 below.

Section 17C.355A.060 Application Submittal Requirements

In addition to the application materials identified in SMC 17G.060.070, Type II and Type III applications submitted under this chapter shall include the following materials.

A. Requirement for FCC Documentation. The applicant shall provide a copy of:

1. its documentation for FCC license submittal or registration, and

2. the applicant's FCC license or registration.

B. Site plans. Complete and accurate plans and drawings to scale, prepared, signed and sealed by a Washington-licensed engineer, land surveyor and/or architect, including (1) plan views and all elevations before and after the proposed construction with all height and width measurements called out; (2) a depiction of all proposed transmission equipment; (3) a depiction of all proposed utility runs and points of contact; and (4) a depiction of the leased or licensed area with all rights-of-way and/or easements for access and utilities in plan view.

C. Visual analysis. A color visual analysis that includes to-scale visual simulations that show unobstructed before-and-after construction daytime and clear-weather views from at least four angles, together with a map that shows the location of each view.

D. Statement of Purpose/RF Justification. A clear and complete written Statement of Purpose shall minimally include: (1) a description of the technical objective to be achieved; (2) a to-scale map that identifies the proposed site location and the targeted service area to be benefited by the proposed project; and (3) full-color signal propagation maps with objective units of signal strength measurement that show the applicant's current service coverage levels from all adjacent sites without the proposed site, predicted service coverage levels from all adjacent sites with the proposed site, and predicted service coverage levels from the proposed site without all adjacent sites. These materials shall be reviewed and signed by a Washington-licensed professional engineer or a qualified employee of the applicant. The qualified employee of the applicant shall submit his or her qualifications with the application.

E. Design justification. A clear and complete written analysis that explains how the proposed design complies with the applicable design standards under this chapter to the maximum extent feasible. A complete design justification must identify all applicable design standards under this chapter and provide a factually detailed reason why the proposed design either complies or cannot feasibly comply.

F. Collocation and alternative sites analysis.

1. All Towers. All applications for a new tower will demonstrate that collocation is not feasible, consistent with SMC 17C.355A.050.

2. Towers in a residential zone or within 150 feet of a residential zone.

a. For towers in or within 150 feet of a residential zone, the applicant must address the City's preferred tower locations in SMC 17.355A.050 with a detailed explanation justifying why a site of higher priority was not selected. The City's tower location preferences must be addressed in a clear and complete written alternative site analysis that shows at least five (5) higher

ranked, alternative sites considered that are in the geographic range of the service coverage objectives of the applicant, together with a factually detailed and meaningful comparative analysis between each alternative candidate and the proposed site that explains the substantive reasons why the applicant rejected the alternative candidate. An applicant may reject an alternative tower site for one or more of the following reasons:

1. preclusion by structural limitations;

2. inability to obtain authorization by the owner;

3. failure to meet the service coverage objectives of the applicant;

4. failure to meet other engineering requirements for such things as location, height and size;

5. zoning constraints, such as the inability to meet setbacks;

6. physical or environmental constraints, such as unstable soils or wetlands; and/or

7. being a more intrusive location despite the higher priority in this chapter as determined by the Planning Director or Hearing Examiner, as applicable.

b. A complete alternative sites analysis provided under this subsection (F)(2) may include less than five (5) alternative sites so long as the applicant provides a factually detailed written rationale for why it could not identify at least five (5) potentially available, higher ranked, alternative sites.

3. Required description of coverage objectives. For purposes of disqualifying potential collocations and/or alternative sites for the failure to meet the applicant's service coverage objectives the applicant will provide (a) a description of its objective, whether it be to close a gap or address a deficiency in coverage, capacity, frequency and/or technology; (b) detailed technical maps or other exhibits with clear and concise RF data to illustrate that the objective is not met using the alternative (whether it be collocation or a more preferred location); and (c) a description of why the alternative (collocation or a more preferred location) does not meet the objective.

G. DAS and small cells. As outlined in SMC 17C.355A.010, the City encourages, but it is does not require, the use of DAS and small cells. Each applicant will submit a statement that explains how it arrived at the structure and design being proposed.

H. Radio frequency emissions compliance report. A written report, prepared, signed and sealed by a Washington-licensed professional engineer or a competent employee of the applicant, which assesses whether the proposed WCF demonstrates compliance with the exposure limits established by the FCC. The report shall also include a cumulative analysis that accounts for all emissions from all WCFs located on or adjacent to the proposed site, identifies the total exposure from all facilities and demonstrates planned compliance with all maximum permissible exposure limits established by the FCC. The report shall include a detailed description of all mitigation measures required by the FCC.

I. Noise study. A noise study, prepared, signed and sealed by a Washington-licensed engineer, for the proposed WCF and all associated equipment in accordance with the Spokane Municipal Code.

J. Collocation consent. A written statement, signed by a person with the legal authority to bind the applicant and the project owner, which indicates whether the applicant is willing to allow other transmission equipment owned by others to collocate with the proposed wireless communication facility whenever technically and economically feasible and aesthetically desirable.

K. Other published materials. All other information and/or materials that the City may, from time to time, make publicly available and designate as part of the application requirements.

Section 17C.355A.070 General Development Standards Applicable to WCFs

The following criteria shall be applied in approving, approving with conditions or denying a WCF. Unless otherwise provided in this chapter, WCF construction shall be consistent with the development standards of the zoning district in which it is located.

A. Height. Refer to SMC Tables 17C.355A-1 and 2.

B. Setback Requirements. Refer to SMC Tables 17C.355A-1 and 2 for towers. All equipment shelters, cabinets or other on-the-ground ancillary equipment shall be buried or meet the setback requirement of the zone in which located. Notwithstanding the setbacks provided for in Tables 17C.355A-1 and 2, when a residence is located on an adjacent parcel, the minimum side setback from the lot line for a new tower must be equal to the height of the proposed tower, unless:

1. The setback is waived by the owner of the residence; or

2. The tower is constructed with breakpoint design technology. If the tower has been constructed using breakpoint design technology, the minimum setback distance shall be equal to 110 percent (110%) of the distance from the top of the structure to the breakpoint level of the structure, or the applicable zone's minimum side setback requirements, whichever is greater. (For example, on a 100-foot tall monopole with a breakpoint at eighty [80] feet, the minimum setback distance would be twenty-two [22] feet [110 percent of twenty (20) feet, the distance from the top of the monopole to the breakpoint] or the minimum side yard setback requirements for that zone, whichever is greater.) Provided, that if an applicant proposes to use breakpoint design technology to reduce the required setback from a residence, the issuance of building permits for the tower shall be conditioned upon approval of the tower design by a structural engineer.

C. Landscaping. All landscaping shall be installed and maintained in accordance with this chapter. Existing on-site vegetation shall be preserved to the greatest extent reasonably possible and/or improved, and disturbance of the existing topography shall be minimized. The director may grant a waiver from the required landscaping based on findings that a different requirement would better serve the public interest.

1. Tower bases, when fenced (compounds), or large equipment shelters (greater than three feet by three feet by three feet), shall be landscaped following the provisions of this section. In all residential, O, OR, NR, NMU, CC, CA, CB, GC, Downtown, and other commercial zones, landscaping shall consist of a six-foot wide strip of L2

landscaping as described in SMC 17C.200.030. Street Frontage and perimeter property landscaping where required shall follow standards set forth in SMC 17C.200.040 Site Planting Standards.

2. If fencing is installed, it shall consist of decorative masonry or wood fencing. Chain link is not allowed in residential, O, OR, NR, NMU, CC, and CA zones, except that in a CB and GC zone up to 3 strands of barbed wire may be placed atop a lawful fence exceeding six feet in height above grade. In Downtown and industrial zones, three strands of barbed wire may be placed atop a lawful fence if the fence is not visible from an adjacent street or is placed behind a sight-obscuring fence or wall. Electrified fences are not permitted in any zone. Razor or concertina wire is not allowed.

3. Applicant shall meet the irrigation requirements of SMC 17C.200.100 where feasible and ensure the full establishment of plantings for two years in accordance with SMC 17C.200.090.

D. Visual Impact. All WCFs in residential zones and within 150 feet of residential zones, including equipment enclosures, shall be sited and designed to minimize adverse visual impacts on surrounding properties and the traveling public to the greatest extent reasonably possible, consistent with the proper functioning of the WCF. Such WCFs and equipment enclosures shall be integrated through location and design to blend in with the existing characteristics of the site. Such WCFs shall also be designed to either resemble the surrounding landscape and other natural features where located in proximity to natural surroundings, or be compatible with the urban, built environment, through matching and complimentary existing structures and specific design considerations such as architectural designs, height, scale, color and texture, and/or be consistent with other uses and improvements permitted in the relevant zone.

E. Use of Stealth Design/Technology. The applicant shall make an affirmative showing as to why they are not employing stealth technology. More specifically:

1. Stealth design is required in residential zones and to the extent shown in Tables A-1 and A-2. Stealth and concealment techniques must be appropriate given the proposed location, design, visual environment, and nearby uses, structures, and natural features. Stealth design shall be designed and constructed to substantially conform to surrounding building designs or natural settings, so as to be visually unobtrusive. Stealth design that relies on screening wireless communications facilities in order to reduce visual impact must screen all substantial portions of the facility from view. Stealth and concealment techniques do not include incorporating faux-tree designs of a kind that are not native to the Pacific Northwest.

F. Lighting. For new wireless communication support towers, only such lighting as is necessary to satisfy FAA requirements is permitted. All FAA-required lighting shall use lights that are designed to minimize downward illumination. Security lighting for the equipment shelters or cabinets and other on-the-ground ancillary equipment is also permitted as long as it is down shielded to keep light within the boundaries of the site. Motion detectors for security lighting are encouraged in residential, O and OR zones or adjacent to residences.

G. Noise. At no time shall transmission equipment or any other associated equipment (including, but not limited to, heating and air conditioning units) at any wireless communication facility emit noise that exceeds the applicable limit(s) established in SMC 10.08D.070.

H. Signage. No facilities may bear any signage or advertisement(s) other than signage required by law or expressly permitted/required by the City.

I. Code compliance. All facilities shall at all times comply with all applicable federal, State and local building codes, electrical codes, fire codes and any other code related to public health and safety.

J. Building-mounted WCFs.

1. In residential zones, all transmission equipment shall be concealed within existing architectural features to the maximum extent feasible. Any new architectural features proposed to conceal the transmission equipment shall be designed to mimic the existing underlying structure, shall be proportional to the existing underlying structure or conform to the underlying use and shall use materials in similar quality, finish, color and texture as the existing underlying structure.

2. In residential zones, all roof-mounted transmission equipment shall be set back from all roof edges to the maximum extent feasible.

3. In all other zones, antenna arrays and supporting transmission equipment shall be installed so as to camouflage, disguise or conceal them to make them closely compatible with and blend into the setting and/or host structure.

K. WCFs in the public rights-of-way.

1. *Preferred locations.* Facilities shall be located as far from residential uses as feasible, and on main corridors and arterials to the extent feasible. Facilities in the rights-of-way shall maintain at least a two hundred (200) foot separation from other wireless facilities (except with respect to DAS or Small Cells), except when collocated or on opposite sides of the same street.

2. *Pole-mounted or tower-mounted equipment.* All pole-mounted and tower-mounted transmission equipment shall be mounted as close as possible to the pole or tower so as to reduce the overall visual profile to the maximum extent feasible. All pole-mounted and tower-mounted transmission equipment shall be painted with flat, non-reflective colors that blend with the visual environment.

3. For all WCFs to be located within the right-of-way, prior to submitting for a building permit, the applicant must have a valid municipal master permit, municipal franchise, or exemption otherwise granted by applicable law, to the extent consistent with RCW 35.21.860.

L. Accessory Equipment. In residential zones, all equipment shall be located or placed in an existing building, underground, or in an equipment shelter that is (a) designed to blend in with existing surroundings, using architecturally compatible construction and colors; and (b) located so as to be unobtrusive as possible consistent with the proper functioning of the WCF.

M. Spacing of Towers. Towers shall maintain a minimum spacing of one-half mile, unless it can be demonstrated that physical limitations (such as topography, terrain, tree cover or location of buildings) in the immediate service area prohibit adequate service by the existing facilities or that collocation is not feasible under SMC 17C.355A.050.

N. Site Design Flexibility. Individual WCF sites vary in the location of adjacent buildings, existing trees, topography and other local variables. By mandating certain design standards, there may result a project that could have been less intrusive if the location of the various elements of the project could have been placed in more appropriate locations within a given site. Therefore, the WCF and supporting equipment may be installed so as to best camouflage, disguise them, or conceal them, to make the WCF more closely compatible with and blend into the setting and/or host structure, upon approval by the Planning Director or the Hearing Examiner, as applicable. The design flexibility allowed under this subsection includes additional height for a tower located within tall trees on (i) City property or (ii) other parcels at least 5 acres in size, so that the impact of the tower may be minimized by the trees while still allowing for the minimum clearance needed for the tower to achieve the applicant's coverage objectives. A formal exception from standards under SMC 17C.355A.090 is not required for proposals meeting this subsection by being a less intrusive design option.

O. Structural Assessment. The owner of a proposed tower shall have a structural assessment of the tower conducted by a professional engineer, licensed in the State of Washington, which shall be submitted with the application for a building permit.

Section 17C.355A.080 Regulations for Facilities Subject to a Conditional Use Permit

A. Approval criteria. In addition to the development standards in this chapter and the approval criteria in SMC 17G.060.170, the following additional approval criteria apply:

1. The need for the proposed tower shall be demonstrated if it is to be located in a residential zone or within one hundred fifty feet of an existing residential lot. An evaluation of the operational needs of the wireless communications provider, alternative sites, alternative existing facilities upon which the proposed antenna array might be located, and collocation opportunities on existing support towers within one-half mile of the proposed site shall be provided. Evidence shall demonstrate that no practical alternative is reasonably available to the applicant.

2. The proposed tower satisfies all of the provisions and requirements of this chapter 17C.355A.

B. Public Notice. In addition to the notice requirements of SMC 17G.060.120, for proposals in residential zones and within 150 feet of a residential zone, public notice shall include:

1. A black and white architectural elevation and color photo simulation rendering of the proposed WCF.

2. The sign required by SMC 17G.060.120(B) shall include that same architectural elevation and color photo simulation combination selected by the City that depicts the visual impact of the WCF.

Section 17C.355A.090 Exception from Standards

A. Applicability. Except as otherwise provided in this chapter (under Site Design Flexibility), no WCF shall be used or developed contrary to any applicable development standard unless an exception has been granted pursuant to this Section. These provisions apply exclusively to WCFs and are in lieu of the generally applicable variance and design deviation provisions in SMC Title 17, provided this section does not provide an exception from this chapter's visual

impact and stealth design requirements or the approval criteria set forth in Section 17C.355A.080.

B. Procedure Type. A wireless communications facility exception is a Type III procedure.

C. Submittal Requirements. In addition to the general submittal requirements for a Type III application, an application for a wireless communication facility exception shall include:

1. A written statement demonstrating how the exception would meet the criteria.

2. A site plan that includes:

a. Description of the proposed facility's design and dimensions, as it would appear with and without the exception.

b. Elevations showing all components of the wireless communication facility as it would appear with and without the exception.

c. Color simulations of the wireless communication facility after construction demonstrating compatibility with the vicinity, as it would appear with and without the exception.

D. Criteria. An application for a wireless communication facility exception shall be granted if the following criteria are met:

1. The exception is consistent with the purpose of the development standard for which the exception is sought.

2. Based on a visual analysis, the design minimizes the visual impacts to residential zones through mitigating measures, including, but not limited to, building heights, bulk, color, and landscaping.

3. The applicant demonstrates the following:

a. A significant gap in the coverage, capacity, or technologies of the service network exists such that users are regularly unable to connect to the service network, or are regularly unable to maintain a connection, or are unable to achieve reliable wireless coverage within a building;
b. The gap can only be filled through an exception to one or more of the standards in this chapter; and
c. The exception is narrowly tailored to fill the service gap such that the wireless communication facility conforms to this chapter's standards to the greatest extent possible.

4. Exceptions in Residential Zones. For a new tower proposed to be located in a residential zone or within 150 feet of a residential zone, unless the proposal qualifies as a preferred location on City-owned or operated property or facilities under SMC 17C.355A.050(B)(3), the applicant must also demonstrate that the manner in which it proposes to fill the significant gap in coverage, capacity, or technologies of the service network is the least intrusive on the values that this chapter seeks to protect.

Section 17C.355A.100 Final Inspection

A. A Certificate of Occupancy will only be granted upon satisfactory evidence that the WCF was installed in substantial compliance with the approved plans and photo simulations.

B. Failure to Comply. If it is found that the WCF installation does not substantially comply with the approved plans and photo simulations, the applicant immediately shall make any and all such changes required to bring the WCF installation into compliance.

Section 17C.355A.110 Maintenance

A. All wireless communication facilities must comply with all standards and regulations of the FCC and any other State or federal government agency with the authority to regulate wireless communication facilities.

B. The site and the wireless communication facilities, including all landscaping, fencing and related transmission equipment must be maintained at all times in a neat and clean manner and in accordance with all approved plans.

C. All graffiti on wireless communication facilities must be removed at the sole expense of the permittee after notification by the City to the owner/operator of the WCF as provided in SMC 10.10.090.

D. If any FCC, State or other governmental license or any other governmental approval to provide communication services is ever revoked as to any site permitted or authorized by the City, the permittee must inform the City of the revocation within thirty (30) days of receiving notice of such revocation.

Section 17C.355A.120 Discontinuation of Use

A. Any wireless communication facility that is no longer needed and its use is discontinued shall be reported immediately by the service provider to the planning director. Discontinued facilities shall be completely removed within six months and the site restored to its pre-existing condition.

B. There shall also be a rebuttable presumption that any WCF that is regulated by this chapter and that is not operated for a period of six (6) months shall be considered abandoned. This presumption may be rebutted by a showing that such WCF is an auxiliary back-up or emergency utility or device not subject to regular use or that the WCF is otherwise not abandoned. For those WCFs deemed abandoned, all equipment, including, but not limited to, antennas, poles, towers, and equipment shelters associated with the WCF shall be removed within six (6) months of the cessation of operation. Irrespective of any agreement among them to the contrary, the owner or operator of such unused facility, or the owner of a building or land upon which the WCF is located, shall be jointly and severally responsible for the removal of abandoned WCFs. If the WCF is not thereafter removed within ninety (90) days of written notice from the City, the City may remove the WCF at the owner of the property's expense or at the owner of the WCF's expense, including all costs and attorneys' fees. If there are two or more wireless communications providers collocated on a single support structure, this provision shall not become effective until all providers cease using the WCF for a continuous period of six (6) months.

Section 17C.355A.130 Independent Technical Review

Although the City intends for City staff to review administrative matters to the extent feasible, the City may retain the services of an independent, radio frequency technical expert of its choice to provide technical evaluation of permit applications for WCFs, including administrative and conditional use permits. The technical expert review may include, but is not limited to (a) the accuracy and completeness of the items submitted with the application; (b) the applicability of analysis and techniques and methodologies proposed by the applicant; (c) the validity of conclusions reached by the applicant; and (d) whether the proposed WCF complies with the applicable approval criteria set forth in this chapter. The applicant shall pay the cost for any independent consultant fees, along with applicable overhead recovery, through a deposit, estimated by the City, paid within ten (10) days of the City's request. When the City requests such payment, the application shall be deemed incomplete for purposes of application processing timelines. In the event that such costs and fees do not exceed the deposit amount, the City shall refund any unused portion within thirty (30) days after the final permit is released or, if no final permit is released, within thirty (30) days after the City receives a written request from the applicant. If the costs and fees exceed the deposit amount, then the applicant shall pay the difference to the City before the permit is issued.

Section 17C.355A.140 Exempt Facilities

The following are exempt from this chapter:

A. FCC licensed amateur (ham) radio facilities;

B. Satellite earth stations, dishes and/or antennas used for private television reception not exceeding one (1) meter in diameter;

C. A government-owned WCF installed upon the declaration of a state of emergency by the federal, state or local government, or a written determination of public necessity by the City; except that such facility must comply with all federal and state requirements. The WCF shall be exempt from the provisions of this chapter for up to one week after the duration of the state of emergency; and

D. A temporary, commercial WCF installed for providing coverage of a special event such as news coverage or sporting event, subject to approval by the City. The WCF shall be exempt from the provisions of this chapter for up to one week before and after the duration of the special event.

E. In locations more than 150 feet from a residential zone, other temporary, commercial WCFs installed for a period of 90 days, subject to renewals at the City's discretion; provided, that such temporary WCF will comply with applicable setbacks and height requirements.

F. Eligible Facilities Requests permitted under Chapter 17C.356 SMC.

Section 17C.355A.150 Indemnification

Each permit issued shall have as a condition of the permit a requirement that the applicant defend, indemnify and hold harmless the City and its officers, agents, employees, volunteers, and contractors from any and all liability, damage, or charges (including attorneys' fees and expenses) arising out of claims, suits, demands, or causes of action as a result of the permit process, granted permit, construction, erection, location, performance, operation, maintenance, repair, installation, replacement, removal, or restoration of the WCF on City property or in the public right-of-way.

SECTION 3. That SMC 17C.110.110 is amended to read as follows:

Section 17C.110.110 Limited Use Standards

The uses listed below contain the limitations and correspond with the bracketed [ ] footnote numbers from Table 17C.110-1.

A. Group Living.
This regulation applies to all parts of Table 17C.110-1 that have a note [1]. Group living uses are also subject to the standards of chapter 17C.330 SMC, Group Living.
    1. General Standards.
    All group living uses in RA, RSF, RTF, RTF, RMF and RHD zones, except for alternative or post incarceration facilities, are regulated as follows:
        a. All group living uses are subject to the requirements of chapter 17C.330 SMC, Group Living, including the maximum residential density provisions of Table 17C.330-1.
        b. Group living uses for more than six residents are a conditional use in the RA and RSF zones, subject to the standards of chapter 17C.320 SMC, Conditional Uses, and the spacing requirements of SMC 17C.330.120(B)(2).
        c. Group living uses for more than twelve residents are a conditional use in the RTF and RMF zones, subject to the standards of chapter 17C.320 SMC, Conditional Uses, and the spacing requirements of SMC 17C.330.120(B)(2).
        d. Exception.
        Normally all residents of a structure are counted to determine whether the use is allowed or a conditional use as stated in subsections (A)(1)(a), (b) and (c) of this section. The only exception is residential facilities licensed by or under the authority of the state of Washington. In these cases, staff persons are not counted as residents to determine whether the facility meets the twelve-resident cut-off above, for which a conditional use permit is required.
    2. Alternative or Post Incarceration Facilities.
    Group living uses which consist of alternative or post incarceration facilities are conditional uses regardless of size and are subject to the provisions of chapter 17C.320 SMC, Conditional Uses. They are also subject to the standards of chapter 17C.330 SMC, Group Living.

B. Office.
This regulation applies to all parts of Table 17C.110-1 that have a note [2]. Offices in the RMF and RHD zones and are subject to the provisions of chapter 17C.320 SMC, Conditional Uses and are processed as a Type III application.

C. Basic Utilities.
This regulation applies to all parts of Table 17C.110-1 that have a note [3]. Basic utilities that serve a development site are accessory uses to the primary use being served. In the RA, RSF and RTF zones, a one-time addition to an existing base utility use is permitted, provided the addition is less than fifteen hundred square feet and five or less parking stalls located on the same site as the primary use. The addition and parking are subject to the development standards of the base zone and the design standards for institutional uses. New buildings or larger additions require a conditional use permit and are processed as a Type III application. New buildings or additions to existing base utilities uses are permitted in the RMF and RHD zones.

D. Community Service Facilities.
This regulation applies to all parts of Table 17C.110-1 that have a note [4]. In the RA, RSF and RTF zones, a one-time addition to an existing community services use is permitted, provided the addition is less than fifteen hundred square feet and three or less parking stalls located on the same site as the primary use. The addition and parking are subject to the development standards of the base zone and the design standards for institutional uses. New buildings or larger additions require a conditional use permit and are processed as a

Type III application. New buildings or additions to existing community services uses are permitted in the RMF and RHD zones.

E. Daycare.
This regulation applies to all parts of Table 17C.110-1 that have a note [5]. Daycare uses are allowed by right if locating within a building or residence, and providing services to no more than twelve (children or clients). Daycare facilities for more than twelve children are a conditional use and are processed as a Type II application in the RA, RSF and RTF zones. However, in the RSF zone, daycare centers up to forty children are permitted if locating within a building that currently contains or did contain a college, medical center, school, religious institution or a community service facility.

F. Religious Institutions.
This regulation applies to all parts of Table 17C.110-1 that have a note [6]. In the RA, RSF and RTF zones, a one-time addition to religious institutions is permitted, provided the addition is less than one thousand five hundred square feet and fifteen or less parking stalls located on the same site as the primary use. The addition and parking are subject to the development standards of the base zone and the design standards for institutional uses. New buildings or larger additions require a conditional use permit and are processed as a Type II application. The planning director may require a Type II conditional use permit application be processed as a Type III application when the director issues written findings that the Type III process is in the public interest. Applicants must comply with the requirements set forth in SMC 17G.060.050 prior to submitting an application. New buildings or additions to existing religious institutions uses are permitted in the RMF and RHD zones.

G. Schools.
This regulation applies to all parts of the Table 17C.110-1 that have a note [7]. In the RA, RSF and RTF zones, a one-time addition to schools is permitted, provided the addition is less than five thousand square feet and five or less parking stalls located on the same site as the primary use. The addition and parking are subject to the development standards of the base zone and the design standards for institutional uses. New buildings or larger additions require a conditional use permit and are processed as a Type II application. The planning director may require a Type II conditional use permit application be processed as a Type III application when the director issues written findings that the Type III process is in the public interest. Applicants must comply with the requirements set forth in SMC 17G.060.050 prior to submitting an application.

H. Agriculture.
This regulation applies to all parts of Table 17C.110-1 that have a note [8]. The keeping of large and small domestic animals, including bees, is permitted in the RA zone. See chapter 17C.310 SMC, Animal Keeping, for specific standards.

I. ((~~Wireless Communication Facilities.~~
~~This regulation applies to all parts of Table 17C.110-1 that have a note [9]. Wireless communication facilities ((are either permitted or require)) requiring a Type III conditional use ((based on location and type of facility)) must use stealth design. See ((chapter 17C.355 SMC)) chapter 17C.355A SMC, Wireless Communication Facilities.~~)) [Deleted]

SECTION 4. That Table 17C.110-1 is amended to read as follows:

Section 17C.110T.001 Table 17C.110-1 Residential Zone Primary Uses

TABLE 17C.110-1 RESIDENTIAL ZONE PRIMARY USES (Click here to view PDF)					
Use is: **P** - Permitted	**RA**	**RSF & RSF-C**	**RTF**	**RMF**	**RHD**

N - Not Permitted **L** - Allowed, but special limitations **CU** - Conditional Use review required					
RESIDENTIAL CATEGORIES					
Group Living [1]	L/CU	L/CU	L/CU	L/CU	L/CU
Residential Household Living	P	P	P	P	P
COMMERCIAL CATEGORIES					
Adult Business	N	N	N	N	N
Commercial Outdoor Recreation	N	CU	CU	CU	CU
Commercial Parking	N	N	N	N	N
Drive-through Facility	N	N	N	N	N
Major Event Entertainment	N	N	CU	CU	CU
Office	N	N	N	CU[2]	CU[2]
Quick Vehicle Servicing	N	N	N	N	N
Retail Sales and Service	N	N	N	N	N
Mini-storage Facilities	N	N	N	N	N
Vehicle Repair	N	N	N	N	N
INDUSTRIAL CATEGORIES					
High Impact Uses	N	N	N	N	N
Industrial Service	N	N	N	N	N
Manufacturing and Production	N	N	N	N	N
Railroad Yards	N	N	N	N	N
Warehouse and Freight Movement	N	N	N	N	N
Waste-related	N	N	N	N	N
Wholesale Sales	N	N	N	N	N
INSTITUTIONAL CATEGORIES					
Basic Utilities [3]	L	L	L	L	L
Colleges	CU	CU	CU	P	P
Community Service	L[4]/CU	L[4]/CU	C[4]/CU	P	P
Daycare [5]	L	L	L	L	L
Medical Center	CU	CU	CU	CU	CU
Parks and Open Areas	P	P	P	P	P
Religious Institutions	L[6]/CU	L[6]/CU	L[6]/CU	P	P
Schools	L[7]/CU	L[7]/CU	L[7]/CU	P	P
OTHER CATEGORIES					
Agriculture	L[8]	N	N	N	N
Aviation and Surface Passenger	N	N	N	N	N

Terminals					
Detention Facilities	N	N	N	CU	CU
Essential Public Facilities	CU	CU	CU	CU	CU
Mining	N	N	N	N	N
Rail Lines and Utility Corridors	CU	CU	CU	CU	CU
((~~Wireless Communication Facilities [9]~~))	~~L/CU~~	~~L/CU~~	~~L/CU~~	~~L/CU~~	~~L/CU~~
Notes: * The use categories are described in chapter 17C.190 SMC. * Standards that correspond to the bracketed numbers [ ] are stated in SMC 17C.110.110. * Specific uses and development may be subject to the standards in SMC 17C.320.080.					

SECTION 5. That SMC 17C.320.080 is amended to read as follows:

Section 17C.320.080 Decision Criteria

Decision criteria for conditional uses are stated in SMC 17G.060.170. Those conditional uses with decision criteria in addition to that provided in SMC 17G.060.170 are listed below. Requests for conditional uses will be approved if the hearing examiner finds that the applicant has shown that all of the decision criteria have been met.

A. ((~~Wireless Communication Support Tower.~~
~~For conditional use permits to construct a wireless communication support tower the following additional criteria apply:~~
    1. ~~The need for the proposed wireless communication support tower shall be demonstrated if it is to be located in a residential zone or within three hundred feet of an existing residential lot. An evaluation of the operational needs of the wireless communications provider, alternative sites, alternative existing facilities upon which the proposed antenna array might be located, and co-location opportunities on existing support towers within one mile of the proposed site shall be provided. Evidence shall demonstrate that no practical alternative is reasonably available to the applicant.~~
    2. ~~The proposed tower satisfies all of the provisions and requirements of SMC 17C.355.030 and SMC 17C.355.040.~~)) [Deleted]

B. Essential Public Facility.
For conditional use permits to site an essential public facility, the following additional criteria apply:
    1. Before issuance of a conditional use permit, the applicant shall have complied with all applicable requirements for the siting of an essential public facility in accordance with state, regional and local mandates including the:
        a. Spokane County Regional Siting Process for Essential Public Facilities, and
        b. administrative procedures adopted as part of the interlocal agreement regarding siting of essential public facilities within Spokane County.
    2. Housing for persons with handicaps as defined under the Federal Fair Housing Act and children in the custody of the state, which housing includes “community facilities” as defined in RCW 72.05.020 and facilities licensed under chapter 74.15 RCW, are exempt from the Spokane County Regional Siting Process for Essential Public Facilities. Housing for juveniles held in county detention facilities or state juvenile institutions as defined in chapter 13.40 RCW is subject to the Spokane County Regional Siting Process for Essential Public Facilities.

3. Facilities of a similar nature must be equitably dispersed throughout the City.

C. Secure Community Transition Facility.
For a conditional use permit to site a secure community transition facility the following additional criteria must be met:
1. Before issuance of a conditional use permit, the applicant shall have complied with all applicable requirements for the siting of an essential public facility in accordance with state, regional and local mandates, including the:
    a. Spokane County Regional Siting Process for Essential Public Facilities, and
    b. administrative procedures adopted as part of the interlocal agreement regarding siting of essential public facilities within Spokane County.
2. The siting of a secure community transition facility must comply with all provisions of state law, including requirements for public safety, staffing, security and training, and those standards must be maintained for the duration of the use.
3. A secure community transition facility should be located on property of sufficient size and frontage to allow the residents an opportunity for secure on-site recreational activities typically associated with daily needs and residential routines.
4. If state funds are available, the department of social and health services should enter into a mitigation agreement with the City of Spokane for training and the costs of that training with local law enforcement and administrative staff and local government staff, including training in coordination, emergency procedures, program and facility information, legal requirements and resident profiles.
5. The applicant must show that the property meets all of the above requirements and, further, if more than one site is being considered, preference must be given to the site furthest removed from risk potential activities or facilities.

D. Mining.
For a conditional use permit for a mining use, the following additional criteria apply:
1. The minimum site size shall be three acres.
2. The minimum setback shall be fifty feet from any property line; provided further, that such mining does not impair lateral or subjacent support or cause earth movements or erosions to extend beyond the exterior boundary lines of the mining site.
3. Mining operations and associated buildings shall be located at least four hundred feet from a residential zone.
4. An eight-foot site-obscuring fence shall be provided and maintained in good condition at all times on the exterior boundary of any portion of any site on which active operations exist and on the exterior boundary of any portion of the site which has been mined and not yet reclaimed.
5. Sound levels, as measured on properties adjacent to a mining site, shall conform to the provisions of WAC 173-60-040, Maximum Permissible Environmental Noise Levels, for noise originating in a Class C RDNA (industrial zone).
6. All mining and site reclamation activity shall be consistent with the Spokane Regional Clean Air Agency (SRCAA) air quality maintenance requirements.
7. A reclamation plan approved by the Washington state department of natural resources (DNR) shall be submitted with the conditional use application. The plan shall be prepared consistent with the standards set forth in chapter 78.44 RCW. DNR shall have the sole authority to approve reclamation plans. Upon the exhaustion of minerals or upon the permanent abandonment of mining operations, the mined excavation must be rehabilitated or reclaimed consistent with the approved reclamation plan.
8. Upon the exhaustion of minerals or materials in the mining use or upon the permanent abandonment of the mining use, all buildings, structures, apparatus or appurtenances accessory to the mining operation shall be removed or otherwise dismantled. Abandonment shall be deemed to have occurred after one year of cessation of all extraction operations.

9. Reclamation shall be complete within one year after the mining operations have ceased or after abandonment of the mining use. The reclamation of the site shall be consistent with the department of natural resources approved site reclamation plan.
10. To provide for protection of groundwater and surface water, during and after operation, mining shall not be allowed to penetrate below an elevation ten feet above the highest known elevation of an aquifer within the Spokane Valley-Rathdrum Prairie Aquifer area.
11. The primary reduction and processing of minerals or materials are high impact uses. These uses include, but are not limited to, concrete batching, asphalt mixing, rock crushing, brick, tile and concrete products manufacturing plants, and the use of accessory minerals and materials from other sources necessary to convert the minerals or materials to marketable products. These uses shall be located a minimum of six hundred feet from the boundary of a residential or commercial zone.
12. The monitoring and clean-up of contaminants shall be ongoing. The mine operator shall comply with all existing water quality monitoring regulations of the Washington state department of ecology and the Spokane county regional health district.

E. Retail Sales and Service Uses within Industrial Zone.
For a conditional use permit for a retail sales and service use in an industrial zone, the following additional criteria apply:
    1. The use shall serve primarily other businesses and the use will contribute to the enhancement of the industrial character of the area and further the purpose of the industrial zone.

F. Institutional and Other Uses in Residential Zones.
These approval criteria apply to all conditional uses in RA through RHD zones. The approval criteria allows institutional uses (including expansions of existing facilities), allows increases to the maximum occupancy of group living, and permits other non-residential household living uses in a residential zone. These types of uses must maintain or do not significantly conflict with the appearance and function of residential areas. The approval criteria are:
    1. Proportion of Residential Household Living Uses.
    The overall residential appearance and function of the area will not be significantly lessened due to the increased proportion of uses not in the residential household living category in the residential area. Consideration includes the proposal by itself and in combination with other uses in the area not in the residential household living category and is specifically based on the:
        a. number, size and location of other uses not in the residential household living category in the residential; and
        b. intensity and scale of the proposed use and of existing residential household living uses and other uses.
    2. Physical Compatibility.
        a. The proposal will be compatible with adjacent residential developments based on characteristics such as the site size, building scale and style, setbacks and landscaping; or
        b. The proposal will mitigate differences in appearance or scale through such means as setbacks, screening, landscaping and other design features.
    3. Livability.
    The proposal will not have significant adverse impacts on the livability of nearby residential zoned lands due to:
        a. noise, glare from lights, late-night operations, odors and litter; and
        b. privacy and safety issues.
    4. Public Services.
        a. The proposed use is in conformance with the street designations of the transportation element of the comprehensive plan.

b. The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include:
    i. street capacity, level of service and other performance measures;
    ii. access to arterials;
    iii. connectivity;
    iv. transit availability;
    v. on-street parking impacts;
    vi. access restrictions;
    vii. neighborhood impacts;
    viii. impacts on pedestrian, bicycle and transit circulation;
    ix. safety for all modes; and
    x. adequate transportation demand management strategies.
c. Public services for water supply, police and fire protection are capable of serving the proposed use, and proposed sanitary waste disposal and stormwater disposal systems are acceptable to the engineering services department.

G. Alternative or Post Incarceration Facilities – Group Living.
These criteria apply to group living uses that consist of alternative or post incarceration facilities in the RA through the RHD zones.
1. Physical Compatibility.
    a. The proposal will preserve any City-designated scenic resources; and
    b. The appearance of the facility is consistent with the intent of the zone in which it will be located and with the character of the surrounding uses and development.
2. Livability.
The proposal will not have significant adverse impacts on the livability of nearby residential-zoned lands due to:
    a. noise, glare from lights, late-night operations, odors and litter; and
    b. privacy and safety issues.
3. Public Services.
    a. The proposed use is in conformance with the street designations in the transportation element of the comprehensive plan.
    b. The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include:
        i. street capacity, level of service or other performance measures;
        ii. access to arterials;
        iii. connectivity;
        iv. transit availability;
        v. on-street parking impacts;
        vi. access restrictions;
        vii. neighborhood impacts;
        viii. impacts on pedestrian, bicycle and transit circulation; and
        ix. safety for all modes; and
    c. Public services for water supply, police and fire protection are capable of serving the proposed use, and proposed sanitary waste disposal and stormwater disposal systems are acceptable to the engineering services department.
4. Safety.
The facility and its operations will not pose an unreasonable safety threat to nearby uses and residents.

H. Detention Facilities.
These approval criteria ensure that the facility is physically compatible with the area in which

it is to be located and that the safety concerns of people on neighboring properties are addressed. The approval criteria are:

1. Appearance.
   The appearance of the facility is consistent with the intent of the zone in which it will be located and with the character of the surrounding uses and development.
2. Safety.
   The facility and its operations will not pose an unreasonable safety threat to nearby uses and residents.
3. Public Services.
   a. The proposed use is in conformance with the street designations shown in the transportation element of the comprehensive plan.
   b. The transportation system is capable of supporting the proposed use in addition to the existing uses in the area. Evaluation factors include:
      i. street capacity, level of service or other performance measures;
      ii. access to arterials;
      iii. connectivity;
      iv. transit availability;
      v. on-street parking impacts;
      vi. access restrictions;
      vii. neighborhood impacts;
      viii. impacts on pedestrian, bicycle and transit circulation; and
      ix. safety for all modes; and
   c. Public services for water supply, police and fire protection are capable of serving the proposed use, and proposed sanitary waste disposal and stormwater disposal systems are acceptable to the engineering services department.

I. Master Campus Plan.
These approval criteria apply to hospitals, colleges and universities, religious institutions and government complexes that develop in a campus setting. The purpose of master campus plan is to recognize the long-range development plans of those institutions and allow for a single integrated review of a campus development plan while allowing for a comprehensive review of facilities serving the site and impacts on neighboring residential areas. Through the master campus plan, these entities prepare master plans for their entire campus to facilitate orderly growth of the institution and assure its compatibility with the surrounding neighborhood.

1. Eligibility.
   All property owned or controlled by a major institution, including all property owned or controlled by the major institution within one-half mile of the primary site. Adjoining property owners may also agree to be included in the master campus plan if the use of their property is functionally related to the institution.
2. Submittal Requirements.
   In addition to the submittal requirements for a Type III application, a master plan of the proposed campus is required to be submitted. The master plan is a long range development plan that would show the long range intent for building locations, uses, circulation, parking, landscape detail, lighting and treatment of the perimeter of the campus area.
3. Approval Criteria.
   a. Physical Compatibility.
      i. The proposal will be compatible with adjacent residential developments based on characteristics such as the site size, building scale and style, setbacks and landscaping; or

ii. The proposal will mitigate differences in appearance or scale through such means as setbacks, screening, landscaping and other design features.

b. Livability.
The proposal will not have significant adverse impacts on the livability of nearby residential zoned lands due to:
i. noise, glare from lights, late-night operations, odors and litter; and
ii. privacy and safety issues.

4. Development Permits.
After a master campus plan is approved, the institution may then make such improvements as are consistent with the master plan, with only normal development permits being required.

5. Master Plan Amendment.
It is expected that the master campus plan will undergo modification. Such modifications may involve the expansion or relocation of the campus boundary, alteration/addition of uses or other changes. Master plan amendments shall be reviewed as a Type III permit application, subject to the same procedural requirements or as prescribed in subsection (I)(6) of this section.

6. Master Campus Plan Minor Adjustments.
In the issuance of building permits for construction within an approved major campus plan, minor adjustments to the plan may be made consistent with the provisions of SMC 17G.060.230.

J. Office.
These approval criteria apply to offices allowed as a conditional use permit in the RMF and RHD zones.

1. Uses in the Office land use category of SMC 17C.190.250 may be allowed by a Type III conditional use permit approval in the RMF and RHD zone subject to the following criteria:
a. The property must have frontage on a principal arterial.
b. The subject property is adjacent to or immediately across the street from an existing commercial zone.
c. Uses permitted in the Office land use category may not be developed to a depth greater than two hundred fifty feet.
d. Ingress and/or egress onto a local access street are not permitted unless the City traffic engineer determines that there is no alternative due to traffic volumes, site visibility and traffic safety.
e. All structures shall have size, scale, and bulk similar to residential uses as provided in SMC 17C.110.500, Institutional Design Standards.
f. The development standards of the underlying zone shall apply to the use.
g. Drive-thru facilities are prohibited, except as allowed by the hearing examiner.

SECTION 6. That SMC 17C.130.220 is amended to read as follows:

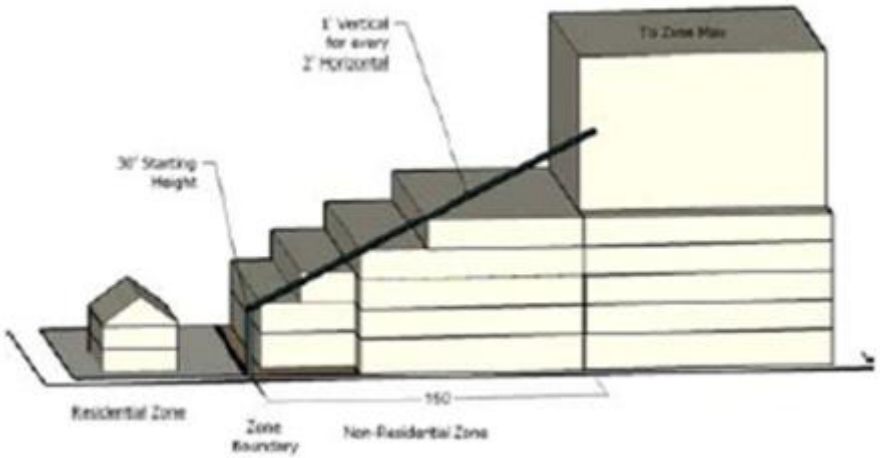
Section 17C.130.220 Height

A. Purpose
The height limits are intended to control the overall scale of buildings. The height limits for sites near residential zones discourage buildings that visually dominate adjacent residential zones. Light, air, and potential for privacy are intended to be preserved in residential zones that are close to industrial zones.

B. Height Standards

The height standards for all structures are stated in Table 17C.130-2. Exceptions to the maximum height standard are stated below.

1. Maximum Height.
   Exceptions to the maximum structure height are designated on the official zoning map by a dash and a height listed after the zone map symbol (i.e., CB-150). Changes to the height limits require a rezone. Height limits are thirty-five feet, forty feet, fifty-five feet, seventy feet or one hundred fifty feet depending on location.
2. Buildings and structures for uses that are not classified as industrial uses within the Industrial Categories of Table 17C.130-1 and that are over fifty feet in height must follow the design, setback and dimensional standards found in chapter 17C.250 SMC, Tall Building Standards.
3. Adjacent to Single-family and Two-family Residential Zones.
   To provide a gradual transition and enhance the compatibility between the more intensive industrial zones and adjacent single-family and two-family residential zones:
   a. For all development within one hundred fifty feet of any single-family or two-family residential zone the maximum building height is as follows: Starting at a height of thirty feet at the residential zone boundary, additional building height may be added at a ratio of one to two (one foot of additional building height for every two feet of additional horizontal distance from the closest single-family or two-family residential zone). The building height transition requirement ends one hundred fifty feet from the single-family or two-family residential zone and then full building height allowed in the zone applies.



4. Projections Allowed.
   Chimneys, flag poles, satellite receiving dishes and other items similar with a width, depth or diameter of five feet or less may rise ten feet above the height limit, or five feet above the highest point of the roof, whichever is greater. If they are greater than five feet in width, depth or diameter, they are subject to the height limit.
5. Rooftop Mechanical Equipment.
   All rooftop mechanical equipment must be set back at least fifteen feet from all roof edges that are parallel to street lot lines and roof lines facing an abutting residential zone. Elevator mechanical equipment may extend up to sixteen feet above the height limit. Other rooftop mechanical equipment, which cumulatively covers no more than ten percent of the roof area, may extend ten feet above the height limit.

6. Radio and television antennas, utility power poles and public safety facilities are exempt from the height limit except as provided in ((~~chapter 17C.355 SMC~~)) chapter 17C.355A.SMC, Wireless Communication Facilities.

C. Special Height Districts
Special height districts are established to control building heights under particular circumstances such as preservation of public view or airport approaches. See chapter 17C.170 SMC, Special Height Overlay Districts and chapter 17C.180.SMC, Airfield Overlay Zones.

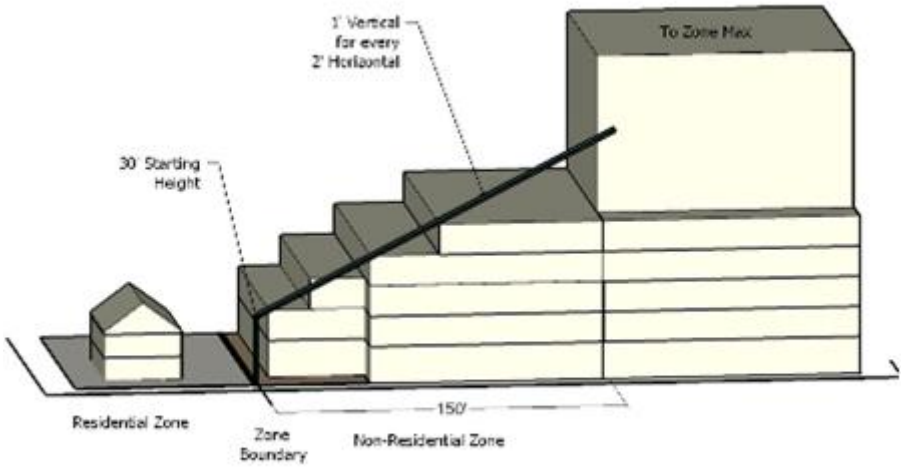
SECTION 7. That SMC 17C.120.220 is amended to read as follows:

Section 17C.120.220 Height

A. Purpose
The height limits are intended to control the overall scale of buildings. The height limits in the O, NR and NMU zones discourage buildings that visually dominate adjacent residential areas. The height limits in the OR, CB and GC zones allow for a greater building height at a scale that generally reflects Spokane's commercial areas. Light, air and the potential for privacy are intended to be preserved in single-family residential zones that are close to commercial zones.

B. Height Standards
The height standards for all structures are stated in Table 17C.120-2. Exceptions to the maximum height standard are stated below.

1. Maximum Height.
Exceptions to the maximum structure height are designated on the official zoning map by a dash and a height listed after the zone map symbol (i.e., CB-150). Changes to the height limits require a rezone. Height limits are thirty-five feet, forty feet, fifty-five feet, seventy feet or one hundred fifty feet depending on location.
2. Buildings and structures over fifty feet in height must follow the design, setback and dimensional standards found in chapter 17C.250 SMC, Tall Building Standards.
3. Adjacent to Single-family and Two-family Residential Zones.
To provide a gradual transition and enhance the compatibility between the more intensive commercial zones and adjacent single-family and two-family residential zones:
    a. For all development within one hundred fifty feet of any single-family or two-family residential zone the maximum building height is as follows:
        i. Starting at a height of thirty feet at the residential zone boundary additional building height may be added at a ratio of 1 to 2 (one foot of additional building height for every two feet of additional horizontal distance from the closest single-family or two-family residential zone). The building height transition requirement ends one hundred fifty feet from the single-family or two-family residential zone and then full building height allowed in the zone applies.



4. Projections Allowed.
   Chimneys, flag poles, satellite receiving dishes, and other similar items with a width, depth or diameter of five feet or less may rise ten feet above the height limit, or five feet above the highest point of the roof, whichever is greater. If they are greater than five feet in width, depth or diameter, they are subject to the height limit.
5. Rooftop Mechanical Equipment.
   All rooftop mechanical equipment must be set back at least fifteen feet from all roof edges that are parallel to street lot lines. Elevator mechanical equipment may extend up to sixteen feet above the height limit. Other rooftop mechanical equipment which cumulatively covers no more than ten percent of the roof area may extend ten feet above the height limit.
6. Radio and television antennas, utility power poles, and public safety facilities are exempt from the height limit except as provided in (~~chapter 17C.355 SMC~~)) chapter 17C.355A SMC, Wireless Communication Facilities.

C. Special Height Districts
   Special height districts are established to control structure heights under particular circumstances such as preservation of public view or airport approaches. See chapter 17C.170 SMC, Special Height Overlay Districts.

SECTION 8. That SMC 17C.110.215 is amended to read as follows:

Section 17C.110.215 Height

A. Purpose.
   The height standards promote a reasonable building scale and relationship of one residence to another and they promote privacy for neighboring properties. The standards contained in this section reflect the general building scale and placement of houses in the City's neighborhoods.
B. Height Standards.
   The maximum height standards for all structures are stated in Table 17C.110-3. The building height shall be measured using the following method:
   1. The height shall be measured at the exterior walls of the structure. Measurement shall be taken at each exterior wall from the existing grade or finished grade,

whichever is lower, up to a plan essentially parallel to the existing or finished grade. For determining structure height, the exterior wall shall include a plane between the supporting members and between the roof and the ground. The vertical distance between the existing grade, or finished grade, if lower, and the parallel plan above it shall not exceed the maximum height of the zone.

2. When finished grade is lower than existing grade, in order for an upper portion of an exterior wall to avoid being considered on the same vertical plan as a lower portion, it must be set back from the lower portion a distance equal to two times the difference between the existing and finished grade on the lower portion of the wall.
3. Depressions such as window wells, stairwells for exits required by other codes, "barrier free" ramps on grade, and vehicle access driveways into garages shall be disregarded in determining structure height when in combination they comprise less than fifty percent of the facade on which they are located. In such cases, the grade for height measurement purposes shall be a line between the grades on either side of the depression.
4. No part of the structure, other than those specifically exempted or excepted under the provisions of the zone, shall extend beyond the plan of the maximum height limit.
5. Underground portions of the structure are not included in height calculations. The height of the structure shall be calculated from the point at which the sides meet the surface of the ground.
6. For purposes of measure building height in residential zones, the following terms shall be interpreted as follows:
    a. "Grade" means the ground surface contour (see also "existing grade" and "finished grade").
    b. "Fill" means material deposited, placed, pushed, pulled or transported to a place other than the place from which it originated.
    c. "Finished grade" means the grade upon completion of the fill or excavation.
    d. "Excavation" means the mechanical removal of earth material.
    e. "Existing grade" means the natural surface contour of a site, including minor adjustments to the surface of the site in preparation for construction.

TABLE 17C.110.215-1
MAXIMUM HEIGHT

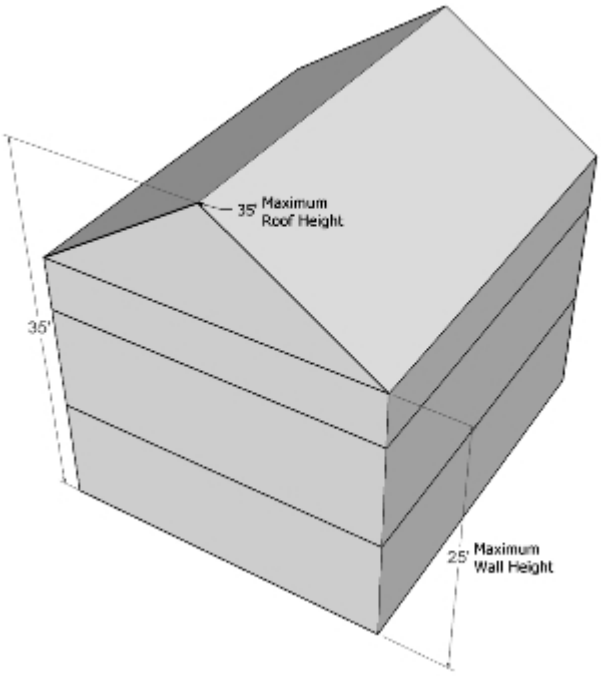
Maximum Wall Height [1]	25 ft.
Maximum Roof Height [2]	35 ft.

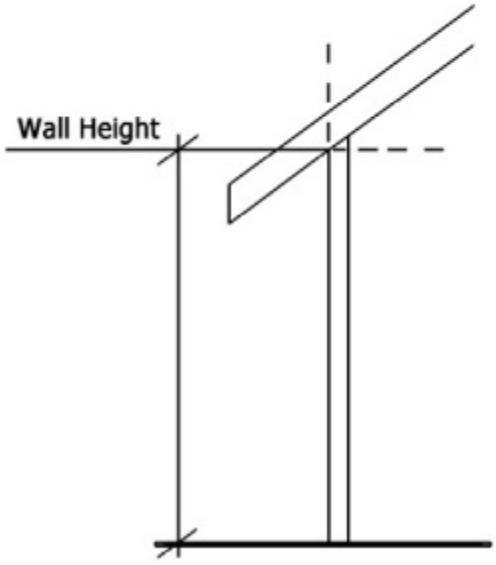
[1] The height of the lowest point of the roof structure intersects with the outside plane of the wall.

[2] The height of the ridge of the roof.

See "Example A" below.

C. **Example A**





C. Exceptions to the maximum height standard are stated below:

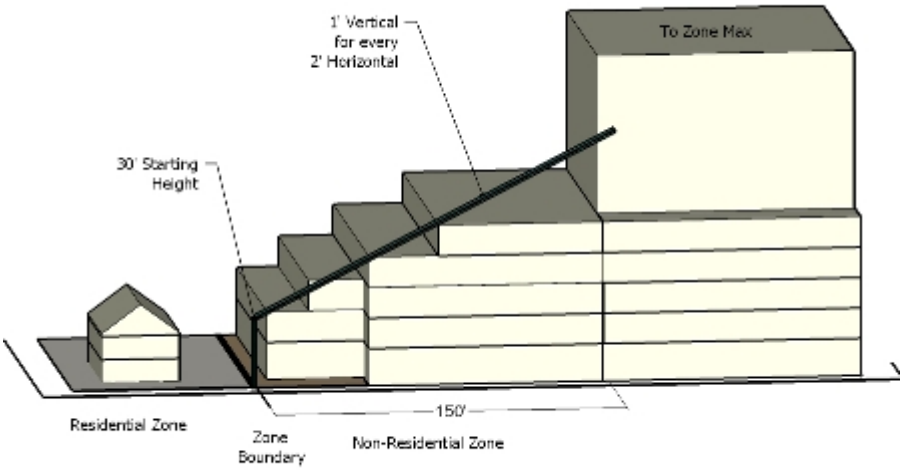
1. Exceptions to the maximum structure height in the RMF and RHD zones are designated on the official zoning map by a dash and a height listed after the zone map symbol (i.e., CB-150). Changes to the height limits in the RMF and RHD zones require a rezone. Height limits are thirty feet, thirty-five feet, forty feet, fifty-five feet, seventy feet, or one hundred fifty feet depending on location.

2. Buildings and structures over fifty feet in height must follow the design, setback and dimensional standards found in chapter 17C.250 SMC, Tall Building Standards

3. Adjacent to Single-family and Two-family Residential Zones.
To provide a gradual transition and enhance the compatibility between the more intensive commercial zones and adjacent single-family and two-family residential zones:

    a. for all development within one hundred fifty feet of any single-family or two-family residential zone the maximum building height is as follows:

        i. Starting at a height of thirty feet, the residential zone boundary additional building height may be added at a ratio of one to two (one foot of additional building height for every two feet of additional horizontal distance from the closest single-family or two-family residential zone). The building height transition requirement ends one hundred fifty feet from the single-family or two-family residential zone and then full building height allowed in the zone applies.



4. Projections Allowed.
Chimneys, flagpoles, satellite receiving dishes and other similar items with a width, depth or diameter of three feet or less may extend above the height limit, as long as they do not exceed three feet above the top of the highest point of the roof. If they are greater than three feet in width, depth or diameter, they are subject to the height limit.

5. Farm Buildings.
Farm buildings such as silos, elevators and barns are exempt from the height limit as long as they are set back from all lot lines at least one foot for every foot in height.

6. Utility power poles and public safety facilities are exempt from the height limit.

7. Radio and television antennas are subject to the height limit of the applicable zoning category.

8. Wireless communication support towers are subject to the height requirements of ((~~chapter 17C.355 SMC~~)) chapter 17C.355A SMC, Wireless Communication Facilities.

9. Uses approved as a conditional use may have building features such as a steeple or tower which extends above the height limit of the underlying zone. Such building features must set back from the side property line adjoining a lot in a residential zone a distance equal to the height of the building feature or one hundred fifty percent of the height limit of the underlying zone, whichever is lower.

D. Special Height Districts.
Special height districts are established to control structure heights under particular circumstances such as preservation of public view or airport approaches. See chapter 17C.170 SMC, Special Height Overlay Districts.

E. Accessory Structures.
The height of any accessory structure located in the rear yard, including those attached to the primary residence, is limited to twenty feet in height, except a detached ADU above a detached accessory structure may be built to twenty-three feet in height.

SECTION 9. That SMC 17C.124.220 is amended to read as follows:

Section 17C.124.220 Height & Massing

A. Purpose.
The height and massing standards control the overall scale of buildings. These standards downtown allow for building height and mass at a scale that generally reflects the most intensive area within the City. The standards help to preserve light, air, and the potential for privacy in lower intensity residential zones that are adjacent to the downtown zones.

B. Height and Massing Standards.
The height and massing standards for all structures are stated in Table 17C.124-2 and as shown on the zoning map. Bonus height may be allowed as defined in SMC 17C.124.220(E). The Bonus height provisions are not available within downtown zones that have a maximum height specified on the zoning map by a dash and a maximum height specified after the zone map symbol (i.e. DTG-100).

1. Changes to the Maximum Height Provisions.
Changes to the height limits are not allowed outside of a downtown plan update process.

2. Pitched roof forms and accessible decks may extend above the height limit; however, if the space within the pitched roof is habitable, it shall only be used for residential purposes.

3. Projections Allowed.
Chimneys, flag poles, satellite receiving dishes, and other similar items with a width, depth, or diameter of five feet or less may rise ten feet above the height limit, or five feet above the highest point of the roof, whichever is greater. If they are greater than five feet in width, depth, or diameter, they are subject to the height limit.

4. Rooftop Mechanical Equipment.
All rooftop mechanical equipment must be set back at least fifteen feet from all roof edges visible from streets. Elevator mechanical equipment may extend up to sixteen feet above the height limit. Other rooftop mechanical equipment which cumulatively covers no more than ten percent of the roof area may extend ten feet above the height limit.

5. Radio and television antennas, utility power poles, and public safety facilities are exempt from the height limit except as provided in ((~~chapter 17C.355 SMC~~))chapter 17C.355A.SMC, Wireless Communication Facilities.

6. Architectural Projections.
The height limits do not apply to uninhabitable space under four hundred square feet in floor area that is devoted to decorative architectural features such belfries, spires, and clock towers.

7. Ground Floor Allowed Height.
The first story of the building may be up to twenty-five feet tall and still count as only one story.

C. Special Height Districts.
Special height districts are established to control structure heights under particular circumstances such as preservation of public view or airport approaches and protection. See chapter 17C.170 SMC, Special Height Overlay Districts.

D. Downtown West End Special Height District.
For the properties shown in Figure 17C.124.220-1 that are located in the area generally west of Monroe Street, east of Cedar Street, and between Main Avenue and Riverside Avenue, the maximum height shall be as shown in Figures 17C.124.220-1 and 17C.124.220-2.

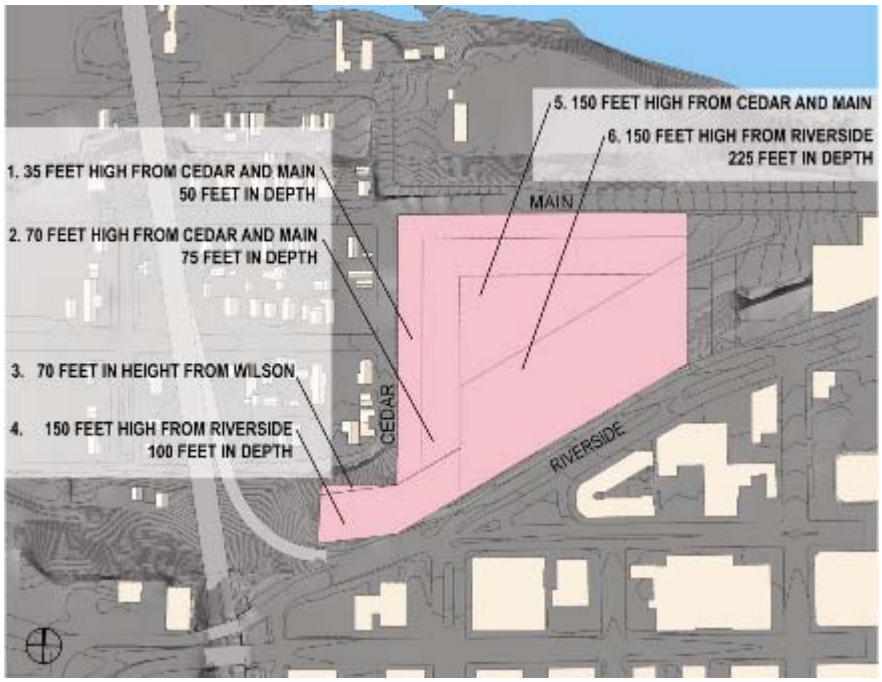


Figure 17C.124.220-1

Notes for Figure 17C.124.220-1.

1. Thirty-five feet high from Cedar Street and Main Avenue street grade (highest street elevation fronting the parcel). Horizontally, fifty feet in depth from Cedar Street and Main Avenue right-of-way/property line.

2. Seventy feet high from Cedar Street and Main Avenue street grade (highest street elevation fronting the parcel). Horizontally, seventy-five feet in depth beginning fifty feet from the Cedar Street and Main Avenue right-of-way/property line.

3. Seventy feet in height from Wilson Avenue street grade (highest street elevation fronting the parcel).
4. One hundred fifty feet high from Riverside Avenue street grade (highest street elevation fronting the parcel). Horizontally, one hundred feet in depth from the Riverside Avenue right-of-way/property line.
5. One hundred fifty feet high from Cedar Street and Main Avenue street grade (highest street elevation fronting the parcel).
6. One hundred fifty feet high from Riverside Avenue street grade (highest street elevation fronting the parcel). Horizontally, two hundred twenty-five feet in depth from the Riverside Avenue right-of-way/property line.

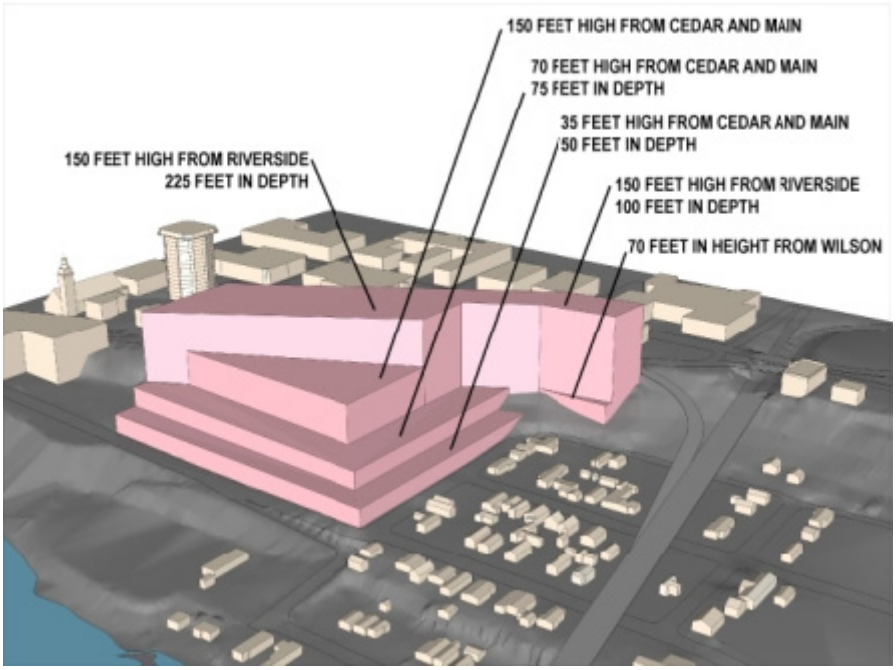
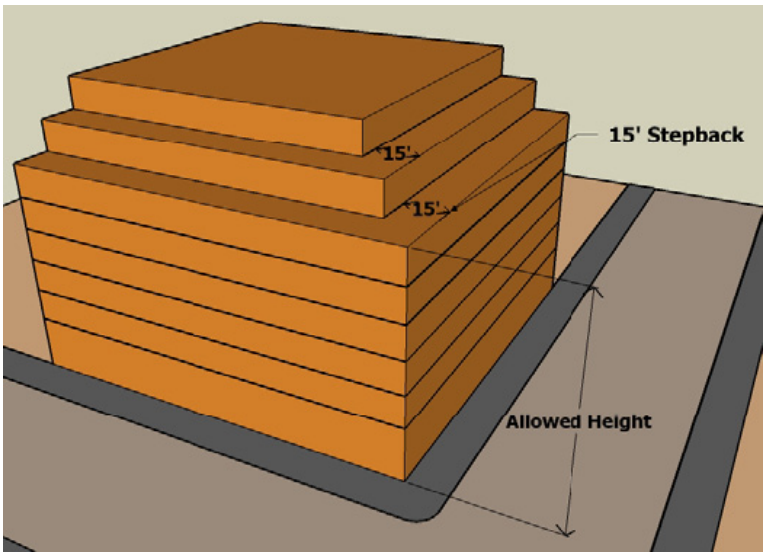


Figure 17C.124.220-2

E. Additional Height Within Specific Height Designation Areas.
Additional stories for structures where the maximum height is specified with a dash after the zoning map symbol (i.e. DTG-70).

1. One additional story is allowed for every fifteen feet of upper story structure stepback from a street lot line, up to the maximum number of stories allowed in the zone without a maximum height specified.



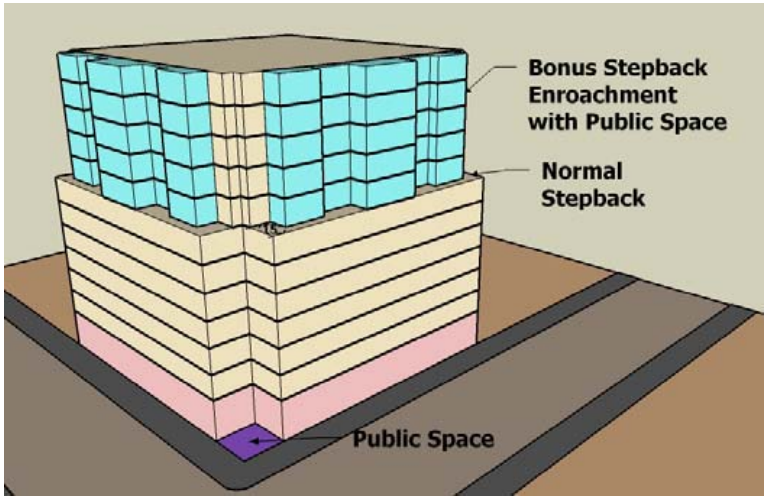
2. In the DTC-100 zone one additional story is allowed for every fifteen feet of upper story structure stepback from Spokane Falls Boulevard. There is no upper story structure stepback required from street lot lines that are not adjacent to Spokane Falls Boulevard after the first fifteen feet of upper story structure stepback from Spokane Falls Boulevard.

F. Structure Standards Above the Seventh Above Ground Story.
These standards are designed to transition the building bulk and mass for buildings exceeding seven stories in the DTG, DTU, and DTS zones.

2. Upper Story Setback.
All stories above the seventh story shall be setback from all property lines and street lot lines a minimum of fifteen feet.

3. Exception.
The provision of an exterior public space as defined below allows for encroachment into the upper story stepback. The allowed area of encroachment may not exceed an area equal to five times the area of the exterior public space.

Exterior Public Space(s) – A Plaza or Courtyard With a Minimum Area of Two Hundred Square Feet.
A plaza or a courtyard is a level space accessible to the public, at least ten feet in width, with a building façade on at least one side. The elevation of the courtyard or plaza shall be within thirty inches of the grade of the sidewalk providing access to it. For courtyards, at least sixty percent of the green shall be planted with trees, ground cover and other vegetation. For plazas, at least fifteen percent, but no more than sixty percent of the space shall be planted with trees, ground cover and other vegetation. Courtyards and plazas shall also include seating, pedestrian-scale lighting, decorative paving, and other pedestrian furnishings. The use of artists to create fixtures and furnishings is strongly encouraged.



G. Bonus Height.

The bonus height provisions are not available within specially designated height areas or the downtown zones that have a maximum height specified on the zoning map by a dash and a maximum height specified after the zone map symbol (i.e. DTG-100).

Additional bonus stories may be achieved if a development incorporates specified and described public amenities allowing bonus height and stories above the number of stories allowed outright in the zone. The bonus stories are in addition to what is specified in Table 17C.124-2. The number of stories above the number of stories allowed outright may be increased through a ministerial process intended to ensure that each amenity both satisfies design criteria and serves a public purpose in the proposed location. Amenities provided must be associated with the use for which the height increase is sought. Proposed amenities shall have a public benefit that is appropriate considering the height increase being achieved.

0. Structure Standards for Stories Above the Twelfth Above Ground Story. These standards are designed to transition the apparent building height and mass for buildings that exceed twelfth stories in the DTG, DTU, and DTS zones. All stories above the twelfth story must meet the following standards. The following floor area and maximum diagonal plan tower dimension shall be measured from the inside face of the outside wall.

a. On sites less than or equal to thirty-four thousand square feet in size:

i. the maximum tower floor plate area per site is twelve thousand square feet;

ii. the maximum tower diagonal plan dimension is one hundred fifty feet.

b. On sites over thirty-four thousand square feet in size:

i. the maximum tower floor plate area per site is thirty-six percent of the total site area;

ii. the maximum tower diagonal plan dimension is based upon the following formula: Maximum tower diagonal plan dimension = (Square Root of (Site Area x 2)) x 0.6).

1. Bonus Height Provisions.

a. The following items quality for addition structure height.

   i. Permanent Affordable Housing.
   Structure envelop devoted to permanent affordable household living space (housing units affordable to households making less than eighty percent of area median income for the City as defined by HUD) is not subject to a height or story limit.

   ii. Affordable Housing Building Volume Bonus.
   An area equal to the area devoted to permanent affordable housing that lies below the twelfth story may be added above the twelfth story in residential use that is not affordable housing.

   iii. Historic Landmark Transfer of Development Right (TDR).
   Subject to the requirements of chapter 17D.070 SMC, Transfer of Development Rights, additional building height and gross floor area may be transferred from a building on the Spokane register of historic places that is within a downtown zone to a new development within a downtown zone. The TDR may be transferred from a historic landmark located on the same site or from a historic landmark located on a separate site.

b. Two Story Bonus.
   The following items each qualify for two bonus stories.

   i. Ground Floor Uses that "Spill" onto Adjacent Streets.
   One ground floor use that "spills" (single use) per one hundred foot of structure street frontage.

   Preferred uses include retail sales and service or entertainment use, or any combination thereof, located on the ground floor with direct access and fronting on a street.

   ii. Canopy Covering at Least Fifty Percent of Adjacent Frontage Over Public Sidewalk.
   A virtually continuous canopy structure. A canopy is a permanent architectural element projecting out from a building facade over a sidewalk or walkway. A canopy shall be at least five feet in horizontal width and be no less than eight feet and no more than twelve feet above grade.

   iii. Alley Enhancements.
   Decorative paving, pedestrian-scaled lighting, special paving, and rear entrances intended to encourage pedestrian use of the alley.

   iv. Additional Streetscape Features.
   Seating, trees, pedestrian-scaled lighting, and special paving in addition to any that are required by the design standards and guidelines.

   v. Small Scale Water Feature.
   A small scale minor water feature integrated within an open space or plaza between the structure and public sidewalk. Small scale minor water features are generally designed to be viewed but not physically interacted with.

   vi. Incorporating Historic Features and Signage.
   Including historic plaques or markings about the local area or site.

Reusing historic building elements and features on the site. Reusing existing landmark signs.

vii. Incorporating Bicycle Parking Enhancements.
Providing covered bicycle parking for all required bicycle parking along with other bicycle amenities such as secured bicycle lockers and equipment storage facilities.

c. Four Story Bonus.
The following items qualify for four bonus stories each.

i. Additional Building Stepback Above the Seventh Floor.
An additional ten feet of upper floor stepback from the street lot lines.

ii. Preferred Materials in Pedestrian Realm.
Use of brick and stone on the building facades that face streets on the first three stories of the building.

iii. Multiple Ground Floor Uses that “Spill” onto Adjacent Streets.
One ground floor use that “spills” per thirty feet of structure street frontage. Preferred uses include retail sales and service or entertainment use, or any combination thereof, located on the ground floor with direct access and fronting on a street.

iv. Major Exterior Public Spaces/Plaza.
A plaza or courtyard, with a minimum area of four hundred square feet or one percent of the site size, whichever is greater. A plaza or a courtyard is a level space accessible to the public, at least ten feet in width, with a building façade on at least one side. The elevation of the courtyard or plaza shall be within thirty inches of the grade of the sidewalk providing access to it. For courtyards, at least sixty percent of the green shall be planted with trees, ground cover and other vegetation. For plazas, at least fifteen percent, but no more than sixty percent of the space shall be planted with trees, ground cover and other vegetation. Courtyards and plazas shall also include seating, pedestrian-scale lighting, decorative paving and other pedestrian furnishings. The use of artists to create fixtures and furnishings is strongly encouraged.

v. Workforce Housing Greater Than Twenty-five Percent of the Total Number of Housing Units.
For this bonus, the housing units shall be affordable to households earning one hundred twenty percent or less of area medium income (AMI). For homes to be purchased the total housing payment (principal, interest, taxes, and insurance, PITI) shall be no more than thirty-three percent of income. For rental housing the rent plus utilities shall be no more than thirty percent of income.

vi. Public Art.
Public art includes sculptures, murals, inlays, mosaics, and other two-dimensional or three-dimensional works, as well as elements integrated into the design of a project (e.g., fountain) that are designed and crafted by one or more artists. Such artists must be listed on a registry of either the Washington state arts commission or the Spokane arts commission. To receive the bonus, public art must be documented at a value that is at least one percent of the construction value of the bonus stories.

vii. Through-block Pedestrian Connections.
Through-block pedestrian connection providing a continuous walkway accessible to the public, at least ten feet in width, paved with decorative paving and lighted for nighttime use. It may be covered or open to the sky.

viii. Major Water Feature.
A major water feature integrated within an open space or plaza between the structure and public sidewalk. A major water feature is designed to be viewed and is large enough to be physically interacted with by the public. It shall be at least ten square feet in size as measure in plan view.

ix. Green/Living Roof.
A planted area of a roof covering greater than fifty percent of the roof surface.

d. Eight Story Bonus.
The following items qualify for eight bonus stories each.

i. Workforce Housing Greater Than Fifty Percent of the Total Number of Housing Units.
For this bonus, the housing units shall be affordable to households earning one hundred twenty percent or less of area medium income (AMI). For homes to be purchased the total housing payment (principal, interest, taxes, and insurance, PITI) shall be no more than thirty-three percent of income. For rental housing the rent plus utilities shall be no more than thirty percent of income.

ii. Bicycle Commuter Shower Facilities.
Structures containing two hundred thousand square feet or more of office gross floor area shall include shower facilities and clothing storage areas for bicycle commuters. One shower per gender shall be required. Such facilities shall be for the use of the employees and occupants of the building, and shall be located where they are easily accessible to parking facilities for bicycles.

SECTION 10. That SMC 17A.020.010 is amended to read as follows:

Section 17A.020.010 “A” Definitions

A. Abandoned Sign Structure.
A sign structure where no sign has been in place for a continuous period of at least six months.
B. Aboveground Storage Tank or AST.
Any one or connected combination of tanks that is used to contain an accumulation of liquid critical materials and the aggregate volume of which (including the volume of piping connected thereto) is more than sixty gallons and the entire exterior surface area of the tank is above the ground and is able to be fully visually inspected. Tanks located in vaults or buildings that are to be visually inspected are considered to be aboveground tanks.
C. Accepted.
A project for which the required plans have been found to be technically adequate.
D. Accessory Dwelling Unit (ADU).
An accessory dwelling unit is a separate additional living unit, including separate kitchen, sleeping, and bathroom facilities, attached or detached from the primary residential unit, on a single-family lot. ADUs are known variously as:

1. “Mother-in-law apartments,”
2. “Accessory apartments,” or
3. “Second units.”

E. Accessory Structure.
A structure of secondary importance or function on a site. In general, the primary use of the site is not carried on in an accessory structure.
1. Accessory structures may be attached or detached from the primary structure.
2. Examples of accessory structures include:
    a. Garages,
    b. Decks,
    c. Fences,
    d. Trellises,
    e. Flagpoles,
    f. Stairways,
    g. Heat pumps,
    h. Awnings, and
    i. Other structures.
3. See also SMC 17A.020.160 (“Primary Structure”).

F. Accessory Use.
A use or activity which is a subordinate part of a primary use and which is clearly incidental to a primary use on a site.

G. Activity.
See Regulated Activity.

H. Administrative Decision.
A permit decision by an officer authorized by the local government. The decision may be for approval, denial, or approval with conditions and is subject to the applicable development standards of the land use codes or development codes.

I. Adult Bookstore or Adult Video Store.
1. A commercial establishment which, as one of its principal business activities, offers for sale or rental for any form of consideration any one or more of the following: books, magazines, periodicals or other printed matter, or photographs, films, motion pictures, video cassettes, compact discs, digital video discs, slides, or other visual representations which are characterized by their emphasis upon the display of “specified anatomical areas,” as defined in SMC 17A.020.190, or “specified sexual activities,” as defined in SMC 17A.020.190. A “principal business activity” exists where the commercial establishment meets any one or more of the following criteria:
    a. At least thirty percent of the establishment’s displayed merchandise consists of said items; or
    b. At least thirty percent of the retail value (defined as the price charged to customers) of the establishment’s displayed merchandise consists of said items; or
    c. At least thirty percent of the establishment’s revenues derive from the sale or rental, for any form of consideration, of said items; or
    d. The establishment maintains at least thirty percent of its floor space for the display, sale, and/or rental of said items (aisles and walkways used to access said items, as well as cashier stations where said items are rented or sold, shall be included in “floor space maintained for the display, sale, and/or rental of said items”); or
    e. The establishment maintains at least five hundred square feet of its floor space for the display, sale, and/or rental of said items (aisles and walkways used to access said items, as well as cashier stations where said items are rented or sold, shall be included in “floor space maintained for the display, sale, and/or rental of said items”); or

f. The establishment regularly offers for sale or rental at least two thousand of said items; or
g. The establishment regularly features said items and regularly advertises itself or holds itself out, in any medium, by using “adult,” “XXX,” “sex,” “erotic,” or substantially similar language, as an establishment that caters to adult sexual interests.

2. For purposes of this definition, the term “floor space” means the space inside an establishment that is visible or accessible to patrons, excluding restrooms.

J. Adult Business.
An “adult bookstore or adult video store,” an “adult entertainment establishment,” or a “sex paraphernalia store.”

K. Adult Entertainment Establishment.
1. An “adult entertainment establishment” is an enclosed building, or any portion thereof, used for presenting performances, activities, or material relating to “specified sexual activities” as defined in SMC 17A.020.190 or “specified anatomical areas” as defined in SMC 17A.020.190 for observation by patrons therein.
2. A motion picture theater is considered an adult entertainment establishment if the preponderance of the films presented is distinguished or characterized by an emphasis on the depicting or describing of "specified sexual activities" or "specified anatomical areas."
3. A hotel or motel providing overnight accommodations is not considered an adult entertainment establishment merely because it provides adult closed circuit television programming in its rooms for its registered overnight guests.

L. Adult Family Home.
A residential use as defined and licensed by the state of Washington in a dwelling unit.

M. Agency or Agencies.
The adopting jurisdiction(s), depending on the context.

N. Agricultural Activities.
1. Pursuant to WAC 173-26-020(3)(a), agricultural uses and practices including, but not limited to:
a. Producing, breeding, or increasing agricultural products;
b. Rotating and changing agricultural crops;
c. Allowing land used for agricultural activities to lie fallow in which it is plowed and tilled but left unseeded;
d. Allowing land used for agricultural activities to lie dormant as a result of adverse agricultural market conditions;
e. Allowing land used for agricultural activities to lie dormant because the land is enrolled in a local, state, or federal conservation program, or the land is subject to a conservation easement;
f. Conducting agricultural operations; maintaining, repairing, and replacing agricultural equipment;
g. Maintaining, repairing, and replacing agricultural facilities, provided that the replacement facility is not closer to the shoreline than the original facility; and
h. Maintaining agricultural lands under production or cultivation.
2. The City of Spokane shoreline master program defines agriculture activities as:
a. Low-intensity agricultural use is defined as passive grazing and plant cultivation; or
b. High-intensity agricultural use includes such activities as feedlots, feed mills, packing plants, agricultural processing plants or warehouse for the purpose of processing, packing, and storage of agricultural products.

O. Agricultural Land.
Areas on which agricultural activities are conducted as of the date of adoption of the updated shoreline master program pursuant to the State shoreline guidelines as evidenced by aerial

photography or other documentation. After the effective date of the SMP, land converted to agricultural use is subject to compliance with the requirements herein.

P. AKART.
An acronym for “all known, available, and reasonable methods to control toxicants” as used in the sense of the state Water Pollution Control Act and RCW 90.48.520 thereof. AKART shall represent the most current methodology that can be reasonably required for preventing, controlling, or abating the pollutants associated with a discharge. The concept of AKART applies to both point and nonpoint sources of pollution.

Q. Alkali Wetlands.
Alkali wetlands means wetlands characterized by the occurrence of shallow saline water. In eastern Washington, these wetlands contain surface water with specific conductance that exceeds three thousand micromhos/cm. They have unique plants and animals that are not found anywhere else in eastern Washington such as the alkali bee. Conditions within these wetlands cannot be easily reproduced through compensatory mitigation.

R. Alley.
See “Public Way” (SMC 17A.020.160).

S. Alteration.
A physical change to a structure or site.
1. Alteration does not include normal maintenance and repair or total demolition.
2. Alteration does include the following:
    a. Changes to the facade of a building.
    b. Changes to the interior of a building.
    c. Increases or decreases in floor area of a building; or
    d. Changes to other structures on the site, or the development of new structures.

T. Alteration of Plat, Short Plat, or Binding Site Plan.
The alteration of a previously recorded plat, short plat, binding site plan, or any portion thereof, that results in a change to conditions of approval or the deletion of existing lots or the change of plat or lot restrictions or dedications that are shown on the recorded plat. An alteration does not include a boundary line adjustment subject to SMC 17G.080.030.

U. Alternative or Post-incarceration Facility.
A group living use where the residents are on probation or parole.

V. ((~~Alternative Tower Structure (“Stealth” Technology).~~
~~Manmade trees, clock towers, bell steeples, light poles, flag poles, and similar alternative-design mounting structures that camouflage or conceal the presence of antennas or towers (see also “Low Visual Impact Facility” SMC 17A.020.120).~~)) [Deleted]

W. ((~~Antenna Array (Wireless Communication Antenna Array).~~
1. ~~One or more rods, panels, discs, or similar devices used for the transmission or reception of radio frequency (RF) signals, which may include omni-directional antenna (whip), directional antenna (panel), and parabolic antenna (dish).~~
2. ~~Wireless communication antenna array shall be considered an accessory use provided they are located upon an existing structure.~~)) [Deleted]

X. ((~~Antenna Height.~~
~~The vertical distance measured from the base of the antenna support structure at grade to the highest point of the structure including the antenna.~~)) [Deleted]

Y. ((~~Antenna Support Structure.~~
~~Any pole, telescoping mast, tower tripod, or any other structure that supports a device used in the transmitting and/or receiving of electromagnetic waves.~~)) [Deleted]

Z. API 653.
The American Petroleum Institute’s standards for tank inspection, repair, alteration, and reconstruction.

AA. Appeal.
A request for review of the interpretation of any provision of Title 17 SMC.

BB. Appeal – Standing For.

As provided under RCW 36.70C.060, persons who have standing are limited to the following:

1. The applicant and the owner of property to which the land use decision is directed; and
2. Another person aggrieved or adversely affected by the land use decision, or who would be aggrieved or adversely affected by a reversal or modification of the land use decision. A person is aggrieved or adversely affected within the meaning of this section only when all of the following conditions are present:
    a. The land use decision has prejudiced or is likely to prejudice that person;
    b. That person's asserted interests are among those that the local jurisdiction was required to consider when it made the land use decision;
    c. A judgment in favor of that person would substantially eliminate or redress the prejudice to that person caused or likely to be caused by the land use decision; and
    d. The petitioner has exhausted his or her administrative remedies to the extent required by law (RCW 36.70C.060).

CC. Applicant.

An application for a permit, certificate, or approval under the land use codes must be made by or on behalf of all owners of the land and improvements. "Owners" are all persons having a real property interest. Owners include:

1. Holder of fee title or a life estate;
2. Holder of purchaser's interest in a sale contract in good standing;
3. Holder of seller's interest in a sale contract in breach or in default;
4. Grantor of deed of trust;
5. Presumptively, a legal owner and a taxpayer of record;
6. Fiduciary representative of an owner;
7. Person having a right of possession or control; or
8. Any one of a number of co-owners, including joint, in common, by entireties, and spouses as to community property.

DD. Application – Complete.

An application that is both counter-complete and determined to be substantially complete as set forth in SMC 17G.060.090.

EE. Aquaculture.

The farming or culture of food fish, shellfish, or other aquatic plants or animals in freshwater or saltwater areas, and may require development such as fish hatcheries, rearing pens and structures, and shellfish rafts, as well as use of natural spawning and rearing areas. Aquaculture does not include the harvest of free-swimming fish or the harvest of shellfish not artificially planted or maintained, including the harvest of wild stock geoducks on DNR-managed lands.

FF. Aquatic Life.

Shall mean all living organisms, whether flora or fauna, in or on water.

GG. Aquifer or Spokane Aquifer.

A subterranean body of flowing water, also known as the Spokane-Rathdrum Aquifer, that runs from Pend Oreille Lake to the Little Spokane River.

HH. Aquifer Sensitive Area (ASA).

That area or overlay zone from which runoff directly recharges the aquifer, including the surface over the aquifer itself and the hillside areas immediately adjacent to the aquifer. The area is shown in the map adopted as part of SMC 17E.050.260.

II. Aquifer Water Quality Indicators.

Common chemicals used for aquifer water quality screening. These are:

1. Calcium,
2. Magnesium,
3. Sodium,

4. Total hardness,
5. Chloride,
6. Nitrate-nitrogen, and
7. Phosphorus.

JJ. Archaeological Areas and Historical Sites.
Sites containing material evidence of past human life, such as structures and tools and/or cultural sites with past significant historical events. These sites are a nonrenewable resource and provided a critical educational link with the past.

KK. Architectural feature
Ornamental or decorative feature attached to or protruding from an exterior wall or roof, including cornices, eaves, belt courses, sills, lintels, bay windows, chimneys, and decorative ornaments.

LL. Architectural Roof Structure
Minor tower or turret extending from the cornice or main roof line of a building, typically highlighting a primary corner or building entry. For purposes of the FBC, such features may not be occupied.

1. Area of Shallow Flooding.
   A designated AO or AH Zone on the Flood Insurance Rate Map (FIRM).
2. The base flood depths range from one to three feet.
3. A clearly defined channel does not exist.
4. The path of flooding is unpredictable and indeterminate.
5. Velocity flow may be evident.
6. AO is characterized as sheet flow and AH indicates ponding.

MM. Area of Shallow Flooding.
A designated AO or AH Zone on the Flood Insurance Rate Map (FIRM).

1. The base flood depths range from one to three feet.
2. A clearly defined channel does not exist.
3. The path of flooding is unpredictable and indeterminate.
4. Velocity flow may be evident.
5. AO is characterized as sheet flow and AH indicates ponding.

NN. Area of Special Flood Hazard.
The land in the floodplain within a community subject to a one percent or greater chance of flooding in any given year. Designation on maps always includes the letters A or V.

OO. Arterial.
See:

1. “Principal Arterials” – SMC 17A.020.160,
2. “Minor Arterials” – SMC 17A.020.130,
3. “Collector Arterial” – SMC 17A.020.030, or
4. “Parkway” – SMC 17A.020.160.

PP. Assisted Living Facility.
A multi-family residential use licensed by the state of Washington as a boarding home pursuant to chapter 18.20 RCW, for people who have either a need for assistance with activities of daily living (which are defined as eating, toileting, ambulation, transfer [e.g., moving from bed to chair or chair to bath], and bathing) or some form of cognitive impairment but who do not need the skilled critical care provided by nursing homes.

1. An "assisted living facility" contains multiple assisted living units.
2. An assisted living unit is a dwelling unit permitted only in an assisted living facility.

QQ. Attached Housing.
Two or more dwelling units that are single-family residences on individual lots attached by a common wall at a shared property line. These include:

1. Townhouses,
2. Row houses, and
3. Other similar structures

RR. Attached Structure.
Any structure that is attached by a common wall to a dwelling unit.
1. The common wall must be shared for at least fifty percent of the length of the side of the principal dwelling.
2. A breezeway is not considered a common wall.
3. Structures including garages, carports, and house additions attached to the principal dwelling unit with a breezeway are still detached structures for purposes of this chapter and its administration.

SS. Available Capacity.
Capacity for a concurrency facility that currently exists for use without requiring facility construction, expansion, or modification (RCW 76.70A.020).

TT. Average Grade Level.
Means the average of the natural or existing topography of the portion of the lot, parcel, or tract of real property on that part of the lot to be occupied by the building or structure as measured by averaging the elevations at the center of all exterior walls of the proposed structure.

UU. Awning
A roof-like cover, often made of fabric or metal, designed and intended for protection from the weather or as a decorative embellishment, and which projects from a wall or roof of a structure over a window, walk, or door.

SECTION 11. That SMC 17A.020.200 is amended to read as follows:

Section 17A.020.200 "T" Definitions

A. Temporary Erosion and Sediment Control Measures.
Erosion and sediment control devices used to provide temporary stabilization of a site, usually during construction or ground disturbing activities, before permanent devices are installed.

B. Temporary Sign.
A sign placed on a structure or the ground for a specifically limited period of time as provided in SMC 17C.240.240(G).

C. Temporary Structure.
A structure approved for location on a lot by the department for a period not to exceed six months with the intent to remove such structure after the time period expires.

D. Tenant Space.
Portion of a structure occupied by a single commercial lease holder with its own public entrance from the exterior of the building or through a shared lobby, atrium, mall, or hallway and separated from other tenant spaces by walls.

E. Through Pedestrian Zone.
The portion of a sidewalk that is intended for pedestrian travel and is entirely free of permanent and temporary objects.

F. Tideland.
Land on the shore of marine water bodies between the line of ordinary high tide and the line of extreme low tide.

G. Total Maximum Daily Load (TMDL).
A calculation of the maximum amount of a pollutant that a water body can receive and still meet water quality standards, and an allocation of that amount to the pollutant's sources. A TMDL is the sum of the allowable loads of a single pollutant from all contributing point and non point sources. The calculation shall include a margin of safety to ensure that the water body can be used for the purposes the state has designated. The calculation shall also

account for seasonable variation in water quality. Water quality standards are set by states, territories, and tribes. They identify the uses for each water body, for example, drinking water supply, contact recreation (swimming), and aquatic life support (fishing), and the scientific criteria to support that use. The Clean Water Act, section 303, establishes the water quality standards and TMDL programs.

H. ((~~Tower (Wireless Communication Support Tower).~~
~~Any structure that is designed and constructed specifically to support a wireless communication antenna array. Towers include self-supporting towers, guyed towers, a single pole structure (monopole), lattice tower, and other similar structures.~~)) [Deleted].

I. ((~~Tower Compound.~~
~~The area containing support tower and ground equipment. The fence surrounding the equipment is the outer extent of the compound.~~)) [Deleted].

J. ((~~Tower Height.~~
~~The vertical distance measured from the base of the tower structure at grade to the highest point of the structure including the antenna.~~)) [Deleted].

K. Tracking.
The deposition of sediment onto paved surfaces from the wheels of vehicles.

L. Tract.
A piece of land created and designated as part of a land division that is not a lot, lot of record or a public right-of-way. Tracts are created and designated for a specific purpose. Land uses within a tract are restricted to those uses consistent with the stated purpose as described on the plat, in maintenance agreements, or through conditions, covenants and restrictions (CC&Rs).

M. Traveled Way.
The area of street which is intended to carry vehicular traffic, including any shoulders.

N. Type I Application.
An application for a project permit that is subject to an administrative approval and is not categorically exempt from environmental review under chapter 43.21C RCW (SEPA) and the City of Spokane Environmental Ordinance chapter 17E.050 SMC, and does not require a public hearing. Type I applications are identified in Table 17G.060-1 in chapter 17G.060 SMC. These applications may include, but are not limited to, building permits and grading permits.

O. Type II Application.
An application for a project permit that is subject to an administrative decision of a department director, that may or may not be categorically exempt from chapter 43.21C RCW (SEPA), and does not require a public hearing. The Type II applications are identified in Table 17G.060-1 in chapter 17G.060 SMC. These applications may include, but are not limited to, short plats, binding site plans, shoreline substantial development permits, and some conditional use permits; provided, the planning director may require conditional use permits which are otherwise characterized as Type II applications under this title to be submitted and processed as Type III applications when the director issues written findings that the Type III process is in the public interest.

P. Type III Application.
An application for a project permit that is subject to a quasi-judicial decision of the hearing examiner that may or may not be categorically exempt from chapter 43.21C RCW (SEPA) and the City of Spokane Environmental Ordinance chapter 17E.050 SMC and requires a public hearing. Type III applications are identified in Table 17G.060-1 in chapter 17G.060 SMC. These applications may include, but are not limited to, rezones, conditional use permits, preliminary long plats, or shoreline conditional use permits.

SECTION 12. That SMC 17C.120.110 is amended to read as follows:

Section 17C.120.110 Limited Use Standards

The paragraphs listed below contain the limitations and correspond with the bracketed [ ] footnote numbers from Table 17C.120-1.

1. Group Living.
   This regulation applies to all parts of Table 17C.120-1 that have a [1].
   a. General Standards.
      All group living uses except for alternative or post-incarceration facilities are allowed by right.
   b. Alternative or Post Incarceration Facilities.
      Group living uses which consist of alternative or post incarceration facilities are conditional uses.
2. Adult Business.
   This regulation applies to all parts of Table 17C.120-1 that have a [2]. Adult businesses are subject to the additional standards of chapter 17C.305 SMC.
3. Commercial Parking.
   This regulation applies to all parts of Table 17C.120-1 that have a [3]. In the O and OR zones, a commercial parking use provided within a building or parking structure is a conditional use.
4. Drive-through Facility.
   This regulation applies to all parts of Table 17C.120-1 that have a [4]. In the O and OR zones, a drive-through facility is permitted only when associated with a drive-through bank. In addition, in the OR zone, for a florist use approved by a special permit, sales of non-alcoholic beverages, and sale of food items not prepared on site, including drive-through sales of such items are allowed as an accessory use at locations situated on principal arterials or a designated state route. Drive-through facilities are subject to the additional standards of SMC 17C.120.290.
5. Quick Vehicle Servicing.
   This regulation applies to all parts of Table 17C.120-1 that have a [5]. Quick vehicle servicing uses are permitted only on sites that have frontage on a principal arterial street. Quick vehicle servicing uses are subject to the additional standards of SMC 17C.120.290.
6. Retail Sales and Service Uses Size Limitation.
   This regulation applies to all parts of Table 17C.120-1 that have a [6]. Retail sales and services are limited in size in order to reduce their potential impacts on residential uses and to promote a relatively local market area. Retail sales and services uses are limited to the following:
   a. When retail sales and services uses are located within an office building, the retail sales and services may be larger than three thousand square feet, but may not exceed ten percent of the total floor area of the building exclusive of parking areas located within the structure.
   b. Uses not within an office building which are listed as sales-oriented under SMC 17C.190.270(C), retail sales and service, are limited to three thousand square feet of total floor area per site exclusive of parking areas located within a structure.
   c. Uses other than a hotel, motel, private club or lodge which are listed as personal service-oriented, entertainment-oriented or repair-oriented under SMC 17C.190.270(C), retail sales and service, that are larger than three thousand square feet are a conditional use. A hotel, motel, private club or lodge may be larger than three thousand square feet.
7. Required Residential Limitation.
   This regulation applies to all parts of Table 17C.120-1 that have a [7]. The limitations are stated in SMC 17C.120.280.
8. Industrial Size Limitation.
   This regulation applies to all parts of Table 17C.120-1 that have a [8]. These types of uses are limited in size to assure that they will not dominate the commercial area and to limit their

potential impacts on residential and commercial uses. In addition, if the planning director determines that the proposed use will not be able to comply with the off- site impact standards of chapter 17C.220 SMC, the planning director may require documentation that the development will be modified to conform with the standards.

a. Individual uses in the NR and NMU zones are limited to five thousand square feet of floor area per site exclusive of parking area.
b. Individual uses in the CB zone that exceed twenty thousand square feet of floor area per site exclusive of parking area are a conditional use.
c. Individual uses in the GC zone that exceed fifty thousand square feet of floor area per site exclusive of parking area are a conditional use.

9. Mini-storage Facilities Limitation.
This regulation applies to all parts of Table 17C.120-1 that have an [9]. The limitations are stated with the special standards for these uses in chapter 17C.350 SMC, Mini-storage Facilities.
10. Outdoor Activity Limitation.
This regulation applies to all parts of Table 17C.120-1 that have a [10]. Outdoor display, storage or use of industrial equipment, such as tools, equipment, vehicles, products, materials or other objects that are part of or used for the business operation is prohibited.
11. [Deleted]
12. ((~~Wireless Communication Facilities.~~
~~This regulation applies to all parts of Table 17C.120-1 that have an [12]. Some wireless communication facilities are allowed by right. See chapter 17C.355 SMC.~~**))** [Deleted]
13. Mobile Food Vending.
This standard applies to all parts of Table 17C.120-1 that have a [13]. All mobile food vendors shall have a valid mobile food vending license issued pursuant to SMC 10.51.010 Mobile Food Vendors.

SECTION 13. that Table 17C.120-1 is amended to read as follows:

Section 17C.120.100 Commercial Zones Primary Uses

A. Permitted Uses – "P."
Uses permitted in the commercial zones are listed in Table 17C.120-1 with a "P." These uses are allowed if they comply with the development standards and other standards of this chapter.
B. Limited Uses – "L."
Uses allowed that are subject to limitations are listed in Table 17C.120-1 with an "L." These uses are allowed if they comply with the limitations as listed in the footnotes following the table and the development standards and other standards of this chapter. In addition, a use or development listed in Part 3 of this division, Special Use Standards, is also subject to the standards of those chapters.
C. Conditional Uses – "CU."
Uses that are allowed if approved through the conditional use review process are listed in Table 17C.120-1 with a "CU." These uses are allowed provided they comply with the conditional use approval criteria for that use, the development standards, and other standards of this chapter. Uses listed with a "CU" that also have a footnote number in the table are subject to the standards cited in the footnote. In addition, a use or development listed in Part 3 of this division, Special Use Standards, is also subject to the standards of those chapters. The conditional use review process and approval criteria are stated in chapter 17C.320 SMC, Conditional Uses.
D. Uses Not Permitted – "N."
Uses listed in Table 17C.120-1 with an "N" are not permitted. Existing uses in categories

listed as not permitted are subject to the standards of chapter 17C.210 SMC, Nonconforming Situations.

TABLE 17C.120-1 COMMERCIAL ZONE PRIMARY USES						
Use is: **P:** Permitted **N:** Not Permitted **L:** Allowed, but Special Limitations **CU:** Conditional Use Review Required	**O (Office)**	**OR (Office Retail)**	**NR (Neighborhood Retail)**	**NMU (Neighborhood Mixed Use)**	**CB (Community Business)**	**GC (General Commercial)**
Residential Categories						
Group Living [1]	L/CU	L/CU	L/CU	L/CU	L/CU	L/CU
Residential Household Living	P	P	P	P	P	P
Commercial Categories						
Adult Business	N	N	N	N	L[2]	L[2]
Commercial Outdoor Recreation	N	N	N	N	P	P
Commercial Parking	CU[3]	CU[3]	P	P	P	P
Drive-through Facility	L[4]	L[4]	L[4]	L[4]	P	P
Major Event Entertainment	N	N	N	N	P	P
Office	P	P	P	P	P	P
Quick Vehicle Servicing	N	N	L[5, 10]	L[5, 7, 10]	P	P

Retail Sales and Service	N	L/CU[6]	P	L[7]	P	P
Mini-storage Facilities	N	N	N	N	L[9]	L[9]
Vehicle Repair	N	N	N	N	P	P
Mobile Food Vending	L[13]	L[13]	L[13]	L[13]	L[13]	L[13]
Industrial Categories						
High Impact Uses	N	N	N	N	N	N
Industrial Service	N	N	N	N	L/CU[8, 10]	L/CU[8, 10]
Manufacturing and Production	N	N	L[8, 10]	L[7, 8, 10]	L/CU[8, 10]	L/CU[8, 10]
Railroad Yards	N	N	N	N	N	N
Warehouse and Freight Movement	N	N	N	N	L/CU[8, 10]	L/CU[8, 10]
Waste-related	N	N	N	N	N	N
Wholesale Sales	N	N	N	N	L/CU[8, 10]	L/CU[8, 10]
Institutional Categories						
Basic Utilities	P	P	P	P	P	P
Colleges	P	P	P	P	P	P
Community Service	P	P	P	P	P	P
Daycare	P	P	P	P	P	P
Medical Centers	P	P	P	P	P	P
Parks and Open Areas	P	P	P	P	P	P

Religious Institutions	P	P	P	P	P	P
Schools	P	P	P	P	P	P
Other Categories						
Agriculture	N	N	N	N	CU	CU
Aviation and Surface Passenger Terminals	CU	CU	CU	CU	CU	CU
Detention Facilities	N	N	N	N	CU	CU
Essential Public Facilities	CU	CU	CU	CU	CU	CU
Mining	N	N	N	N	N	N
Rail Lines and Utility Corridors	CU	CU	CU	CU	CU	CU
~~Wireless Communication Facilities [11]~~	~~L/CU~~	~~L/CU~~	~~L/CU~~	~~L/CU~~	~~L/CU~~	~~L/CU~~

Notes:

- The use categories are described in chapter 17C.190 SMC.
- Standards that correspond to the bracketed numbers [ ] are stated in SMC 17C.120.110.
- Specific uses and developments may be subject to the standards in Part 3 of this division, Special Use Standards.

SECTION 14. That SMC 17C.124.110 is amended to read as follows:

Section 17C.124.110 Limited Use Standards

A. The paragraphs listed below contain the limitations and correspond with the bracketed [ ] footnote numbers from Table 17C.124-1.
   1. Group Living.
      This regulation applies to all parts of Table 17C.124-1 that have a [1].
      a. General Standards.
         All group living uses except for alternative or post-incarceration facilities are allowed by right.

b. Alternative or Post Incarceration Facilities.
Group living uses which consist of alternative or post incarceration facilities are conditional uses.

2. Adult Business.
This regulation applies to all parts of Table 17C.124-1 that have a [2]. Adult businesses are subject to the additional standards of chapter 17C.305 SMC.

3. Commercial Parking.
This regulation applies to all parts of Table 17C.124-1 that have a [3]. See SMC 17C.230.310 for the parking structure design guidelines. See SMC 17C.124.340, Parking and Loading, for ground level parking structure use standards.
   a. New standalone surface commercial parking lots are not allowed as the primary use within the area shown on Map 17C.124-M1, Surface Parking Limited Area. Within the area shown on Map 17C.124-M1, standalone commercial parking as a primary use must be located entirely within a parking structure.

4. Drive-through Facility.
This regulation applies to all parts of Table 17C.124-1 that have a [4]. Drive-through facilities are subject to the additional standards of SMC 17C.124.290.

5. Quick Vehicle Servicing.
This regulation applies to all parts of Table 17C.124-1 that have a [5]. Quick vehicle servicing uses are permitted only on sites that have frontage on a Type III or IV complete street. Quick vehicle servicing uses must be fully contained within a structure. Quick vehicle servicing uses are subject to the additional standards of SMC 17C.124.290.

6. Retail Sales and Services Uses Motorized Vehicle Limitation.
This regulation applies to all parts of Table 17C.124-1 that have a [6]. Sale, rental, or leasing of motor vehicles, including passenger vehicles, light and medium trucks is not allowed. Sale, rental, and leasing of motorcycles and other recreational vehicles not able to be licensed for normal on street use is allowed. For sale or leasing of motorcycles and other recreational vehicles see SMC 17C.124.270, Outdoor Activities.

7. Industrial Limitation.
This regulation applies to all parts of Table 17C.124-1 that have a [7]. These types of uses are limited to assure that they will not dominate the downtown area and to limit their potential impacts on residential and commercial uses. In addition, if the planning director determines that the proposed use will not be able to comply with the off-site impact standards of chapter 17C.220 SMC, the planning director may require documentation that the development will be modified to conform with the standards.
   a. Limited industrial uses are allowed. Only limited industrial uses are allowed. Industrial uses more intensive than the limited industrial definition are not allowed.
   b. Industrial buildings and industrial sites are subject to the same design standards as commercial buildings and commercial sites.

8. Mini-storage, Storage, Warehousing, Industrial and Parking Structure Limitation.
This regulation applies to all parts of Table 17C.124-1 that have an [8]. See SMC 17C.124.340.

9. Mini-storage Facilities Limitation.
This regulation applies to all parts of Table 17C.124-1 that have an [9]. Mini-storage facilities are subject to the additional standards of chapter 17C.350 SMC, Mini-storage Facilities.

10. Outdoor Activity Limitation.
This regulation applies to all parts of Table 17C.124-1 that have a [10]. Outdoor display, storage, or use of industrial equipment or other industrial items such as

tools, equipment, vehicles, products, materials, or other objects that are part of or used for the business operation is prohibited.

11. Community Services.
    This regulation applies to all parts of Table 17C.124-1 that have a [11]. Most community service uses are allowed by right.
12. Wireless Communication Facilities.
    ((~~This regulation applies to all parts of Table 17C.124-1 that have an [12]. Some wireless communication facilities are allowed by right. See chapter 17C.355 SMC.~~))
    See chapter 17C.355A SMC.
13. Existing Light Industrial and Self-service Storage Uses.
    This regulation applies to all parts of Table 17C.124-1 that have an [13]. Light industrial and self-service storage uses in operation on the effective date of this ordinance, are considered to be a conforming use.
14. Mobile Food Vending.
    This standard applies to all parts of Table 17C.124-1 that have a [14]. All mobile food vendors shall have a valid mobile food vending license issued pursuant to SMC 10.51.010.

SECTION 15. That SMC 16C.130.110 is amended to read as follows:

Section 17C.130.110 Limited Use Standards

The paragraphs listed below contain the limitations and correspond with the bracketed [ ] footnote numbers from Table 17C.130-1.

1. Group Living.
   This standard applies to all parts of Table 17C.130-1 that have a [1].
   a. Group living uses are allowed on sites within one-quarter mile of the Spokane River where residents can take advantage of the river amenity. The planning director may authorize a group living use greater than one-quarter mile from the Spokane River if the applicant demonstrates that the site has a river viewpoint and a pedestrian connection to the river. Group living uses shall provide buffering from adjacent industrial lands by use of berms, landscaping, fencing or a combination of these measures or other appropriate screening measures deemed appropriate by the planning director. The proposal shall include a design, landscape and transportation plan which will limit conflicts between the residential, employment and industrial uses.
   b. Alternative or Post Incarceration Facilities.
      Group living uses which consist of alternative or post incarceration facilities are not permitted.
2. Residential Household Living.
   This standard applies to all parts of Table 17C.130-1 that have a [2].
   a. Residential household living uses are allowed on sites within one- quarter mile of the Spokane River where residents can take advantage of the river amenity. The planning director may authorize a residential living use greater than one-quarter mile from the Spokane River if the applicant demonstrates that the site has a river viewpoint and a pedestrian connection to the river. Residential uses shall provide buffering from adjacent industrial lands by use of berms, landscaping, fencing or a combination of these measures or other appropriate screening measures deemed appropriate by the planning director. The proposal shall include a design, landscape, and transportation plan, which will limit conflicts between the residential, employment and industrial uses.

b. A single-family residence may be erected on a lot having a side property line which adjoins a lot in a residential zone, with or without an intervening alley, or on a lot which has less than one hundred feet of frontage and has residences existing on all lots adjoining its side property lines.
c. Living quarters for one caretaker per site in the LI, HI and PI zones are permitted.

3. Group Living and Residential Household Living.
This standard applies to all parts of Table 17C.130-1 that have a [3]. Group living and residential household living uses may be permitted in the PI zone as a part of a binding site plan under the provisions of the subdivision code or a planned unit development under the provisions of Division G – Administration and Procedures. A minimum of fifty percent of the site within the binding site plan or planned unit development shall be in manufacturing and production, industrial service or office uses. Group living and residential household living uses shall be buffered from industrial lands by use of berms, landscaping, fencing or a combination of these measures or other appropriate screening measures deemed appropriate by the planning director. The buffering improvements shall be developed on the residential portion of the binding site plan or planned unit development at the time the residential uses are constructed. The site development plan shall include a design, landscape, and transportation plan, which will limit conflicts between the residential and industrial uses.
4. Adult Business.
This standard applies to all parts of Table 17C.130-1 that have a [4]. Adult businesses are subject to the following standards:
a. Chapter 17C.305 SMC, Adult Business.
b. Adult businesses are subject to the size requirements specified in item [5] below applicable to retail sales and services uses in the light industrial (LI) zone.
c. In addition to the standards in subsections (4)(a) and (b) of this section, adult businesses are permitted only in the light industrial zone adult business overlay zone as designated on the official zoning map.
5. Retail Sales and Service Uses Size Limitation.
This standard applies to all parts of Table 17C.130-1 that have a [5]. Retail sales and service uses are allowed if the floor area plus outdoor sales and display and outdoor storage area is not more than sixty thousand square feet per site. Retail sales and service uses where the floor area plus the outdoor sales and display and outdoor storage area is more than sixty thousand square feet per site are a conditional use.
6. Retail Sales and Service Uses Size Limitation.
This standard applies to all parts of Table 17C.130-1 that have a [6]. Retail sales and service uses are allowed if the floor area plus outdoor sales and display and outdoor storage area is not more than twenty thousand square feet per site. Retail sales and service uses where the floor area plus the outdoor sales and display and outdoor storage area is more than twenty thousand square feet per site are a conditional use.
7. Retail Sales and Service Uses Size Limitation.
This standard applies to all parts of Table 17C.130-1 that have a [7]. Retail sales and service uses are allowed if the floor area plus the outdoor sales and display and outdoor storage area is not more than three thousand square feet per site. Retail sales and service uses where the floor area plus the outdoor sales and display and outdoor storage area is more than three thousand square feet per site may be permitted as a part of a binding site plan under the provisions of the subdivision code or a planned unit development under the provisions of the zoning code. A minimum of fifty percent of the site area of the uses in the planned unit development or binding site plan shall be in manufacturing and production, industrial service or office uses.
8. Mini-storage Facilities.
This standard applies to all parts of Table 17C.130-1 that have a [8]. The limitations are

stated with the special standards for these uses in chapter 17C.350 SMC, Mini-Storage Facilities.

9. High Impact Uses.
   This standard applies to all parts of Table 17C.130-1 that have a [9]. High impact uses shall be located a minimum of six hundred feet from the boundary of a residential or commercial zone.
10. Colleges, Medical Centers, Daycare and School Uses.
    This standard applies to all parts of Table 17C.130-1 that have an [10]. Colleges, medical centers, daycare and school uses may be permitted as a part of a binding site plan under the provisions of the subdivision code, or a planned unit development under the provisions of the zoning code. A minimum of fifty percent of the site within the planned unit development or binding site plan shall be in manufacturing and production, industrial service or office uses. Colleges, medical centers, daycare and school uses are allowed within the planned unit development or binding site plan provided that the site development includes a design, landscape and transportation plan which will limit conflicts between the college, medical center, daycare, school and industrial uses.
11. Wireless Communication Facilities.
    ((~~This standard applies to all parts of Table 17C.130-1 that have a [11]. Some wireless communication facilities are allowed by right. See chapter 17C.355 SMC.~~)) See chapter 17C.355A SMC.
12. Mobile Food Vending.
    This standard applies to all parts of Table 17C.130-1 that have a [12]. All mobile food vendors shall have a valid mobile food vending license issued pursuant to SMC 10.51.010.

SECTION 16. That TABLE 17C.130-1 is amended to read as follows:

Section 17C.130.100 Industrial Zones Primary Uses

A. Permitted Uses (P).
   Uses permitted in the industrial zones are listed in Table 17C.130-1 with a “P.” These uses are allowed if they comply with the development standards and other standards of this chapter.
B. Limited Uses (L).
   Uses allowed that are subject to limitations are listed in Table 17C.130-1 with an “L.” These uses are allowed if they comply with the limitations as listed in the footnotes following the table and the development standards and other standards of this chapter. In addition, a use or development listed in Part 3 of this division, Special Use Standards, is also subject to the standards of those chapters.
C. Conditional Uses (CU).
   Uses that are allowed if approved through the conditional use review process are listed in Table 17C.130-1 with a “CU.” These uses are allowed provided they comply with the conditional use approval criteria for that use, the development standards, and other standards of this chapter. Uses listed with a “CU” that also have a footnote number in the table are subject to the standards cited in the footnote. In addition, a use or development listed in Part 3 of this division, Special Use Standards, is also subject to the standards of those chapters. The conditional use review process and approval criteria are stated in chapter 17C.320 SMC, Conditional Uses.
D. Uses Not Permitted (N).
   Uses listed in Table 17C.130-1 with an “N” are not permitted. Existing uses in categories listed as not permitted may be subject to the standards of chapter 17C.210 SMC, Nonconforming Situations.

Table 17C.130-1 Industrial Zones Primary Uses			
Use is: **P** – Permitted; **N** – Not Permitted; **L** – Allowed, but with Special Limitations; **CU** – Conditional Use Review Required	**LI Zone (Light Industrial)**	**HI Zone (Heavy Industrial)**	**PI Zone (Planned Industrial)**
Residential Categories			
Group Living	L[1]	N	L[3]
Residential Household Living	L[2]	L[2]	L[3]
Commercial Categories			
Adult Business	L[4]	N	N
Commercial Outdoor Recreation	P	P	CU
Commercial Parking	P	P	P
Drive-through Facility	P	P	P
Major Event Entertainment	CU	CU	CU
Office	P	P	P
Quick Vehicle Servicing	P	P	P
Retail Sales and Service	L/CU[5]	L/CU[6]	L[7]
Mini-storage Facilities	L[8]	L[8]	L[8]
Vehicle Repair	P	P	P
Mobile Food Vending	L[12]	L[12]	L[12]
Industrial Categories			
High Impact Use	L[9]	L[9]	N

Industrial Service	P	P	P
Manufacturing and Production	P	P	P
Railroad Yards	CU	P	P
Warehouse and Freight Movement	P	P	P
Waste-related	CU	CU	CU
Wholesale Sales	P	P	P
Institutional Categories			
Basic Utilities	P	P	P
Colleges	P	N	L[10]
Community Service	P	N	N
Daycare	P	CU	L[10]
Medical Centers	P	N	L[10]
Parks and Open Areas	P	CU	P
Religious Institutions	P	N	N
Schools	P	N	L[10]
Other Categories			
Agriculture	P	P	P
Aviation and Surface Passenger Terminals	P	P	P
Detention Facilities	CU	CU	CU
Essential Public Facilities	CU	CU	CU
Mining	CU	CU	CU
Rail Lines and Utility Corridors	P	P	P
~~Wireless Communication Facilities~~	~~L/CU[11]~~	~~L/CU[11]~~	~~L/CU[11]~~
Notes: • The use categories are described in chapter 17C.190 SMC. • Standards that correspond to the bracketed numbers [ ] are specified in SMC 17C.130.110.			

• Specific uses and developments may be subject to the standards in Part 3 of this division, Special Use Standards. • Standards applicable to conditional uses are stated in chapter 17C.320 SMC.

SECTION 17. That SMC 01.05.160 is amended to read as follows:

Section 01.05.160 Land Use Violation

A. For each subsequent violation, excluding continuing violations, by a person the classification of infraction advances by one class.
B. Infraction/Violation Class – General.

SMC 1.05.160
Penalty Schedule – Land Use Violation

Infraction		Violation Class
General		
IFC 105.3.3	Occupy Land or Building Without Certificate of Occupancy	2
SMC 17G.010.100(B)		
SMC 10.48.050	Alarm Installation or Monitoring Company Failure to Provide Customer List	1
SMC 10.48.130	Alarm Installation or Monitoring Company Failure to Report New Customers	1
Boiler Code		
SMC 10.29.020	Operating Boiler Without License	1
SMC 10.29.021	Failure to Report Hazard	1
SMC 10.29.022	Leaving Boiler Room	2
SMC 17F.030.110	Failure to Cause Required Inspections of Boiler, Pressure Vessel	2
SMC 17F.030.130	Improper Operation of Boiler, Pressure Vessel	1
SMC 17F.060.050	Operate Without Elevator Operating Permit	1
Fire Code – International Fire Code (IFC)		
Chapter 22 IFC	Improper Aboveground Storage Tank for Motor Fuel Dispensing	1
Chapter 28 IFC	Improper Storage, Display of Aerosols	2
Chapter 33 IFC	Unauthorized Manufacture, Storage, Sale, Use, Handling of	1
IFC 105.6.14	Explosives	
Chapter 10.33A SMC		
SMC 17F.080.060		
IFC 107	Continuance of Hazard	1
IFC 109		
IFC 110		
IFC 109.2.2	Noncompliance with Condemnation Tag	1
IFC 109.2.4	Removal, Destruction of Tag, Sign	1
IFC 304	Improper Storage/Accumulation of Rubbish, Vegetation	2
IFC 304	Storage, Use, Handling of Miscellaneous Combustible Material	2
IFC 308	Improper Use of Candles, Open Flame	3
IFC 311	Failure to Properly Maintain Vacant Building, Property	2
IFC 503.4	Obstruction of Fire Access Road	2
IFC 703.1	Failure to Maintain Fire-resistive Construction	2

IFC 703.2	Failure to Maintain Fire Assemblies for Openings	2
IFC 704		
IFC 805	Failure to Flameproof Decorative Material	2
IFC 806		
IFC 901.4	Failure to Install Protection for Kitchen Hoods, Ducts	2
IFC 901.4	Failure to Install Sprinkler System	2
IFC 901.4	Failure to Install Alarm System	1
SMC 17F.080.100		
SMC 17F.080.150		
IFC 901.6	Failure to Maintain Automatic Extinguishing System	2
IFC 901.6	Failure to Maintain Kitchen Rangehood Extinguishing System	2
IFC 901.6	Failure to Maintain Sprinkler System	2
IFC 901.6	Failure to Maintain Standpipe System	2
IFC 903.4	Failure to Provide Approved Electronic Monitoring for Sprinkler and	2
IFC 907.15	Fire Alarm Systems	
IFC 904.11.6.3	Failure to Clean Kitchen Hoods, Ducts	2
IFC 905.3	Failure to Install Standpipe System	2
IFC		
IFC 1003.6	Obstruction of Exit	1
IFC 1011	Failure to Provide Exit Signs	1
IFC 2703.3	Release of Hazardous Material	1
IFC 3404.2.13.1.3	Failure to Remove Abandoned Underground Storage Tank	1
Spokane Municipal Code		
SMC 10.08.040	Fire Hazard from Vegetation and Debris	1
SMC 10.20.020	Abatement of Nuisance	1
SMC 12.01.0804	Failure to Maintain Pedestrian Strip	2
SMC 12.02.010	Sidewalk Not Clear of Snow, Ice	3
SMC 12.02.0210	Vegetation Nuisance Obstruction	1
SMC 12.02.0737	Obstruction of Public Right-of-Way	1
SMC 12.02.0760	Disposal of Leaves and Yard Debris	2
SMC 13.05.010	Tree, etc., Interfering With City Sewer	2
SMC 13.05.020	Poplar, Cottonwood Tree Near Utility Line	2
SMC 17C.110.100	Use Not Permitted in Residential Zone	2
SMC 17C.110.110	Limited Use Standards (Residential)	2
SMC 17C.110.120	Accessory Uses – Residential	2
SMC 17C.110.200 – SMC 17C.110.220	Violation of Development Standards – Residential	2
SMC 17C.110.225	Accessory Structures – Residential	2
SMC 17C.110.230	Residential Fence	2
SMC 17C.110.270	Exterior Storage	2
SMC 17C.110.300 – SMC 17C.110.350	Alternative Residential Development	1
SMC 17C.110.400 – SMC 17C.110.465	Multi-family Design Standards	1
SMC 17C.110.500 – SMC 17C.110.575	Institutional Design Standards	1
SMC 17C.120.100	Use Not Permitted in Commercial Zone	1
SMC 17C.120.110	Limited Use Standards – Commercial	1
SMC 17C.120.210	Development Standards - Commercial	1

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SMC 17C.120.300
SMC 17C.120.310 Commercial Fence 1
SMC 17C.120.500 Commercial Design Standards 1
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SMC 17C.120.580
SMC 17C.122.070 Use Not Permitted in Center and Corridor Zone 1
SMC 17C.122.080 Development Standards – Center and Corridor Zone 1
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SMC 17C.122.150
SMC 17C.124.100 Use Not Permitted in Downtown Zone 1
SMC 17C.124.110 Limited Use Standards – Downtown 1
SMC 17C.124.210 Development Standards - Downtown 1
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SMC 17C.124.300
SMC 17C.124.310 Fences – Downtown Zone 1
SMC 17C.124.340 Parking and Loading - Downtown 1
SMC 17C.124.500 Design Standards – Downtown 1
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SMC 17C.124-590
SMC 17C.130.100 Use Not Permitted in Industrial Zone 1
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SMC 17C.130.110
SMC 17C.130.210 Violation of Development Standards 1
–
SMC 17C.130.250
SMC 17C.130.270 Outdoor Activities Not Permitted 1
SMC 17C.130.300 Detached Accessory Structures 1
SMC 17C.130.310 Industrial Fence 1
SMC 17C.160.020 North River Overlay District 1
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SMC 17C.160.030
SMC 17C.170.110 Special Height Overlay Zone 1
SMC 17C.180.050 Airfield Overlay Zone 1
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SMC 17C.180.100
SMC 17C.200.040 Landscaping and Screening Requirements 1
–
SMC 17C.200.110
SMC 17C.210.040 Non-conforming Rights 1
–
SMC 17C.210.070
SMC 17C.220.080 Off-Site Impacts 1
–
SMC 17C.220.090
SMC 17C.230.140 Development Standards – Parking and Loading 2
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SMC 17C.230.300
SMC 17C.230.310 Design Standards - Parking Structures 1
SMC 17C.240.070 Sign in Violation of the Sign Code 1
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SMC 17C.240.270
SMC 17C.300.100 Accessory Dwelling Units General Regulations 2

SMC 17C.300.110	Accessory Dwelling Units Criteria	2
SMC 17C.300.130	ADU Development Standards	1
SMC 17C.305.020	Adult Business Use Standards	1
SMC 17C.310.100 – SMC 17C.310.160	Animal Keeping – Permitted/Prohibited Practices	2
SMC 17C.315.120	Bed and Breakfast Use-related Regulations	2
SMC 17C.315.130	Bed and Breakfast Site-related Standards	2
SMC 17C.315.150	Bed and Breakfast Monitoring	2
SMC 17C.315.160	Pre-established Bed and Breakfast Facilities	2
SMC 17C.316	Short Term Rentals	2
SMC 17C.319.100	Commercial Use of Residential Streets	2
SMC 17C.319.200	Recreational Camping	2
SMC 17C.320.080	Conditional Uses	1
SMC 17C.325.030 – SMC 17C.325.060	Drive-through Facilities	1
SMC 17C.330.120	Group Living Development Standards	1
SMC 17C.335.110	Historical Structures – Change Of Use Development Standards	1
SMC 17C.340.100 – SMC 17C.340.110	Home Occupations	2
SMC 17C.345.100 – SMC 17C.345.120	Manufactured Homes and Mobile Home Parks	1
SMC 17C.350.030	Development Standards – Mini Storage Facilities	1
SMC 17C.350.040	Design Considerations – Mini Storage Facilities	1
((~~SMC 17C.355.030 – SMC 17C.355.040~~))	Wireless Communication Facilities	1
Chapter 17C.355A SMC		
SMC 17C.390.030.B	Mobile Food Vending Located Entirely on Private Property	1
Chapter 17D.060 SMC	Stormwater Facility Standards	1
SMC 17E.010.080	Aquifer Pollution Nuisance Declared by Critical Review Officer	2
SMC 17E.010.160(B) SMC 17E.010.350(F) SMC 17E.010.540(F)	Failure to Comply With Order, Decision of Critical Review Officer	1
SMC 17E.010.160(C)	Failure to Abide by Terms, Conditions of Permit, License, Approval	1
SMC 17E.010.210(A)	Maintain Underground Storage Tank Without Permit	2
SMC 17E.010.230	Use of Underground/Aboveground Storage Tank Without Permit	1
SMC 17E.010.440 SMC 17E.010.350(A)	Supply False, Inaccurate, Incomplete Information Concerning an UST or AST	2

SMC 17E.010.350(E) SMC 17E.010.540(A) SMC 17E.010.540(E) SMC 17E.010.350(B) SMC 17E.010.540(B)	Approval Permit Violation	2
SMC 17E.010.350(C) SMC 17E.010.540(C)	Fill Unpermitted Underground/Aboveground Storage Tank	2
SMC 17E.010.350(D) SMC 17E.010.540(D)	Tamper with, Fail to Maintain Inventory, Other Records	2
Chapter 17E.020 SMC	Prohibited Activities in Fish and Wildlife Areas and Buffers	1
Chapter 17E.040 SMC	Prohibited Activities in Geological Hazard Areas and Buffers	1
SMC 17E.060.120	Use, Alter Land, Erect, Alter, Occupy Structure Within Shoreline Without Compliance With Shoreline Management Regulations	1
Chapter 17E.070 SMC	Prohibited Activities in Wetlands and Buffers	1
SMC 17F.070.380	Failure to Discharge Responsibilities of Owner	2
SMC 17F.070.390	Failure to Discharge Responsibilities of Occupant	2
SMC 17F.080.250	Failure to Maintain Fire Alarm System	1
SMC 17F.080.260(B)	Failure to Provide Fire Protection System Verification Fees	2
SMC 17F.080.280	Failure to Secure Fire-damaged Building	2
SMC 17F.080.390	Failure to Provide Semi-annual Inspection of Private Hydrant	2
SMC 17F.080.420	Failure to Maintain Private Hydrant	2
SMC 17F.080.440	Lack of Basement Sprinkler System in Existing Building	2
SMC 17G.010.100 (C)(2)	Testing Underground Storage Tank Without Spokane Fire Department Registration	1

SECTION 18. Conflicts with Other Ordinances or Regulations. In the event that any City ordinance or regulation, in whole or in part, conflicts with any provisions in this Ordinance, the provisions of this Ordinance shall control.

SECTION 19. Severability. In the event that a court of competent jurisdiction holds any section, subsection, paragraph, sentence, clause or phrase in this Ordinance unconstitutional, preempted or otherwise invalid, that portion shall be severed from this Ordinance and shall not affect the validity of the remaining portions of this Ordinance.

SECTION 20. Declaration of Emergency and Effective Date. This ordinance, passed by a majority plus one of the whole membership of the City Council as a public emergency ordinance necessary for the protection of the public health, public safety, public property, or public peace, shall be effective immediately upon its passage. The City Council previously adopted Ordinance C35243 imposing a moratorium on applications for new wireless communications support towers in the City's

residential zones. The City's wireless communications regulations were dated, and without the moratorium, processing of such applications by the City could have occurred under regulations that are inconsistent with the City's legitimate policy of protecting residentially zoned areas from the aesthetic, visual, and noise impacts associated with wireless communications support towers and related attachments. Wireless communications support towers that are incompatible with adjoining land uses could have been permitted, since current City regulations have not anticipated the proliferation of support towers that are being constructed in response to rapid increases in demand for and changes in wireless communications technology and law. The moratorium is set to expire, and it is necessary for the new regulations in this Ordinance to go into effect immediately for the same reasons the moratorium was needed.

CITY OF SPOKANE, WASHINGTON

_____

Mayor

ATTEST:

_____

City Clerk

APPROVED AS TO FORM:

_____

James Richman, Assistant City Attorney

Exhibit 13
MC 16-05

SUMMARY OF FCC'S DECLARATORY RULING ON CTIA'S SHOT CLOCK PETITION

WT Docket No. 08-165; FCC 09-99
Rel. November 18, 2009

Shot Clock

The FCC declared that state and local authorities must review completed applications within 90 days for collocations and 150 days for all other applications. These timeframes are deemed presumptively "reasonable" under section 332(c)(7)(B)(ii).

The *Declaratory Ruling* does not preempt state statutes or local zoning ordinances. Therefore, if a state or local government mandates shorter or longer time limits for application review, these time limits are still effective. When the shorter timeframe runs, the applicant can seek whatever remedy is provided under the state statute or local zoning ordinance. Once the federally mandated timeframe runs, the applicant can seek the federal remedy. Similarly, if a state statute or local zoning ordinance imposes a longer timeframe, an applicant may seek the federal remedy once the federal timeframe runs, and may seek the remedy provided by state statute or local zoning ordinance once the longer timeframe runs.

Trigger

The shot clock begins once an application is filed. State and local governments have 30 days to review an application for completeness and to request additional information. If a state or local government requests additional information outside of 30 day review period, the time it takes an applicant to respond and the time the authority takes to review the additional material counts towards the 90 day or 150 day timeframe.

Enforcement

If a state or local government fails to act within the prescribed timeframes, applicants can seek relief from a court of competent jurisdiction. Section 332(c)(7)(B)(v) of the Act requires applicants to seek relief within 30 days of the failure to act. The *Declaratory Ruling* preserves state and local governments' ability, if challenged for a failure to act, to rebut the presumption that the timeframes are reasonable given the circumstances.

Effect on Pending Applications

The *Declaratory Ruling* is effective upon the date of release, November 18, 2009. If a state or local government has not acted within the prescribed timeframes as of November 18, 2009, an applicant may provide notice to the relevant state or local authority that it is filing suit under section 332(c)(7)(B)(v). If the locality fails to act within 60 days of the notice given, the applicant may file suit for failure to act. For applications currently pending upon release of the *Declaratory Ruling* for a time less than the proscribed timeframes, the state or local authority has 90 or 150 days from the release of the *Declaratory Ruling* to act.

Single Provider Rejections

State and local authorities are prohibited from denying an application *solely* because one or more carriers serve a given geographic market. A locality that denies an application on this ground violates section 332(c)(7)(B)(i)(II) by engaging in unlawful regulation that "prohibits or ha[s] the effect of prohibiting the provision of personal wireless services." This resolves the existing split among several courts of appeals.

Ordinances Requiring Variances

The Commission declined to preempt local ordinances and state laws that require service providers to obtain a variance regardless of the type of deployment. The record was insufficient to establish a controversy on which the Commission could base its action.

Other Issue Addressed

Several commenters in this docket urged the Commission to deny the *Petition* because of concerns over radio frequency emissions. The Commission reaffirmed that under section 332(c)(7)(B)(iv) state and local authorities are prohibited from denying or delaying action on an application because of "perceived health effects of RF emissions."