# PLANNING COMMISSION WORK SESSION AGENDA
## Monday, October 26, 2020 - 6:00 PM
## City Hall, Conference Room A, 169 SW Coast Hwy, Newport, OR 97365

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This will be a hybrid meeting which means that it will be held electronically, via Zoom, with a limited number of people (up to 15) allowed to attend in-person. The meeting will be live-streamed at https://newportoregon.gov, and broadcast on Charter Channel 190.

Anyone interested in making public comment is allowed to attend in-person, subject to congregant limitations (up to 15).

Anyone wishing to provide virtual public comment should make a request by noon on the day of the meeting, at publicomment@newportoregon.gov, and ask for the Zoom meeting information.

Anyone wishing to provide written public comment should send the comment to publiccomment@newportoregon.gov. The e-mail must be received by noon on the scheduled date of the meeting. Written comments received by noon on a Planning Commission meeting date, will be included in the agenda packet. These comments will be acknowledged, at the appropriate time, by the Chair. If a specific request is made to read written public comment into the record during a meeting, staff will be provided a maximum of three minutes to read the comment during the meeting.

The agenda may be amended during the meeting to add or delete items, change the order of agenda items, or discuss any other business deemed necessary at the time of the meeting.

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1. CALL TO ORDER

2. UNFINISHED BUSINESS

2.A Updated Draft of NMC Chapter 9.25, Regulating the Placement of Small Wireless Facilities within Rights-of-Way (5G Implementation).
Memorandum
Draft of NMC Chapter 9.25, Small Wireless, dated 10-26-20
How is RF Radiofrequency Radiation Measured, Summary from FCC FAQ

League of Oregon Cities FAQ on Small Wireless Facilities, August 2020

3. NEW BUSINESS

3.A Draft Small Wireless Facility Design Standards.
Memorandum
Draft Small Wireless Facility Design Standards, dated 10-26-20
League of Oregon Cities Small Wireless Facilities Model Design Guidelines, June 2020

3.B Transportation System Plan Fall Virtual Events.
Memorandum
Flyer for Virtual Outreach Event No. 1

3.C Updated Planning Commission Work Program.
PC Work Program - 10-23-20

4. ADJOURNMENT

# City of Newport

**Community Development Department**

# Memorandum

To: Planning Commission / Commission Advisory Committee

From: Derrick I. Tokos, AICP, Community Development Director

Date: October 26, 2020

Re: Updated Draft of NMC Chapter 9.25, Regulating the Placement of Small Wireless Facilities within Rights-of-Way (5G Implementation)

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Enclosed is an updated version of the draft regulations with changes responding to feedback the Commission and Commission Advisory Committee provided at the 10/12/20 work session. Deleted language is shown in ~~strikethrough~~ and new language is depicted ith a double underline.

At the 10/12/20 work session, Commission members inquired as to how Radio Frequency (RF) radiation emissions are measured and the steps the Federal Communications Commission (FCC) can take to ensure that such emissions are within the parameters they have identified as acceptable exposure limits. Enclosed is the portion of the FCC RF Safety FAQ that explains how RF radiation is measured. Appendix B to the League of Oregon Cities Model Ordinance and Design Guidelines summarizes the Environmental Assessment process that the FCC uses to evaluate RF emissions for different facility types, and when an Environmental Assessment is required. The process includes an avenue whereby an interested person can file a petition with the Bureau asking that an Environmental Assessment be required. The interested person must provide justification, and it is the Bureau that decides if an assessment is warranted.

An FAQ for small wireless facilities, developed by the League of Oregon Cities, specifically addresses the topic of RF emissions (reference Items #9 through #11). For those interested in a deep dive in how the FCC goes about evaluating whether or not a facility complies with its RF exposure limits, you can pull up OET Bulletin 65 on the FCC website. It is downloadable and delves into the topic in great detail.

Assuming that the revisions to the regulations are acceptable to the Commission, then staff will forward a copy of the document to affected utilities for comment.

Attachments
Draft of NMC Chapter 9.25, Small Wireless, dated 10/26/20
How is RF Radiofrequency Radiation Measured, summary from FCC FAQ
League of Oregon Cities FAQ on Small Wireless Facilities, August 2020

# CHAPTER 9.25 SMALL WIRELESS FACILITIES

## 9.25.005 Purpose

The purpose of this Chapter is to establish reasonable and non-discriminatory policies and procedures for the placement of small wireless facilities in rights-of-way within the City's jurisdiction, which will provide public benefit consistent with the preservation of the integrity, safe usage, and reasonable aesthetic qualities of the City rights-of-way and the City as a whole. In enacting this Chapter, the City is establishing uniform standards consistent with federal law to address the placement of small wireless facilities and associated poles in the rights-of-way, including without limitation, to manage the public rights-of-way in order to:

A. prevent interference with the use of streets, sidewalks, alleys, parkways and other public ways and places; and

B. prevent the creation of obstructions and other conditions that are hazardous to vehicular and pedestrian traffic; and

C. prevent interference with the facilities and operations of facilities lawfully located in rights-of-way or public property; and

D. protect against environmental damage, including damage to trees; and

E. preserve the character of the community, historic districts or areas with decorative poles; and

F. facilitate technology advancements, such as deployment of small wireless facilities, to provide the benefits of wireless services.

*Staff: This Section incorporates the purpose and intent language from the League of Oregon Cities Model Ordinance ("model ordinance"), dated June of 2020.*

## 9.25.010 Definitions

The following definitions apply in this chapter.

Antenna means the same as defined in 47 C.F.R. § 1.6002(b), as may be amended or superseded. The term includes an apparatus designed for the purpose of emitting radio frequencies (RF) to be operated or operating from a fixed location pursuant to Federal Communications Commission authorization, for the provision of personal wireless service and any commingled information services. For purposes of this definition, the term antenna does not include an unintentional radiator, mobile station, or device authorized under 47 C.F.R. Part 15.

**Antenna Equipment** means the same as defined 47 C.F.R. § 1.6002(c), as may be amended or superseded, which defines the term to mean equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

**Antenna Facility** means the same as defined in 47 C.F.R. § 1.6002(d), as may be amended or superseded, which defines the term to mean an antenna and associated antenna equipment.

**Applicable codes** means uniform building, fire, safety, electrical, plumbing, or mechanical codes adopted by a recognized national code organization or state or local amendments to those codes that are of general application and consistent with state and federal law.

**Applicant** means any person who submits an application as or on behalf of a wireless provider.

**Application** means requests submitted by an applicant (i) for permission to collocate small wireless facilities; or (ii) to approve the installation, modification or replacement of a structure on which to collocate a small wireless facility in the rights-of-way, where required.

**Collocate** means the same as defined in 47 C.F.R. § 1.6002(g), as may be amended or superseded, which defines that term to mean (1) mounting or installing an antenna facility on a preexisting structure, and/or (2) modifying a structure for the purpose of mounting or installing an antenna facility on that structure. "Collocation" has a corresponding meaning.

**Day** means calendar day. For purposes of the FCC shot clock, a terminal day that falls on a holiday or weekend shall be deemed to be the next immediate business day.

**Decorative pole** means a pole that is specially designed and placed for aesthetic purposes.

**Historic district** means a group of buildings, properties, or sites that are either: (1) listed in the National Register of Historic Places or formally determined eligible for listing by the Keeper of the National Register in accordance with Section VI.D.1a.i-v of the Nationwide Programmatic Agreement codified at 47 C.F.R. Part 1, Appendix C; or, (2) a design review district established pursuant to Chapter 14.30, or (3) historic buildings or sites listed in the Newport Comprehensive Plan as being significant

historical resources which should be preserved and regulated pursuant to Chapter 14.23.

*Staff: Adjusted the definition to include rights-of-way in design review districts (i.e. Nye Beach) and rights-of-way that may be a part of a historic site regulated under NMC Chapter 14.23.*

**Permissions** means a franchise agreement, building permit, right-of-way permit, business license or other authorization needed for SWF deployment.

**Person** means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization, including the City.

**Pole** means a type of structure in the rights-of-way that is or may be used in whole or in part by or for wireline communications, electric distribution, lighting, traffic control, signage, or similar function, or for collocation of small wireless facilities; provided, such term does not include a tower, building or electric transmission structures.

**Rights-of-Way or "ROW"** means areas dedicated to the public and administered by the city for use for transportation purposes, including any city street, road, bridge, alley, sidewalk, trail, or path, and all other public ways and areas managed by the city. Rights-of-Way also includes public utility easements to the extent that the easement allows use by the utility operator planning to use or using the public utility easement. "Right-of-way" includes the subsurface under and airspace over these areas.

*Staff: Definition aligns with definition in Chapter 9.05 Utilities*

**Routine Maintenance** means inspections, testing, repair, and modifications subject to Section 6409(a) that maintain functional capacity, aesthetic and structural integrity of a small wireless facility and/or the associated pole or structure.

**Small wireless facility** means a facility that meets each of the following conditions per 47 C.F.R § 1.6002(l), as may be amended or superseded:

A. The facilities (i) are mounted on structures 50 feet or less in height as measured from adjacent finished ground elevation, including the antennas, or (ii) are mounted on structures no more than 10 percent taller than other adjacent structures, or (iii) do not extend existing structures on which they are located to a height of more than 50 feet above the finished ground elevation or by more than 10 percent, whichever is greater; and

*Staff: Addresses concern raised by Commission members at the 10/12/20 work session, that the baseline point of measurement be called out in the definition.*

B. Each antenna associated with the deployment, excluding associated antenna equipment, is no more than three cubic feet in volume; and

C. All other wireless equipment associated with the structure, including wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume; and

D. The facilities do not result in human exposure to radio frequency in excess of the applicable safety standards specified in 47 C.F.R. § 1.1307(b).

**Structure** means the same as defined in 47 C.F.R. § 1.6002(m), as may be amended or superseded, which defines that term as a pole, tower, or base station, whether or not it has an existing antenna facility, that is used or to be used for the provision of personal wireless service (whether on its own or comingled with other types of service).

**Wireless Infrastructure Provider** means any person, including a person authorized to provide communications service in the state, that builds or installs wireless communication transmission equipment, wireless facilities, but that is not a wireless services provider.

**Wireless Provider** means a wireless infrastructure provider or a wireless services provider.

**Wireless Services Provider** means a person who provides personal wireless services (whether or not it is comingled with other services).

*Staff: Except where staff comments are provided, definitions are verbatim from the model ordinance. "City Structure" is a defined term in the model ordinance that is not included because collocation interest is likely to be limited to City owned poles, and the term "pole" is defined.*

## 9.25.015 Permit Required

Except as otherwise provided in this Chapter, no person shall place any small wireless facility, or a new, modified, or replacement pole for collocation of a small wireless facility, in rights-of-way without first obtaining a permit from the City of Newport.

*Staff: This Section addresses the permitted use and permission required components of the model ordinance.*

## 9.25.020 Application Requirements

An application filed pursuant to this Chapter shall be made by the wireless provider or its duly authorized representative on forms provided by the city, and shall contain the following:

A. The applicant's name, address, telephone number, and e-mail address; and

B. The names, addresses, telephone numbers, and e-mail addresses of all duly authorized representatives and consultants, if any, acting on behalf of the applicant with respect to the filing of the application; and

C. A general description of the proposed small wireless facility and associated pole, if applicable. The scope and detail of such description shall be appropriate to the nature and character of the work to be performed, with special emphasis on those matters likely to be affected or impacted by the physical work proposed; and

D. Site plans and engineering drawings to scale that identify the proposed small wireless facility; and

E. Written narrative explaining how the application complies with small wireless facility design standards adopted by resolution of the Newport City Council.

F. A copy of the wireless providers franchise agreement with the City of Newport; and

G. A statement or other demonstration that the small wireless facility shall comply with all applicable codes, regulations and standards, including applicable FCC regulations for human exposure to RF emissions.

*Staff: This Section includes the submittal requirements recommended in the model code. It also includes a requirement that the provider possess a duly executed franchise agreement to operate within City rights-of-way. Added a requirement that applicants explain how a project complies with design standards. This should minimize potential miscommunication.*

## 9.25.025 Routine Maintenance and Replacement Exemption

An application for a permit pursuant to this Chapter shall not be required for routine maintenance or the replacement of a small wireless facility with another small wireless facility that is the same, or smaller in ~~size~~ volume, weight and installed height. The City may require a permit for work within the right of way as set forth in Chapter 9.10 or if the activity is regulated by

building codes adopted by the City of Newport pursuant to Section 11.05.080.

*Staff: Similar to language in the model code. Removed the language "substantially similar" because its discretionary. Cross reference added to right-of-way permit chapter which lists regulated activities within the right-of-way and building codes to the extent that they are applicable. At the 10/12/20 work session, Commission members felt that the term "volume" is clearer than "size" and that the reference to "height" should be "installed height."*

## 9.25.030 Approval Criteria

An application filed pursuant to this Chapter shall be approved unless the proposed small wireless facility, or new, modified, or replacement pole:

A. Materially and demonstrably interferes with the safe operation of traffic control equipment; or

B. Materially and demonstrably interferes with sight lines or clear zones for transportation or pedestrians; or

C. Materially fails to comply with the Americans with Disabilities Act or similar federal, state, or local laws, standards and regulations regarding pedestrian access or movement; or

D. Fails to comply with applicable codes, standards and regulations, including the City's design standards for small wireless facilities as adopted by City Council resolution; or

E. Fails to comply with the provisions in this Chapter.

*Staff: Standards are consistent with the model code. Compliance with city adopted design standards is picked up under this Section.*

## 9.25.035 Batch Applications

Applicants may include the proposed installation of multiple small wireless facilities, or new, modified, or replacement poles in a single, consolidated permit application.

*Staff: The FCC small cell order requires that local governments allow applications to be batched in this manner. This approach is also more efficient.*

## 9.25.040 Decorative Poles and Historic Districts

Small wireless facilities that are proposed to be placed on a decorative pole or any structure within a historic district shall be designed to have a similar appearance, including coloring and design elements, if technically feasible, of the structure upon which it is being installed. New poles required to support the collocation of small wireless facilities shall be designed to have a similar appearance, including coloring and design elements, if technically feasible, of other poles in the rights-of-way within 500 feet of the proposed installation. Concealment measures used to comply with the above requirements shall not be considered part of the small wireless facility for purpose of the size restrictions in the definition of small wireless facility in Section 9.25.010.

*Staff: This Section combines a couple of elements of the model code and requires that small cell deployments have a similar appearance, color, and design elements as the structures upon which they are being installed. This may need more work to clarify expectations (and reduce discretion).*

## 9.25.045 Permit Review Procedures

A. No later than ~~30~~ 10 calendar days after receipt of an application filed pursuant to this Chapter, the city shall determine whether or not the permit application is complete and notify the applicant, in writing, of ~~what~~ any information that is missing, including the specific rule or regulation creating the obligation that such documents or information be submitted.~~ and allow the applicant to submit the missing information.~~

B. Upon receipt of a complete permit application, the city shall either approve or deny the permit in accordance with the following timelines:

1. Applications to collocate a small wireless facility on an existing structure: 60 days.

~~2. Applications to collocate a facility other than a small wireless facility using an existing structure: 90 days.~~

~~3~~2. Applications to deploy a small wireless facility using a new structure: 90 days.

~~4. Applications to deploy a facility other than a small wireless facility using a new structure: 150 days.~~

C. Review timelines outlined in this Section begin at the time of application. If an application is determined to be incomplete, then the timeline is tolled (i.e. the clock stops) when the applicant is informed, in writing, that information is missing. The timeline restarts at zero on the date that~~when~~ the missing information is submitted. If an applicant believes they have submitted all required information, they may indicate as much

in writing and a decision on the permit application will be rendered considering the information that has been submitted.

*Staff: This Section addresses the FCC shot clock review timelines. In response to a question raised by the Commission at the 10/12/20 work session, options 2 and 4 are being deleted because they apply to deployment of wireless facilities not regulated by this chapter. Facilities other than small wireless are typically located outside of rights-of-way. The 30-day review timeline was reduced to 10 to comply with 47 C.F.R, Section 1.6003, which sets out an expedited review timeline for small wireless facilities. The change indicating that the timeline restarts at zero has also been made to align with the federal regulations.*

## 9.25.050 Maximum Height Limitations

Any wireless provider that seeks to install, modify, or replace facilities on a pole in a right-of-way that exceeds 50-feet in height, as measured from adjacent finished ground elevation, shall be subject to applicable requirements of Title XIV of the Newport Municipal Code.

*Staff: Title XIV is the City of Newport Zoning Ordinance. Potential changes to the Zoning Ordinance that would apply to facilities of this nature will be presented at a future work session. Change picks up Commission request from the 10/12 work session that 50-feet means 50-feet from the ground up.*

## 9.25.055 Authority Granted

A permit from the City authorizes an applicant to undertake only certain activities in accordance with this Chapter and does not create a property right or grant authority to the applicant to impinge upon the rights of others who may already have an interest in the rights-of-way.

*Staff: This language is recommended in the model code and will need to be reviewed by the City Attorney. This may be adequately addressed in the City's franchise code (NMC Chapter 9.05).*

## 9.25.060 Permit Duration

A. A permit for construction granted pursuant to this Section shall be valid for a period of 12-months after issuance unless the City agrees to extend this period for ~~good cause~~ circumstances outside of the control of the permittee~~, including but not limited to delay caused by the lack of commercial power or communications facilities, or by other events outside of the reasonable control of the wireless provider~~.

B. The installed facility is subject to applicable relocation requirements, termination for material non-compliance after notice and a reasonable

opportunity to cure, as outlined in Chapter 9.05. An applicant may terminate a permit at any time.

*Staff: The 12-month timeframe is consistent with the period of time that a right-of-way permit is valid (ref: Chapter 9.10). That provides administrative consistency, as a right-of-way permit will almost always be required in conjunction with the deployment of a small wireless facility. Issues under Subsection (B) are addressed in the City's franchise code. The same goes for Section 7 of the League of Oregon Cities Model Ordinance. At the 10/12/20 work session, the Commission requested that the extension language be simplified to "circumstances outside of the control of the permittee."*

## 9.25.065 Collocation on City Owned Poles

A. Small wireless facilities may be collocated on city owned poles in rights-of-way pursuant to this Chapter. No person will be permitted an exclusive arrangement or an arrangement which excludes otherwise qualified applicants to attach to city owned poles in the rights-of-way. A wireless provider seeking to collocate on a city owned pole is subject to the requirements of this Section.

B. The City will provide a good faith estimate for any work reasonably necessary to make a specific city owned pole suitable for attachment of the requested small wireless facility ("make-ready work"), including pole replacement if necessary, within 60 days after receipt of a completed request. Make-ready work including any pole replacement shall be completed prior to the installation of the requested small wireless facility.

C. City's good faith estimate shall be limited to actual and direct costs required to meet applicable codes, or that may be reasonably necessary to avoid interference with other attachments on the pole.

D. A wireless provider authorized to place a small wireless facility on a city-owned pole will pay to the City compensation for use of the rights-of-way and collocation at a rate established by City Council resolution.

E. A wireless provider may remove one or more of its small wireless facilities at any time from a city owned pole with the required permits. The wireless provider will cease owing the City compensation, as of the date of removal, for such removed facilities.

*Staff: While most poles within rights-of-way are owned by non-city utilities, the City of Newport owns some light poles. They are located along the bayfront, SE 40th and SE Marine Science Drive. This Section was drafted specific to poles because other structures the City owns within the right-of-way, such as signs, will not be suitable for small cell deployment. The City's*

*franchise code does not clearly address collocation, so this Section is needed. It is closely aligned with the model ordinance. The model ordinance notes that the FCC has established a "safe harbor" limit on use of right-of-way and collocation to an aggregate annual rate that is not to exceed $270 per small wireless facility. Annual use of right-of-way fees are established in the franchise code at 5% of gross revenue. This "gross revenue" approach to calculating franchise fees, may need to be adjusted for small wireless deployments in order for the city to stay within the safe harbor limits.*

## 9.25.070 Permit Fee

The fee for a permit application submitted in accordance with the provisions of this Chapter shall be due at the time the application is submitted, in the amount established by City Council resolution.

*Staff: This is consistent with the model ordinance and how the City establishes permit fees. The model ordinance notes that the FCC has established "safe harbor" limits on the fees local governments can charge. They are as follows: $500 for up to the first five small wireless facilities in the same application, with an additional $100 for each small wireless facility beyond five in the same application, or fees that are (1) a reasonable approximation of costs, (2) those costs themselves are reasonable, and (3) are nondiscriminatory. (2) $1000 for the installation, modification or replacement of a pole together with the collocation of an associated small wireless facility in the rights-of-way that is a permitted use in accordance with this Chapter, or fees that are (1) a reasonable approximation of costs, (2) those costs themselves are reasonable, and (3) are nondiscriminatory.]*

## HOW IS RADIOFREQUENCY RADIATION MEASURED?

An RF electromagnetic wave has both an electric and a magnetic component (electric field and magnetic field), and it is often convenient to express the intensity of the RF environment at a given location in terms of units specific to each component. For example, the unit "volts per meter" (V/m) is used to express the strength of the electric field (electric "field strength"), and the unit "amperes per meter" (A/m) is used to express the strength of the magnetic field (magnetic "field strength"). Another commonly used unit for characterizing the total electromagnetic field is "power density." Power density is most appropriately used when the point of measurement is far enough away from an antenna to be located in the "far-field" zone of the antenna.

Power density is defined as power flow per unit area. For example, power density is commonly expressed in terms of watts per square meter ($W/m^2$), milliwatts per square centimeter ($mW/cm^2$), or microwatts per square centimeter ($\mu W/cm^2$). One $mW/cm^2$ equals 10 $W/m^2$, and 100 $\mu W/cm^2$ equal one $W/m^2$. With respect to frequencies in the microwave range, power density is usually used to express intensity of exposure.

The quantity used to measure the rate at which RF energy is actually absorbed in a body is called the "Specific Absorption Rate" or "SAR." It is usually expressed in units of watts per kilogram (W/kg) or milliwatts per gram (mW/g). In the case of exposure of the whole body, a standing ungrounded human adult absorbs RF energy at a maximum rate when the frequency of the RF radiation is in the range of about 70 MHz. This means that the "whole-body" SAR is at a maximum under these conditions. Because of this "resonance" phenomenon and consideration of children and grounded adults, RF safety standards are generally most restrictive in the frequency range of about 30 to 300 MHz. For exposure of parts of the body, such as the exposure from hand-held mobile phones, "partial-body" SAR limits are used in the safety standards to control absorption of RF energy (see later questions on mobile phones). (Back to Index)

FAQ

League of Oregon Cities

# FAQ on Small Wireless Facilities

AUGUST 2020

This document was produced in coordination with:

T-Mobile AT&T verizon

**DISCLAIMER**

At the time of this publication the FCC Small Cell Order is in effect. However, there is active litigation going on related to the FCC Small Cell Order which means some of this information is subject to change in the future.

## Background

On January 31, 2017, Federal Communications Commission ("FCC") Chairman Ajit Pai established a Broadband Deployment Advisory Committee ("BDAC"), which he tasked with making recommendations to the FCC on ways to accelerate the deployment of broadband by reducing or removing regulatory barriers to infrastructure investment. On September 27, 2018, the FCC released a Declaratory Ruling and Third Report and Order (FCC 18-133, identified throughout this document as "Small Cell Order" or "FCC Order") that significantly limits local authority over small wireless infrastructure deployment and fees for use of the rights of way. Most provisions of the FCC Order took effect January 14, 2019. Under the FCC Order, there are prescribed definitions of small wireless facilities, as well as criteria for aesthetic or design standards.The definitions within the FCC Order reflect that such facilities may not result in human exposure to radiofrequency ("RF") radiation in excess of applicable standards in the FCC's rules. Currently, the League of Oregon Cities is disputing the Small Cell Order in the 9th Circuit Court along with other local governments and the National Association of Telecommunications Officers and Advisors (NATOA).

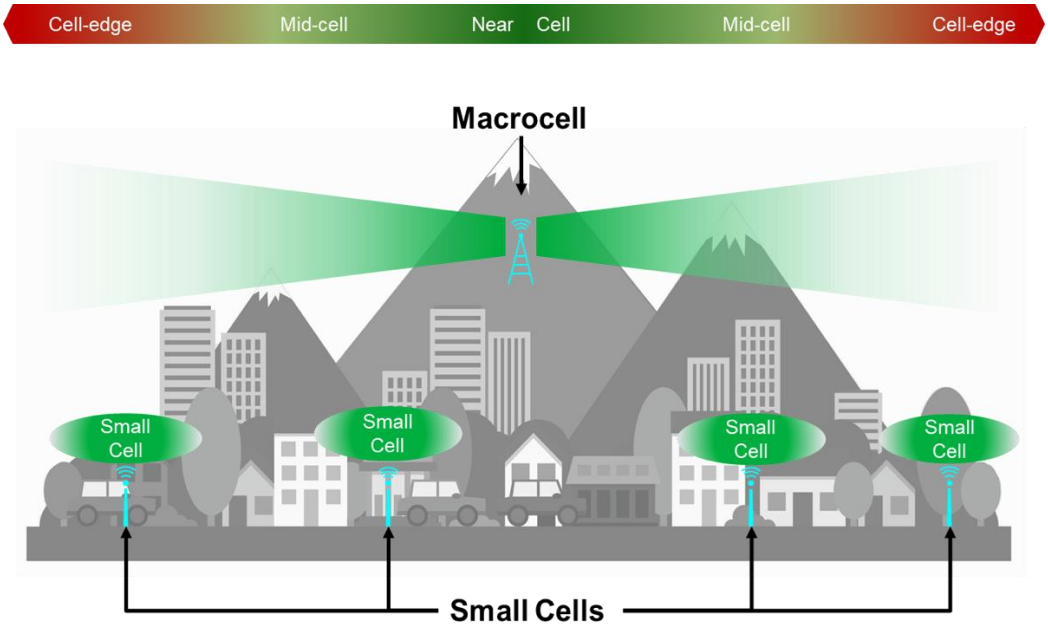
## LOC FAQ on Small Wireless Facilities

As the demand for connectivity increases and the Internet of Things ("IoT") proliferates with the connection of millions of new smart devices to the internet, cities are facing the reality that to meet the increasing demands of residents and businesses, more wireless facilities and infrastructure needs to be deployed. With that reality, city officials must also reconcile a number of policy, public safety, land-use and right-of-way considerations. As cities navigate this rapidly-changing policy environment and work to reconcile issues from wireless and infrastructure providers and community residents, a number of considerations for the different stakeholders begin to emerge.

To help in this time of change, the League of Oregon Cities, in coordination with many cities, as well as representatives from Verizon, AT&T, and T-Mobile, met and worked diligently from January 2019 to May 2020 to discuss and craft a model code, model design standards, and an informational document relating to small wireless facilities. Note: small wireless facilities are also referred to as small cells. This document serves as that informational document and provides an overview of small cell technology, deployment, and infrastructure. The intended audience of this document is city staff, planning commissioners, elected officials and community members.

## 1. What is a Small Wireless Facility?

Small wireless facilities, also known as small cells, are just what the name implies – they have smaller wireless radios and antennas than macrocell sites (such as the typical wireless cell tower). Small wireless facilities have a range that varies from a few hundred feet to upwards of 1,000 feet, depending on terrain, vegetation, and the radio frequencies used. These lower power facilities primarily add capacity in high-traffic areas, dense urban areas, and suburban communities, where people are using smartphones and other devices, and are not a substitute for macrocell sites. Small wireless facilities can include 4G and 5G antennas and equipment.




Increasing wireless traffic from data usage, particularly video, requires more wireless facilities, similar to how increased vehicle traffic necessitates additional infrastructure. Increasing demand from wireless users is overburdening existing macrocell sites resulting in congestion when too many users try to use the network's capacity at the same time. Small wireless facilities provide much-needed capacity to relieve this congestion.

## 2. 5G - How Did We Get Here?

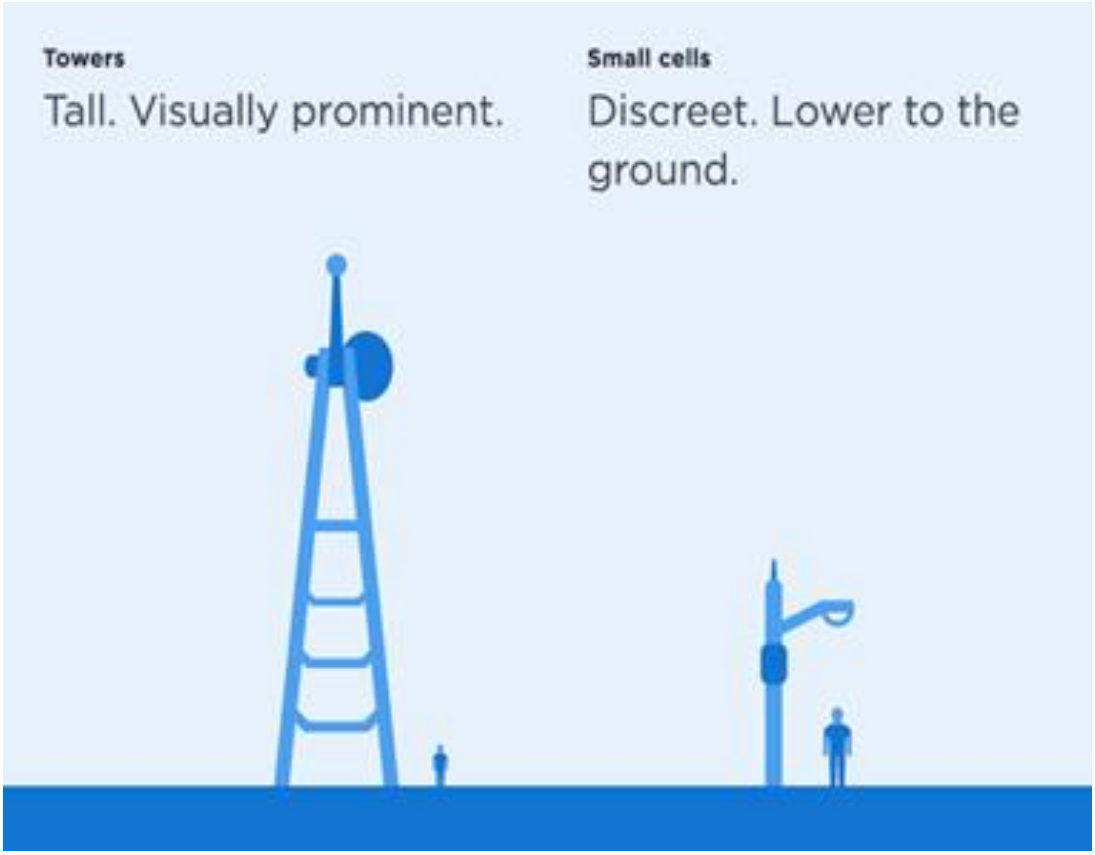
Technology is constantly changing and so are the standards that define wireless communications. The first standard or generation of wireless communication was known as 1G (first generation), which provided analog voice calling on cellular devices. With 2G came digital voice calling and the ability to send texts. 3G added data to the mix along with the first smartphones. 4G (or LTE) is the current standard that allows for faster data transfers, making video calls and other multimedia solutions possible. With each new generation of cellular technology, older standards are eventually phased out. This migration usually takes many years with multiple standards and equipment in use at the same time.

| What's the difference between 5G and the other Gs? | | | | |
|---|---|---|---|---|
| **1G** | **2G** | **3G** | **4G** | **5G** |
| **VOICE** | **SMS** | **DATA & APPS** | **VIDEO & SPEED** | **TRANSFORMATION** |
| We first talk without the wires – on the move, with analog technology. | SMS messaging debuts, bringing us a new way to chat and creating a new language to chat with. | We begin sharing snapshots of our lives, sending images thanks to higher data transfers. | Video calls and new businesses are possible with wireless broadband on our smart devices. | From wireless home broadband AR/VR to mobile gaming and more, 5G will change how we live, learn, work and play. |

The 5th Generation technology (5G) is a change in standards for wireless communication to increase capacity, efficiency, responsiveness, and download speeds. This technology is planned to accommodate smart communities, IoT, immersive education, connected cars, remote medicine, virtual reality, remote learning, etc. Carriers deploying 5G may change the type of antennas and wireless equipment currently used to connect all the 5G devices. 5G is expected to be up to 100 times faster and five times more responsive than the previous generation, 4G.

### 3. What Does Small Wireless Technology Look Like?

The current FCC definition of a "small wireless facility" caps the height of the facility and its support structure at 50 feet or 10% of the height of adjacent structures, whichever is greater, and establishes volumetric limits – no more than three cubic feet in volume for each antenna and no more than 28 cubic feet in volume for all other associated equipment. These standards recognize that small wireless facilities may need to differ by provider and situation, but ensure that small wireless facilities are indeed smaller than the cell towers most people are familiar with today, which are known as macro towers.




A typical small wireless facility deployment on a wood utility pole may involve antennas within a cylindrical enclosure, cylindrical omnidirectional antennas, and/or small panel antennas at either the top or middle of the pole to work around the existing electrical wires. Fiber and power lines, enclosed in conduit, connect the antennas to an equipment box, which houses the radios and other equipment. The antennas and equipment configuration may vary from provider to provider. For example, some providers may use panel antennas, which require the ability to tilt or position the antennas to control the direction of the signal; others may use the cantenna, which transmits in a roughly 360 degree pattern without the ability to tilt/position the antennas. Some providers may utilize a single enclosure that houses both the radios and antennas.

5G deployment may require antennas and equipment in addition to those installed for 4G and will be mounted in a variety of configurations. It is important to note that some 5G small wireless antennas cannot operate if covered or painted, but generally come in colors compatible with most installations.

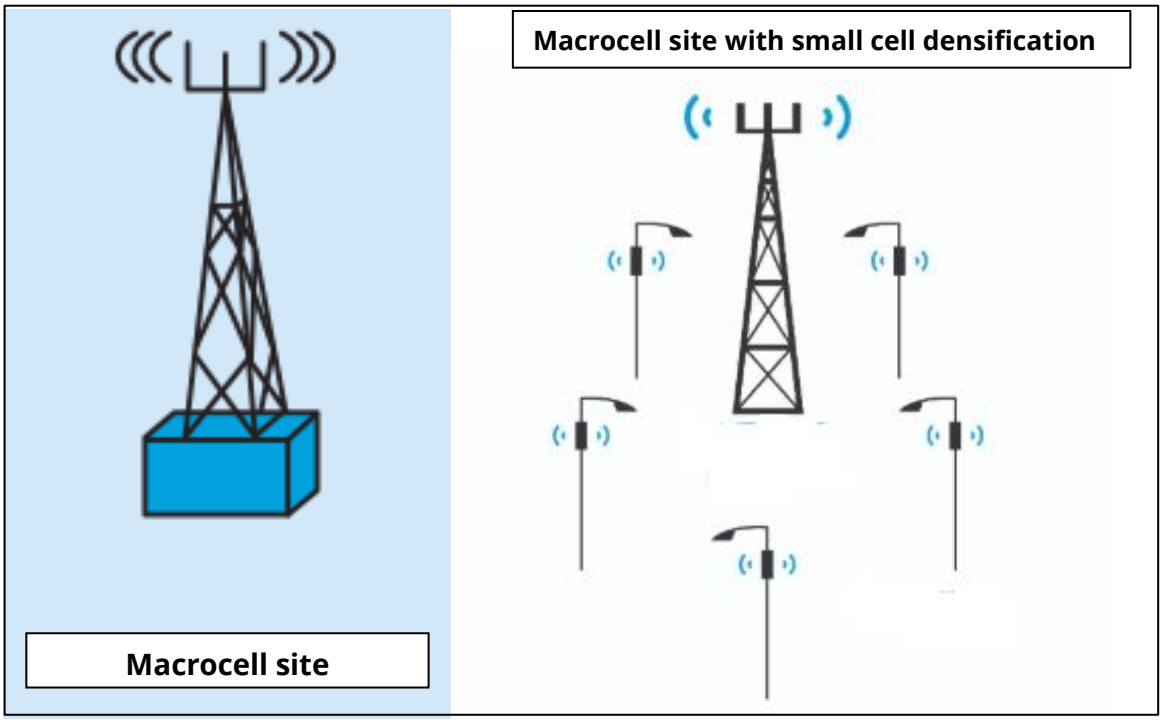
Small wireless facilities can also be placed on light standards or metal stand-alone poles, with antennas located at the top or the side of the pole. Small wireless facility equipment can either be attached to the pole within an enclosure or housed within a larger diameter pole or pole base.

### 4. As Current Small Wireless Technology Becomes Outdated, What will the Next Generation of Technology Look Like?

From what we currently know, it is probable that small wireless facilities are as small as the technology will be for the foreseeable future. 4G/5G small cell installations will likely continue to be deployed for many years to come, because any new generation of technology may require updates to network equipment, infrastructure and consumer devices.

### 5. What is "Densification"?

Densification is the process of adding small wireless facilities – much smaller-scale antennas and equipment than traditional macrocell sites. Small wireless facilities can be deployed on street lights and utility poles in the right-of-way. It is noteworthy that small wireless facilities are additive to existing wireless infrastructure.




### 6. How Does the Carrier Decide Where to Put the Small Wireless Sites? What Factors are Involved and How Big is the Search?

To meet customer needs and expectations, wireless providers must expand and enhance their networks where users live, work, travel and play. Wireless engineers gather information from many sources and analyze the data to determine the best location based on customer needs, terrain, and modeling results. Attaching to existing structures, such as street lights and utility poles, is generally considered first. Network teams perform extensive searches in the area needing improvement to find a location that will meet technical needs while ensuring the potential location complies with applicable laws.

### 7. What is the Likely per Capita Number of Small Wireless Facilities Over Time?

Wireless providers do not build small wireless facilities to meet per capita numbers, but rather to fulfill the data/voice transmission needs of consumers in the area (see also response to question #6 above).

### 8. Will There be Noise Emitted from These Sites?

The sound is expected to be negligible from the ground and facilities are required to comply with applicable noise regulations. Small wireless facilities are generally either passively cooled, so they make no sound, or have very small fans to cool the equipment.

### 9. Why is Investment in Wireless Networks Important?

There are many reasons to invest in wireless networks, including:

- 90% of U.S. households use wireless service. With this increase in demand from users at home and those who work from home comes the need for more facilities to meet the customer needs.

- Over 63% of adults in Oregon households are wireless-only for voice service,[1] exceeding the around 59% of adults in American households that are now wireless-only for voice service.[2]

- Residents need access to 9-1-1 and reverse 9-1-1 and wireless may be their only connection.[3] According to the National Emergency Number Association, 240 million calls are made to 9-1-1 each year, and in many areas of the country, 80% or more are made from wireless devices. [4]

- Wireless technology is constantly innovating and evolving to meet customer needs and demand. Goldman Sachs estimates that in the United States, connected devices could create $305 billion in annual health system savings from decreased costs and mortality due to the enhanced ability to monitor and communicate with patients managing chronic illnesses.[5]

### 9. How Can Cities Address Health Concerns in Relation to the Regulation of Small Wireless Facilities?

While cities and councils may hear public testimony on health concerns related to RF exposure, the cities cannot base decisions concerning small wireless facilities on those concerns. The federal 1996 Telecommunications Act expressly preempts state and local government regulation of the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of RF emissions to the

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[1] *CDC's Wireless Substitution: Early Release of State-Level Estimates from the National Health Interview Survey , 2018 (released 12/17/2019)*

[2] *CDC's Wireless Substitution: Early Release of Estimates from the National Health Interview Survey, January-June 2019 (released 05/28/2020)*

[3] *CTIA, June 2015*

[4] *National Emergency Number Association (NENA), 2018*

[5] https://www.ctia.org/the-wireless-industry/infographics-library?topic=17

extent that such facilities comply with the FCC's regulations concerning such emissions. 47 U.S.C. §332(c)(7)(B)(iv). Although cities may require applicants of the small wireless facilities to affirm compliance with the FCC RF exposure requirements, the FCC remains the exclusive agency for resolving non-compliance.

### 10. Where Can I Go to Find Out More About Health Effects from Small Wireless Facilities?

The FCC requirements for human exposure to RF electromagnetic fields continue to apply and were derived from the recommendations of two expert organizations, the National Council on Radiation Protection and Measurements ("NCRP") and the Institute of Electrical and Electronics Engineers ("IEEE"). Both the NCRP exposure criteria and the IEEE standard were developed by expert scientists and engineers after extensive reviews of the scientific literature related to RF biological effects. The RF exposure limits are based on thresholds for known adverse effects, and they incorporate prudent margins of safety. In adopting the current RF exposure guidelines, the FCC consulted with the EPA, FDA, OSHA and NIOSH, and obtained their support for the guidelines that the FCC is using. More information can be found at the FCC's website at http://www.fcc.gov/oet/rfsafety/rf-faqs.html

### 11. Has the FCC Updated its RF Exposure Limits?

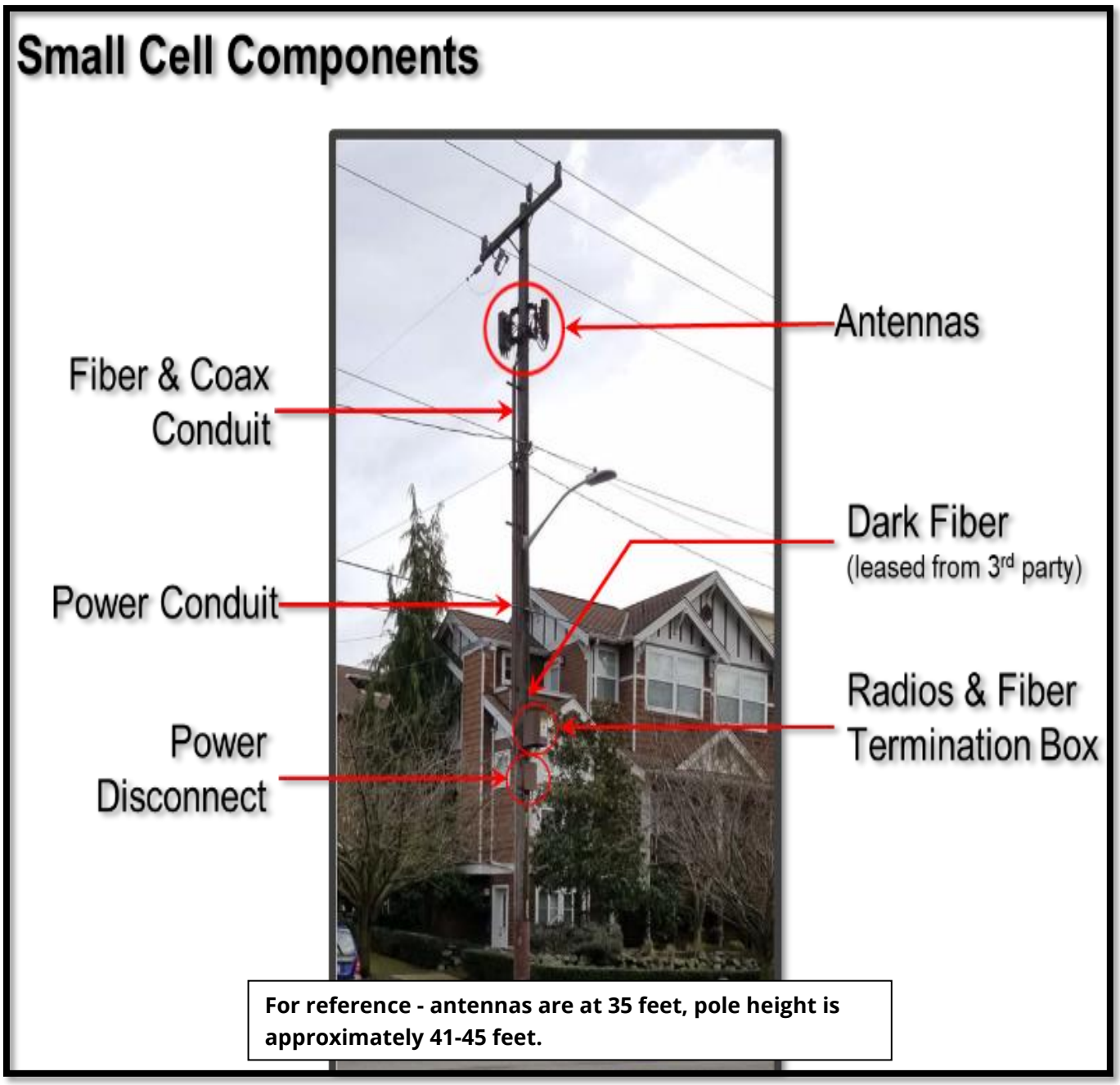
Many local governments have asked the FCC to update their guidelines on RF emissions as technology has advanced and the public continues to be increasingly worried about RF exposure. On December 4, 2019, the FCC released a Resolution of Inquiry, Second Report and Order, Notice of Proposed Rulemaking, and Memorandum of Opinion and Order related to human exposure to RF emissions (FCC 19-226 referred to as the "RF Order"). The FCC maintained in the RF Order that current RF exposure safety standards are sufficient at this time and will remain unchanged. The FCC reached this conclusion because the evidence "does not demonstrate that the science underpinning the current RF exposure limits is outdated or insufficient to protect human safety." These standards will continue to apply to all wireless devices, including 5G devices and millimeter wave spectrum that some carriers will use to deploy 5G service.

### 12. Will this Site Near My House Affect My Property Value?

Generally, cities and carriers do not factor in property values in the consideration of the location on these facilities. However, the National Realtors Association, the Oregon Realtors Association, and the Greater Oregon Chapter of the Appraisal Institute can be consulted on these matters.

## Examples and Further Pictures

*Disclaimer: The carriers have provided several images of actual small cell installations on various types of poles. Estimated pole heights have been provided as a frame of reference. These pictures are intended to be representative of the different types of small cell configurations the providers may deploy, but the exact equipment size, and equipment used, will vary based on the providers frequency and network needs.*



# Small Cell v. Macrocell Antenna

# Utility Pole

**For reference - antennas are at 35 feet, pole height is approximately 41-45 feet.**

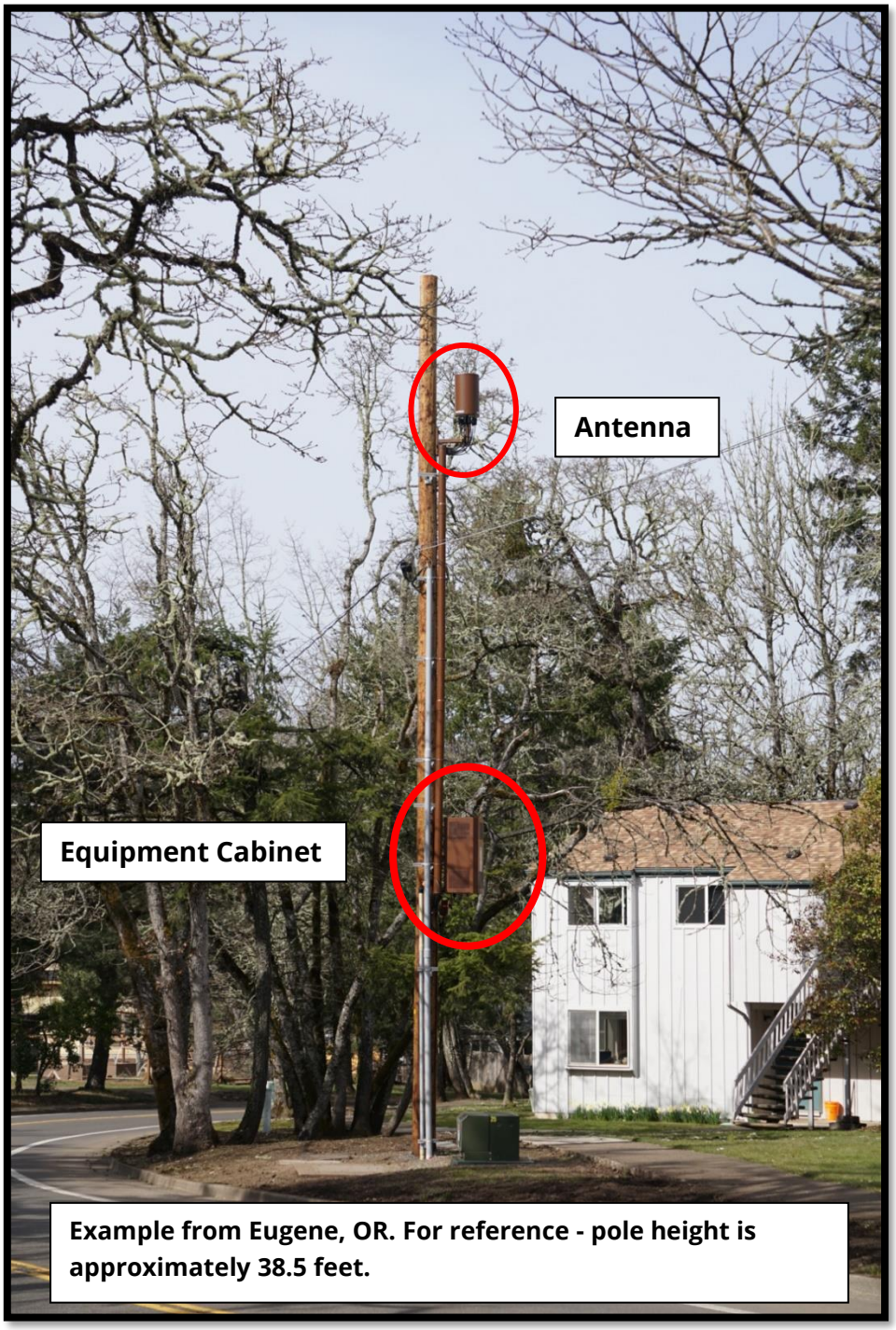
# Light Standard

# Wireless Only Pole

For reference - pole height is approximately 30 feet.

# Strand Mounted Antennas

# Omni Antennas or Antennas within Canister



# 4G/5G Installation on a Streetlight

# Consolidated Equipment Cabinet with Radios and Antennas

# Small Cell Facility Integrated into A Streetlight Pole

**Example of a proposed small cell facility integrated into a streetlight pole in Beaverton, OR. For reference - pole height is approximately 30 feet pole.**

## Acknowledgements

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Ryan Zink, City of Salem

Sambo Kirkman, City of Beaverton

Scott McClure, Formerly with the City of Monmouth

Steve Coon, Verizon

Tegan Enloe, City of Tigard

Tim Halinski, T-Mobile

# City of Newport

**Community Development Department**

# Memorandum

To: Planning Commission / Commission Advisory Committee

From: Derrick I. Tokos, AICP, Community Development Director

Date: October 26, 2020

Re: Draft Small Wireless Facility Design Standards

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Attached is a draft set of "Small Wireless Facility Design Standards" for review by the Commission and Commission Advisory Committee. The concept is that they would be adopted by resolution of the City Council and serve as a companion to the NMC Chapter 9.25 provisions reviewed at the last work session. Since the design standards will be adopted by resolution, they can be easily revised to respond to changes in wireless technology and associated concealment options.

Please review the materials and come prepared to discuss whether or not they are adequate, as drafted, or in need of adjustments. The standards have been tailored to align with the League of Oregon Cities Model Design Guidelines, a copy of which is enclosed.

Attachments
Draft Small Wireless Facility Design Standards, dated 10/26/20
League of Oregon Cities Small Wireless Facilities Model Design Guidelines, June 2020

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# Small Wireless Facility Design Standards



A. **Definitions**.

The definition of terms listed in the NMC Section 9.25.010 of the City of Newport's Small Wireless Facility Ordinance apply to the design standards outlined below.

*Staff: Wireless providers should familiarize themselves with the ordinance, and including a cross reference to defined terms might help in that regard. Alternatively, we can replicate the definitions in this document.*

B. **General Requirements**.

1. Ground-mounted equipment in the right-of-way is discouraged, unless the applicant can demonstrate that pole-mounted equipment is not technically feasible, or the electric utility requires placement of equipment on the ground (such as an electric meter). If ground-mounted equipment is necessary, then the applicant shall conceal the equipment in a cabinet, in street furniture or with landscaping.

   *Staff: The League of Oregon Cities (LOC) design standards list this as optional language. It can be difficult to accommodate ground-mounted equipment within rights-of-way, particularly those that are fully developed, as they can obstruct access to underground utilities and impede user mobility (e.g. blocking pedestrian access). Requiring the equipment be elevated where technically feasible is a reasonable requirement. As noted in the design standards, the term "technically feasible" is used by the FCC to describe when aesthetic standards may be found to be reasonable and do not materially inhibit the wireless providers ability to provide service.*

2. Replacement poles, new poles and all antenna equipment shall comply with the Americans with Disabilities Act ("ADA"), city construction and sidewalk clearance standards and city, state and federal laws and regulations in order to provide a clear and safe passage within, through and across the right-of-way. Further, the location of any replacement pole, new pole, and/or antenna equipment must comply with applicable traffic requirements, not interfere with utility or safety fixtures (e.g., fire hydrants, traffic control devices).

   *Staff: Language mirrors the LOC design standards except for the reference to "and not adversely affect public health, safety or welfare," as that phrase is too open ended. Standards need to be specific enough that applicants know how to comply with them.*

3. Replacement poles shall be located as near as feasible to the existing pole. The abandoned pole must be removed within 30 days, unless an alternative timeline is agreed to, in writing, by the City engineer, or designee.

   *Staff: This language aligns with the abandonment provisions outlined in NMC Section 9.05.280 of the City's franchise code.*

4. Any replacement pole shall substantially conform to the material and design of the existing pole or adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section H.

5. No advertising, branding or other signage is allowed unless approved by the City as a concealment technique or as follows:

   a. Safety signage as required by applicable laws, regulations, and standards; and,

   b. Identifying information and 24-hour emergency telephone number (such as the telephone number for the operator's network operations center) on wireless equipment in an area that is visible.

   *Staff: The language in (4) and (5) above aligns with what is contained in the LOC design standards. Safety signage is likely to be most relevant for colocation on poles with overhead utility lines. That issue is specifically addressed by Central Lincoln PUD. The city could require that signage be legible when viewed from the ground; however, that could lead to large lettering that runs counter to concealment objectives, particularly for units mounted at the upper end of the 50-foot height limit.*

6. The total volume of multiple antennas on one structure shall not exceed fifteen (15) cubic feet, unless additional antenna volume is requested and approved pursuant to Section H.

   *Staff: The "Small Wireless Facility" definition limits antenna, excluding associated equipment, to three cubic feet in volume.*

7. Antennas and antenna equipment shall not be illuminated except as required by municipal, federal or state authority, provided this shall not preclude deployment on a new or replacement street light.

8. Small wireless facilities may not displace any existing street tree or landscape features unless such displaced street tree or landscaping is replaced with native and/or drought-resistant trees, plants or other landscape features, in accordance with the City's adopted Tree Manual.

   *Staff: The language in (7) above aligns with the LOC design standards. Removal of trees within the right-of-way is governed by the City's right-of-way permitting process that relies upon an adopted Tree Manual. The language in (8) has been drafted to be consistent.*

C. **Small Wireless Facilities Attached to Wooden Poles and Non-Wooden Poles with Overhead Lines.**

Small wireless facilities located on wooden utility poles and non-wooden utility poles with overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section H:

1. Proposed antenna and related equipment shall meet:

   a. The City's design standards for small wireless facilities;

   b. The pole owner requirements; and

   c. National Electric Safety Code ("NESC") and National Electric Code ("NEC") standards.

2. The pole at the proposed location may be replaced with a taller pole or extended for the purpose of accommodating a small wireless facility; provided that the replacement or extended pole, together with any small wireless facility, does not exceed 50 feet in height or 10 percent taller than adjacent poles, whichever is greater. The replacement or extended pole height may be increased if required by the pole owner, and such height increase is the minimum necessary to provide sufficient separation and/or clearance from electrical and wireline facilities. Such replacement poles may either match the approximate color and materials of the replaced pole or shall be the standard new pole used by the pole owner in the city.

3. To the extent technically feasible, antennas, equipment enclosures, and all ancillary equipment, boxes, and conduit shall match the approximate material and design of the surface of the pole or existing equipment on which they are attached, or adjacent poles located within the contiguous right-of-way. Near matches may be permitted by the City when options are limited by technical feasibility considerations, such as when high-frequency antennas cannot be placed within an opaque shroud but could be wrapped with a tinted film.

4. Antennas which are mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.

5. No antenna shall extend horizontally more than 20 inches past the outermost mounting point (where the mounting hardware connects to the antenna), unless additional antenna space is requested and approved pursuant to Section H.

6. Antenna equipment, including but not limited to radios, cables, associated shrouding, disconnect boxes, meters, microwaves and conduit, which is mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.

7. Antenna equipment for small wireless facilities must be attached to the pole, unless otherwise required by the pole owner or permitted to be ground-mounted [pursuant to subsection (B)(1) above]. The equipment must be placed in an enclosure reasonably related in size to the intended purpose of the facility.

*Staff: The language above aligns with the LOC design standards.*

8. All cables and wiring shall be covered by conduits and cabinets to the extent that it is technically feasible, if allowed by pole owner. The number of conduits shall be minimized to the extent technically feasible.

D. **Small Wireless Facilities Attached to Non-Wooden Light Poles and Non-Wooden Utility Poles without Overhead Utility Lines.**

Small wireless facilities attached to existing or replacement non-wooden light poles and non-wooden utility poles without overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section H:

1. All equipment (excluding disconnect switches), conduit and fiber must be fully concealed within the pole, if technically feasible. The antennas must be camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible.

2. In cases where the applicant demonstrates that it is not technically feasible to conceal equipment within the pole, then the antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible and must be reasonably related in size to the intended purpose of the facility and reasonable expansion for future frequencies and/or technologies, not to exceed the volumetric requirements described in Section A. If the equipment enclosure(s) is mounted on the exterior of the pole, the applicant is encouraged to place the equipment enclosure(s) behind any decorations, banners or signs that may be on the pole. Conduit and fiber must be fully concealed within the pole.

   *Staff: The LOC design standards indicate that municipalities may want to consider one or both of these concepts. This version includes both. If it is technically feasible to locate equipment within a pole then they will be required to go that route. Otherwise, they can mount to the exterior of the pole and camouflage. Note that, at this time, all antennas will be exterior mounted. Central Lincoln PUD has indicated that the acorn style ornamental poles are not designed to accommodate the additional weight of wireless equipment, and at 14-ft, 6-in height they are not tall enough to be an attractive collocation option. Pole options can change though, so I don't know that it is relevant to the adoption of an initial set of design standards.*

3. Any replacement pole shall substantially conform to the material and design of the existing pole or adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section H.

4. The height of any replacement pole may not extend more than 10 feet above the height of the existing pole, unless such further height increase is required in writing by the pole owner.

   *Staff: The language in (3) and (4) aligns with the LOC design standards.*

E. **New Poles.**

Small wireless facilities may be attached to new poles that are not replacement poles under sections C or D, installed by the wireless provider, subject to the following criteria:

1. Antennas, antenna equipment and associated equipment enclosures (excluding disconnect switches), conduit and fiber shall be fully concealed within the structure. If such concealment is not technically feasible, or is incompatible with the pole design, then the antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the structure or mounted as close to the pole as feasible, and must be reasonably related in size to the intended purpose of the facility, not to exceed the volumetric requirements for small wireless facilities.

2. To the extent technically feasible, all new poles and pole-mounted antennas and equipment shall substantially conform to the material and design of adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section H.

3. New poles shall be no more than forty (40) feet in height unless additional height is requested and approved pursuant to Section H.

4. The city prefers that wireless providers install small wireless facilities on existing or replacement poles instead of installing new poles, unless the wireless provider can document that installation on an existing or replacement pole is not technically feasible or otherwise not possible (due to a lack of owner authorization, safety considerations, or other reasons acceptable to the City engineer, or designee.

*Staff: The above language aligns with the LOC design standards. As noted in the LOC design standards, small cell deployments work best at 35-45-feet in height, so a 40-foot height limitation for new poles should be fine. Language in (4) should help with pole clutter, which could be an issue in areas where existing ornamental lights cannot accommodate collocation of small wireless facilities.*

F. **Historic District Requirements.**

Small wireless facilities or poles to support collocation of small wireless facilities located in Historic Districts shall be designed to have a similar appearance, including material and design elements, if technically feasible, of other poles in the rights-of-way within 500 feet of the proposed installation. Any such design or concealment measures may not be considered part of the small wireless facility for purpose of the size restrictions in the definition of small wireless facility.

*Staff: The above language aligns with the LOC design standards.*

G. **Strand Mounted Equipment.**

Strand mounted small wireless facilities, designed to fit onto existing aerial cables, are permitted, subject to the following criteria:

1. Each strand mounted antenna shall not exceed 3 cubic feet in volume, unless a deviation is requested and approved pursuant to Section H.

2. Only 2 strand mounted antennas are permitted between any two existing poles.

3. Strand mounted devices shall be placed as close as possible to the nearest pole and in no event more than five feet from the pole unless a greater distance is required by the pole owner.

4. No strand mounted device will be located in or above the portion of the roadway open to vehicular traffic.

5. Strand mounted devices must be installed with the minimum excess exterior cabling or wires (other than original strand) to meet the technological needs of the facility.

*Staff: The above language aligns with the LOC design standards.*

H. **Deviation from Design Standards.**

1. An applicant may obtain a deviation from these design standards if they demonstrate, in writing, that compliance with the standard:

   a. is not technically feasible; or

   b. impedes the effective operation of the small wireless facility; or

   c. impairs a desired network performance objective; or

   d. conflicts with pole owner requirements; or

   e. otherwise materially inhibits or limits the provision of wireless service.

2. When requests for deviation are sought under subsections (H)(1)(a)-(e), the request must be narrowly tailored to minimize deviation from the requirements of these design standards, and the City engineer, or designee, must find the applicant's proposed design provides similar aesthetic value when compared to strict compliance with these standards.

3. City engineer, or designee, may also allow for a deviation from these standards when he/she finds the applicant's proposed design provides equivalent or superior aesthetic value when compared to strict compliance with these standards.

4. The small wireless facility design approved under this Section H must meet the conditions of 47 C.F.R. Sec. 1.6002(l).

5. City engineer, or designee, will review and may approve a request for deviation to the minimum extent required to address the applicant's needs or facilitate a superior design. Such approval shall be in writing, and shall include the reason(s) for the deviations.

*Staff: The above language aligns with the LOC design standards, including the recommendation that municipalities document their rationale for granting requests to deviate from design standards.*

MODEL

League of Oregon Cities

# Small Wireless Facilities Model Design Guidelines

JUNE 2020

This model was produced in coordination with:

T-Mobile AT&T verizon

## DISCLAIMER

Any model document provided by the League of Oregon Cities (LOC) is intended to be used as a starting point in an individual city's development of its own documents. Each city is unique, and any adopted document or policy should be individually tailored to meet a city's unique needs. Furthermore, this model is not intended to be a substitute for legal advice. Cities should consult with their city attorney before adopting any small wireless facility policies to ensure that they comply with all aspects of federal, state, and local law.

# Table of Contents

# Foreword

## Background

On January 31, 2017, Federal Communications Commission ("FCC") Chairman Ajit Pai established a Broadband Deployment Advisory Committee ("BDAC"), which he tasked with making recommendations to the FCC on ways to accelerate the deployment of broadband by reducing or removing regulatory barriers to infrastructure investment. On September 27, 2018, the FCC released a Declaratory Ruling and Third Report and Order (FCC 18-133, referred throughout the document as "Small Cell Order" or "FCC Order") that significantly limits local authority over small wireless infrastructure deployment and fees for use of the rights-of-way (ROW). The FCC Order took effect January 14, 2019. However, the requirements regarding aesthetics did not take effect until April 15, 2019. Under the FCC Order aesthetic or design standards must be: (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; (3) objective; and (4) published in advance. The FCC Order also defines the size limitations for small wireless facilities (allowing antennas of up to 3 cubic feet each, with additional equipment not to exceed 28 cubic feet), and specifies that such facilities may not result in human exposure to radiofrequency radiation in excess of applicable standards in the FCC's rules (federal law preempts local regulation of RF emissions). "Small wireless facilities" are sometimes also called "small cells."

## LOC Model Small Wireless Facilities Design Standard

In coordination with many cities,[1] representatives from Verizon, AT&T, T-Mobile, and the LOC met from January 2019 to May 2020 to discuss and craft a model code and model design standards relating to small wireless facilities while there is pending litigation[2] on the FCC Order. The model code and model design standards are intended to be paired together.

There is no single design standard that will work for every jurisdiction. As such, the LOC's model design standard is intended as a roadmap to assist local governments in adopting their own design standard. While example language is included in some sections, the LOC does not intend to suggest these examples could work for every jurisdiction. In some instances, the local government may need to issue a deviation to the design standards when it would be technically infeasible for the applicant to comply. The deviation process is provided in Section I of these model standards and is intended to occur within the "shot clock"[3] – the time frame in which the state or local government should act on a request for authorization to place, construct, or modify personal wireless service facilities, as defined by the FCC. However, to the extent that the local government cannot reasonably act on the application within the shot clock, the parties are encouraged to seek a tolling agreement to allow the applicant to vet reasonable design alternatives and the local government to complete its review. Local governments cannot require a tolling agreement as a condition of a deviation.

[1] See "Acknowledgments" section for full list of participants.
[2] In October 2018, the LOC in coordination with other municipalities and municipal leagues filed suit against the FCC in the United States Court of Appeals for the Ninth Circuit.
[3] See Appendix A

The LOC also recognizes there are many ways to structure a design standard. The appropriate structure will vary by jurisdiction. For purposes of this model, the LOC opted to approach designs by type of pole and deployment. The model is intended to provide a general framework and thus is drafted as an outline of provisions jurisdictions may want to include in their final design standard. In many cases example language is provided to help illustrate the issues to be addressed. However, the intent is to allow each jurisdiction to draft the substantive provisions that best reflect local needs and interests. The LOC recommends that jurisdictions that own poles or other structures in the rights-of-way establish a clear design standard. The circumstances of each municipality may, and likely will, require modifications to the framework and/or example language of this model design standard.

**Additional Considerations**

The LOC model design standards only applies to small wireless facilities. Municipalities should review their existing ordinances, standards and policies to determine if this framework is appropriate. Municipalities may want to consider whether it would be preferable to adopt a utility-neutral standard covering all utilities and communications providers, which would provide one set of "rules" for the design of the public rights-of-way. Differences in policy choices and existing standards, among other things, may impact the decision in how to proceed. It is recommended that cities consult their attorney, ROW specialists, engineers, master plans, comprehensive plans, goals and/or wireless providers before final adoption of standards. Cities may choose to adopt design standards administratively or in code.

**Understanding the Organization of the Model Design Standards**

As stated above, the model is best described as an outline or roadmap to assist municipalities in drafting the appropriate standards for their community. The model includes example language to illustrate the intent of the section. The example language, or a variation thereof, may be appropriate for final adoption in some jurisdictions.

Finally, there may be additional notes or issues for consideration within the subsections of the model, which are [bracketed] and in ALL CAPS. Again, these notes are is intended as guidance for municipal drafters, not for adoption in a final ordinance.

## Small Wireless Facility Design Standards

[GIVEN THAT THE TECHNICAL NEEDS FOR EACH OPERATOR MAY VARY, JURISDICTIONS ARE ENCOURAGED TO ADOPT DESIGN STANDARDS BY CITY COUNCIL RESOLUTION AND/OR ADMINISTRATIVELY BY THE CITY MANAGER OR OTHER OFFICIAL. THIS WAY, CITIES WOULD BE ABLE TO REACT QUICKLY AND AMEND THE STANDARDS IN RESPONSE TO CHANGES IN LAW AND TECHNOLOGY. CITIES SHOULD NOTE THAT THIS NIMBLER APPROACH IS POSSIBLE ONLY IF THE REGULATIONS FOR SMALL WIRELESS FACILITIES IN THE PUBLIC RIGHTS-OF-WAY ARE LOCATED OUTSIDE OF THE LAND DEVELOPMENT CODE.]

### A. Definitions

"**Antenna**" means the same as defined in 47 C.F.R. § 1.6002(b), as may be amended or superseded. The term includes an apparatus designed for the purpose of emitting radio frequencies (RF) to be operated or operating from a fixed location pursuant to Federal Communications Commission authorization, for the provision of personal wireless service and any commingled information services. For purposes of this definition, the term antenna does not include an unintentional radiator, mobile station, or device authorized under 47 C.F.R. Part 15.

"**Antenna Equipment**" means the same as defined 47 C.F.R. § 1.6002(c), as may be amended or superseded, which defines the term to mean equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

"**Antenna Facility**" means the same as defined in 47 C.F.R. § 1.6002(d), as may be amended or superseded, which defines the term to mean an antenna and associated antenna equipment.

"**Applicable codes**" means uniform building, fire, safety, electrical, plumbing, or mechanical codes adopted by a recognized national code organization or state or local amendments to those codes that are of general application and consistent with state and federal law.

"**Applicant**" means any person who submits an application as or on behalf of a wireless provider.

"**Application**" means requests submitted by an applicant (i) for permission to collocate small wireless facilities; or (ii) to approve the installation, modification or replacement of a structure on which to collocate a small wireless facility in the rights-of-way, where required.

"**Collocate**" means the same as defined in 47 C.F.R. § 1.6002(g), as may be amended or superseded, which defines that term to mean (1) mounting or installing an antenna facility on a preexisting structure, and/or (2) modifying a structure for the purpose of mounting or installing an antenna facility on that structure. "Collocation" has a corresponding meaning.

"**Day**" means calendar day. For purposes of the FCC shot clock, a terminal day that falls on a holiday or weekend shall be deemed to be the next immediate business day.

"**Historic District**" means a group of buildings, properties, or sites that are either: (1) listed in the National Register of Historic Places or formally determined eligible for listing by the Keeper of the National Register in accordance with Section VI.D.1a.i-v of the Nationwide Programmatic Agreement codified at 47 C.F.R. Part 1, Appendix C; or, (2) a locally designated historic district as of the effective date of this [Chapter/Section] or in a locally designated historic district existing when an application is submitted. [NOTE: THIS IS NOT MEANT TO RETROACTIVELY AFFECT SWFs ALREADY IN PLACE WHEN A NEW DISTRICT IS CREATED].

"**Person**" means an individual, corporation, limited liability company, partnership, association, trust, or other entity or organization, including the City.

"**Pole**" means a type of structure in the rights-of-way that is or may be used in whole or in part by or for wireline communications, electric distribution, lighting, traffic control, signage, or similar function, or for collocation of small wireless facilities; provided, such term does not include a tower, building or electric transmission structures.

"**Rights-of-Way**" or "**ROW**" means [INSERT A CONSISTENT DEFINITION ACROSS OTHER CODES. Example: "Right-of-way," "rights-of-way," "public right-of-way," or "ROW" means and includes, but is not limited to, the space in, upon, above, along, across, over or under the public streets, roads, highways, lanes, courts, ways, alleys, boulevards, bridges, trails, paths, sidewalks, bicycle lanes, public utility easements and all other public ways or areas, including the subsurface under and air space over these areas, but does not include parks, parkland, or other City property not generally open to the public for travel.]

"**Small wireless facility**" means a facility that meets each of the following conditions per 47 C.F.R § 1.6002(*l*), as may be amended or superseded:

1. The proposed facilities meet one of the following height parameters:
    a. are mounted on structures 50 feet or less in height including their antennas as defined in 47 C.F.R. Section 1.1320(d), or
    b. are mounted on structures no more than 10 percent taller than other adjacent structures, or
    c. do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater.

2. Each antenna or antenna enclosure shall not exceed three cubic feet in volume.

3. The total volume of installed equipment external to the pole (including, but not limited to cabinets, vaults, boxes) shall not exceed twenty-eight (28) cubic feet. This maximum applies to all equipment installed at the time of original application and includes any equipment to be installed at a future date. Antennas and antenna

enclosures are excluded. If equipment exceeds this maximum, the installation will be redefined as a Macro site installation and all the associated standards and rates for Macro installations will be applied.

4. The facilities do not result in human exposure to radio frequency radiation in excess of the applicable safety standards specified in the FCC's Rules and Regulations [47 C.F.R. section 1.1307(b)].

"**Structure**" means the same as provided in 47 C.F.R. § 1.6002(m), as may be superseded or amended, which defines the term as a pole, tower, base station, or structure, whether or not it has an existing antenna facility, that is used or to be used for the provision of personal wireless service (whether on its own or comingled with other types of service).

[IF THE CITY HAS SPECIFIC CODES OR ORDINANCES WITH DEFINITIONS RELATING TO SWF, CONSIDER INCLUDING DEFINITIONS OR A CROSS REFERENCE HERE.]

**B. General Requirements.**

1. [NOTE: SECTION (B)(1) IS OPTIONAL. CITIES SHOULD CONSIDER A PREFERENCE THAT IS IN LINE WITH GOALS AND CURRENT STANDARDS ON WHETHER THE CITY PREFERS GROUND-MOUNTED EQUIPMENT OR NOT.] Ground-mounted equipment in the right-of-way is discouraged, unless the applicant can demonstrate that pole-mounted equipment is not technically feasible, or the electric utility requires placement of equipment on the ground (such as an electric meter). If ground-mounted equipment is necessary, then the applicant shall conceal the equipment in a cabinet, in street furniture or with landscaping. [THE TERM "TECHNICALLY FEASIBLE" IS USED BY THE FCC TO DESCRIBE WHEN AESTHETIC STANDARDS MAY BE FOUND TO BE REASONABLE AND DO NOT MATERIALLY INHIBIT THE WIRELESS SERVICE PROVIDER'S ABILITY TO PROVIDE SERVICE.]

2. Replacement poles, new poles and all antenna equipment shall comply with the Americans with Disabilities Act ("ADA"), city construction and sidewalk clearance standards and city, state and federal laws and regulations in order to provide a clear and safe passage within, through and across the right-of-way. Further, the location of any replacement pole, new pole, and/or antenna equipment must comply with applicable traffic requirements, not interfere with utility or safety fixtures (e.g., fire hydrants, traffic control devices), and not adversely affect public health, safety or welfare. [NOTE: ADA REQUIREMENTS, WALKING SPACE, BOLT PATTERNS AND OTHER GENERALLY APPLICABLE CONSTRUCTION STANDARDS ALL NEED TO BE CONSIDERED. THESE CAN BE LIMITING DESIGN FACTORS.]

3. Replacement poles shall be located as near as feasible to the existing pole. The abandoned pole must be removed within_____days. [NOTE: KEEP CONSISTENT

WITH OTHER CODES OR REQUIREMENTS ABOUT TIMEFRAMES TO REMOVE EQUIPMENT.]

4. Any replacement pole shall substantially conform to the material and design of the existing pole or adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section I.

5. No advertising, branding or other signage is allowed unless approved by the [City designee] as a concealment technique or as follows:

    a. Safety signage as required by applicable laws, regulations, and standards; and,

    b. Identifying information and 24-hour emergency telephone number (such as the telephone number for the operator's network operations center) on wireless equipment in an area that is visible.

    [NOTE: IDENTIFYING SIGNAGE IS USUALLY REQUIRED TO BE PLACED ON THE POLE AND READABLE FROM THE GROUND AS A MINIMUM. A CITY MAY ADD ADDITIONAL REQUIREMENTS FOR PLACEMENT. STANDARDS FOR SIGNAGE ARE ADVISORY AND MAY BE SUBJECT TO OVERSIGHT BY MULTIPLE FEDERAL AGENCIES. ALTHOUGH THE FCC'S REGULATIONS ULTIMATELY CONTROL, THE FCC'S REGULATIONS ARE GENERAL AND CAN BE UNCLEAR. AS A BEST PRACTICE, CITIES MAY WISH TO CONSULT THE MORE DETAILED RECOMMENDATIONS BY THE OCCUPATIONAL SAFETY AND HEALTH ADMINISTRATION.]

6. The total volume of multiple antennas on one structure shall not exceed fifteen (15) cubic feet, unless additional antenna volume is requested and approved pursuant to Section I.

7. Antennas and antenna equipment shall not be illuminated except as required by municipal, federal or state authority, provided this shall not preclude deployment on a new or replacement street light.

8. Small wireless facilities may not displace any existing street tree or landscape features unless: (a) such displaced street tree or landscaping is replaced with native and/or drought-resistant trees, plants or other landscape features approved by the City, and (b) the applicant submits and adheres to a landscape maintenance plan or agrees to pay an appropriate in-lieu fee for the maintenance costs.

**C. Small Wireless Facilities Attached to Wooden Poles and Non-Wooden Poles with Overhead Lines.** Small wireless facilities located on wooden utility poles and non-wooden utility poles with overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section I:

[IN OREGON, PGE AND PACIFIC CORP ARE THE MOST COMMON UTILITY POLE OWNERS. BOTH HAVE THEIR OWN DESIGN STANDARDS. CITIES SHOULD

WORK WITH POLE OWNERS TO FIND WHAT WORKS BEST FOR THEIR COMMUNITIES AND COMPARE DESIGN STANDARDS.]

1. Proposed antenna and related equipment shall meet:

    a. The City's design standards for small wireless facilities;
    b. The pole owner requirements; and
    c. National Electric Safety Code ("NESC") and National Electric Code ("NEC") standards.

2. The pole at the proposed location may be replaced with a taller pole or extended for the purpose of accommodating a small wireless facility; provided that the replacement or extended pole, together with any small wireless facility, does not exceed 50 feet in height or 10 percent taller than adjacent poles, whichever is greater. The replacement or extended pole height may be increased if required by the pole owner, and such height increase is the minimum necessary to provide sufficient separation and/or clearance from electrical and wireline facilities. Such replacement poles may either match the approximate color and materials of the replaced pole or shall be the standard new pole used by the pole owner in the city.

3. To the extent technically feasible, antennas, equipment enclosures, and all ancillary equipment, boxes, and conduit shall match the approximate material and design of the surface of the pole or existing equipment on which they are attached, or adjacent poles located within the contiguous right-of-way. Near matches may be permitted by the City when options are limited by technical feasibility considerations, such as when high-frequency antennas cannot be placed within an opaque shroud but could be wrapped with a tinted film.

4. Antennas which are mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.

5. No antenna shall extend horizontally more than 20 inches past the outermost mounting point (where the mounting hardware connects to the antenna), unless additional antenna space is requested and approved pursuant to Section I. [NOTE: THE 20 INCH STANDARD HERE IS NOT INTENDED TO DICTATE THE SIZE OF THE ANTENNA. RATHER, TO DICTATE THE DISTANCE BETWEEN THE ANTENNA/ANTENNA EQUIPMENT AND THE POLE ITSELF.]

6. Antenna equipment, including but not limited to radios, cables, associated shrouding, disconnect boxes, meters, microwaves and conduit, which is mounted on poles shall be mounted as close to the pole as technically feasible and allowed by the pole owner.

7. Antenna equipment for small wireless facilities must be attached to the pole, unless otherwise required by the pole owner or permitted to be ground-mounted [pursuant to subsection (B)(1) above]. The equipment must be placed in an enclosure reasonably related in size to the intended purpose of the facility. [IF APPLICABLE, THE APPLICANT IS ENCOURAGED TO PLACE THE EQUIPMENT ENCLOSURE(S)

BEHIND ANY DECORATIONS, BANNERS OR SIGNS THAT MAY BE ON THE POLE. IN APPROPRIATE CIRCUMSTANCES, CITIES MAY ALSO WISH TO CONSIDER ALLOWING ENCLOSURES THAT INCLUDE REASONABLE SPACE FOR FUTURE ADDITIONAL EQUIPMENT.]

8. All cables and wiring shall be covered by conduits and cabinets to the extent that it is technically feasible, if allowed by pole owner. The number of conduits shall be minimized to the extent technically feasible.

**D. Small Wireless Facilities Attached to Non-Wooden Light Poles and Non-Wooden Utility Poles without Overhead Utility Lines.** Small wireless facilities attached to existing or replacement non-wooden light poles and non-wooden utility poles without overhead lines shall conform to the following design criteria unless a deviation is requested and approved pursuant to Section I:

[NOTE: JURISDICTION MAY PREFER A OR B OR BOTH. ALSO, NOTE THAT THE MOST COMMON TYPES OF THESE POLES ARE DUAL USE POLES. DUAL USE POLES USUALLY REQUIRE SEPARATION INSIDE THE POLE TO KEEP THE UTILITY EQUIPMENT SEPARATE FROM NEW OR ADDED EQUIPMENT FROM SMALL WIRELESS FACILITIES. HOWEVER, THERE MAY BE STANDALONE SMALL WIRELESS FACILITIES POLES THAT MAY USE OPTION A OR B OR BOTH.]

a. **External Equipment**. The antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible and must be reasonably related in size to the intended purpose of the facility and reasonable expansion for future frequencies and/or technologies, not to exceed the volumetric requirements described in Section A. If the equipment enclosure(s) is mounted on the exterior of the pole, the applicant is encouraged to place the equipment enclosure(s) behind any decorations, banners or signs that may be on the pole. Conduit and fiber must be fully concealed within the pole.

b. **Concealed Equipment**. All equipment (excluding disconnect switches), conduit and fiber must be fully concealed within the pole. The antennas must be camouflaged to appear as an integral part of the pole or be mounted as close to the pole as feasible. [NOTE: AT THIS TIME, MILLIMETER WAVE ANTENNAS CANNOT BE COVERED OR SHROUDED, THEREFORE THEY MUST BE MOUNTED TO THE OUTSIDE OF THE POLE. POLES MAY HAVE TO BE SIGNIFICANTLY BIGGER IN DIAMETER IF EQUIPMENT IS CONCEALED IN OPTION B (ACCORDING TO POLE MANUFACTURES APPROX. 16-20 INCHES). OPTION A MAY REQUIRE A REPLACEMENT POLE. THE DIAMETER OF THE POLE SHOULD BE SIMILAR TO THE ORIGINAL.]

2. Any replacement pole shall substantially conform to the material and design of the existing pole or adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section I.

3. The height of any replacement pole may not extend more than 10 feet above the height of the existing pole, unless such further height increase is required in writing by the pole owner.

**E. New Poles.** Small wireless facilities may be attached to new poles that are not replacement poles under sections C or D, installed by the wireless provider, subject to the following criteria:

[NOTE: CITIES SHOULD CHECK WITH OTHER CODES TO MAKE SURE THIS SECTION DOES NOT CONFLICT WITH PRACTICES OF NO NEW POLES OR POLE NEUTRAL PRACTICES, AND REVISE SUCH CODES AS APPROPRIATE.]

**1.** Antennas, antenna equipment and associated equipment enclosures (excluding disconnect switches), conduit and fiber shall be fully concealed within the structure. If such concealment is not technically feasible, or is incompatible with the pole design, then the antennas and associated equipment enclosures must be camouflaged to appear as an integral part of the structure or mounted as close to the pole as feasible, and must be reasonably related in size to the intended purpose of the facility, not to exceed the volumetric requirements in Section (A)(3). [IN APPROPRIATE CIRCUMSTANCES, CITIES MAY ALSO WISH TO CONSIDER ALLOWING ENCLOSURES THAT INCLUDE REASONABLE SPACE FOR FUTURE ADDITIONAL EQUIPMENT.**]**

2. To the extent technically feasible, all new poles and pole-mounted antennas and equipment shall substantially conform to the material and design of adjacent poles located within the contiguous right-of-way unless a different design is requested and approved pursuant to Section I.

3. New poles shall be no more than forty (40) feet in height unless additional height is requested and approved pursuant to Section I. [NOTE: THE FCC DEFINITION CONSIDERS A FACILITY A SMALL WIRELESS FACILITY IF IT IS 50 FT. OR UNDER. SMALL CELL TECHNOLOGY WORKS BEST WHEN DEPLOYED BETWEEN 35-45 FT. AND OTHER THAN DEPLOYMENTS ON UTILITY POLES, MOST WIRELESS PROVIDERS DO NOT NEED 50 FT TO DEPLOY. THEREFORE, IT MAY BE POSSIBLE TO HAVE NEW POLES THAT ARE NOT 50 FT.]

4. The city prefers that wireless providers install small wireless facilities on existing or replacement poles instead of installing new poles, unless the wireless provider can document that installation on an existing or replacement pole is not technically feasible or otherwise not possible (due to a lack of owner authorization, safety considerations, or other reasons acceptable to the [City designee]).

[NOTE: CITIES MAY CONSIDER THE SPACING BETWEEN POLES/DEPLOYMENTS. IT IS RECOMMENDED THAT CITIES CONSIDER DISTANCES BETWEEN NEW POLES BY AN INDIVIDUAL PROVIDER RATHER THAN ALL SWF DEPOLOYMENTS. SPACING MAY VARY BECAUSE OF BUILDINGS, TOPOGRAPHY, SIZE OF INSTALLATION, ETC. THEREFORE, IT IS RECOMMENDED THAT CITIES WORK WITH PROVIDERS TO SEE WHAT IS FEASIBLE.THE FCC PROVIDES THAT MINIMUM SPACING REQUIREMENTS CANNOT PREVENT A PROVIDER FROM REPLACING ITS PREEXISTING FACILITIES OR COLLOCATING NEW EQUIPMENT ON A STRUCTURE ALREADY IN USE. ULTIMATELY, MINIMUM SPACING REQUIREMENTS WILL BE EVALUATED UNDER THE FCC'S TEST FOR AESTHETIC REGULATIONS – THAT THE REQUIREMENTS MUST BE (1) REASONABLE; (2) NO MORE BURDENSOME THAN THOSE APPLIED TO OTHER INFRASTRUCTURE DEPLOYMENTS; (3) OBJECTIVE, AND (4) PUBLISHED IN ADVANCE.]

**F. Undergrounding Requirements.** [ACCORDING TO THE FCC ORDER, UNDERGROUNDING REQUIREMENTS ARE SUBJECT TO THE SAME CRITERIA AS OTHER AESTHETIC STANDARDS.

SOME COMPONENTS OF SMALL WIRELESS FACILITTIES WILL OFTEN NOT WORK UNDERGROUND. THEREFORE, CITIES UNDERGROUNDING REQUIREMENTS OR UNDERGROUND DISTRICTS MAY CREATE AN EFFECTIVE PROHIBITION. CITIES ARE ENCOURAGED TO REVIEW CURRENT UNDERGROUNDING REQUIREMENTS AND WORK WITH THEIR ATTORNEYS/ROW SPECIALISTS TO MAKE SURE THOSE REQUIREMENTS ARE NOT IN CONFLICT WITH THE FCC ORDER.]

**G. Historic District Requirements.**
Small wireless facilities or poles to support collocation of small wireless facilities located in Historic Districts shall be designed to have a similar appearance, including material and design elements, if technically feasible, of other poles in the rights-of-way within 500 feet of the proposed installation. Any such design or concealment measures may not be considered part of the small wireless facility for purpose of the size restrictions in the definition of small wireless facility.

**H. Strand Mounted Equipment**. Strand mounted small wireless facilities arepermitted, subject to the following criteria:

1. Each strand mounted antenna shall not exceed 3 cubic feet in volume, unless a deviation is requested and approved pursuant to Section I.
2. Only 2 strand mounted antennas are permitted between any two existing poles.

3. Strand mounted devices shall be placed as close as possible to the nearest pole and in no event more than five feet from the pole unless a greater distance is required by the pole owner.

4. No strand mounted device will be located in or above the portion of the roadway open to vehicular traffic.

5. Strand mounted devices must be installed with the minimum excess exterior cabling or wires (other than original strand) to meet the technological needs of the facility.

**I. Deviation from Design Standards.**

1. An applicant may obtain a deviation from these design standards if compliance with the standard: (a) is not technically feasible; (b) impedes the effective operation of the small wireless facility; (c) impairs a desired network performance objective; (d) conflicts with pole owner requirements; or (e) otherwise materially inhibits or limits the provision of wireless service. [NOTE: SINCE DEVIATIONS FROM THE DESIGN STANDARDS MAY LEAD TO QUESTIONS FOR WHY ONE PROVIDER WAS ALLOWED AN EXCEPTION AND ANOTHER WAS NOT, IT IS ADVISED THAT CITIES DOCUMENT REASONS FOR DEVIATIONS.]

2. When requests for deviation are sought under subsections (I)(1)(a)-(e), the request must be narrowly tailored to minimize deviation from the requirements of these design standards, and the [City designee] must find the applicant's proposed design provides similar aesthetic value when compared to strict compliance with these standards.

3. [City designee] may also allow for a deviation from these standards when it finds the applicant's proposed design provides equivalent or superior aesthetic value when compared to strict compliance with these standards.

4. The small wireless facility design approved under this Section I must meet the conditions of 47 C.F.R. Sec. 1.6002(*l*).

5. [City designee] will review and may approve a request for deviation to the minimum extent required to address the applicant's needs or facilitate a superior design. [NOTE: CITIES MAY RECOMMEND A PRE-MEETING WITH PROVIDERS IF A DEVIATION FROM STANDARDS IS BEING CONSIDERED. HOWEVER, PRE-MEETINGS **MUST BE OPTIONAL.** MANDATORY PRE-MEETINGS, WHETHER WITH STAFF, MEMBERS OF THE COMMUNITY OR NEIGHBORHOOD ASSOCIATIONS, WILL TRIGGER THE SHOT CLOCK TO START.]

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## Appendix A – Shot Clock Information

*Shot clock provisions that apply to small wireless facilities are codified in 47 C.F.R. Section 1.6003, which is provided below.*

**§1.6003 Reasonable periods of time to act on siting applications.**

(a) *Timely action required.* A siting authority that fails to act on a siting application on or before the shot clock date for the application, as defined in paragraph (e) of this section, is presumed not to have acted within a reasonable period of time.

(b) *Shot clock period.* The shot clock period for a siting application is the sum of—

(1) The number of days of the presumptively reasonable period of time for the pertinent type of application, pursuant to paragraph (c) of this section; plus

(2) The number of days of the tolling period, if any, pursuant to paragraph (d) of this section.

(c) *Presumptively reasonable periods of time*—(1) *Review periods for individual applications.* The following are the presumptively reasonable periods of time for action on applications seeking authorization for deployments in the categories set forth in paragraphs (c)(1)(i) through (iv) of this section:

(i) Review of an application to collocate a Small Wireless Facility using an existing structure: 60 days.

(ii) Review of an application to collocate a facility other than a Small Wireless Facility using an existing structure: 90 days.

(iii) Review of an application to deploy a Small Wireless Facility using a new structure: 90 days.

(iv) Review of an application to deploy a facility other than a Small Wireless Facility using a new structure: 150 days.

(2) *Batching.* (i) If a single application seeks authorization for multiple deployments, all of which fall within a category set forth in either paragraph (c)(1)(i) or (iii) of this section, then the presumptively reasonable period of time for the application as a whole is equal to that for a single deployment within that category.

(ii) If a single application seeks authorization for multiple deployments, the components of which are a mix of deployments that fall within paragraph (c)(1)(i) of this section and deployments that fall within paragraph (c)(1)(iii) of this section, then the presumptively reasonable period of time for the application as a whole is 90 days.

(iii) Siting authorities may not refuse to accept applications under paragraphs (c)(2)(i) and (ii) of this section.

(d) *Tolling period.* Unless a written agreement between the applicant and the siting authority provides otherwise, the tolling period for an application (if any) is as set forth in paragraphs (d)(1) through (3) of this section.

(1) For an initial application to deploy Small Wireless Facilities, if the siting authority notifies the applicant on or before the 10th day after submission that the application is materially incomplete, and clearly and specifically identifies the missing documents or information and the specific rule or regulation creating the

obligation to submit such documents or information, the shot clock date calculation shall restart at zero on the date on which the applicant submits all the documents and information identified by the siting authority to render the application complete.

(2) For all other initial applications, the tolling period shall be the number of days from—

(i) The day after the date when the siting authority notifies the applicant in writing that the application is materially incomplete and clearly and specifically identifies the missing documents or information that the applicant must submit to render the application complete and the specific rule or regulation creating this obligation; until

(ii) The date when the applicant submits all the documents and information identified by the siting authority to render the application complete;

(iii) But only if the notice pursuant to paragraph (d)(2)(i) of this section is effectuated on or before the 30th day after the date when the application was submitted; or

(3) For resubmitted applications following a notice of deficiency, the tolling period shall be the number of days from—

(i) The day after the date when the siting authority notifies the applicant in writing that the applicant's supplemental submission was not sufficient to render the application complete and clearly and specifically identifies the missing documents or information that need to be submitted based on the siting authority's original request under paragraph (d)(1) or (2) of this section; until

(ii) The date when the applicant submits all the documents and information identified by the siting authority to render the application complete;

(iii) But only if the notice pursuant to paragraph (d)(3)(i) of this section is effectuated on or before the 10th day after the date when the applicant makes a supplemental submission in response to the siting authority's request under paragraph (d)(1) or (2) of this section.

(e) *Shot clock date.* The shot clock date for a siting application is determined by counting forward, beginning on the day after the date when the application was submitted, by the number of calendar days of the shot clock period identified pursuant to paragraph (b) of this section and including any pre-application period asserted by the siting authority; *provided,* that if the date calculated in this manner is a "holiday" as defined in §1.4(e)(1) or a legal holiday within the relevant State or local jurisdiction, the shot clock date is the next business day after such date. The term "business day" means any day as defined in §1.4(e)(2) and any day that is not a legal holiday as defined by the State or local jurisdiction

## Appendix B – Code of Federal Regulations (C.F.R.) Cited Throughout Document

**47 C.F.R. Section 1.1307**

**§1.1307 Actions that may have a significant environmental effect, for which Environmental Assessments (EAs) must be prepared.**

Link to an amendment published at 85 FR 18142, Apr. 1, 2020.

Link to a correction of the above amendment published at 85 FR 33578, June 2, 2020.

(a) Commission actions with respect to the following types of facilities may significantly affect the environment and thus require the preparation of EAs by the applicant (see §§1.1308 and 1.1311) and may require further Commission environmental processing (*see* §§1.1314, 1.1315 and 1.1317):

(1) Facilities that are to be located in an officially designated wilderness area.

(2) Facilities that are to be located in an officially designated wildlife preserve.

(3) Facilities that: (i) May affect listed threatened or endangered species or designated critical habitats; or (ii) are likely to jeopardize the continued existence of any proposed endangered or threatened species or likely to result in the destruction or adverse modification of proposed critical habitats, as determined by the Secretary of the Interior pursuant to the Endangered Species Act of 1973.

NOTE: The list of endangered and threatened species is contained in 50 CFR 17.11, 17.22, 222.23(a) and 227.4. The list of designated critical habitats is contained in 50 CFR 17.95, 17.96 and part 226. To ascertain the status of proposed species and habitats, inquiries may be directed to the Regional Director of the Fish and Wildlife Service, Department of the Interior.

(4) Facilities that may affect districts, sites, buildings, structures or objects, significant in American history, architecture, archeology, engineering or culture, that are listed, or are eligible for listing, in the National Register of Historic Places (*see* 54 U.S.C. 300308; 36 CFR parts 60 and 800), and that are subject to review pursuant to section 1.1320 and have been determined through that review process to have adverse effects on identified historic properties.

(5) Facilities that may affect Indian religious sites.

(6) Facilities to be located in floodplains, if the facilities will not be placed at least one foot above the base flood elevation of the floodplain.

(7) Facilities whose construction will involve significant change in surface features (e.g., wetland fill, deforestation or water diversion). (In the case of wetlands on Federal property, *see* Executive Order 11990.)

(8) Antenna towers and/or supporting structures that are to be equipped with high intensity white lights which are to be located in residential neighborhoods, as defined by the applicable zoning law.

(b) In addition to the actions listed in paragraph (a) of this section, Commission actions granting construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities, require the preparation of an Environmental Assessment (EA) if the particular facility, operation or transmitter would cause human exposure to levels of radiofrequency radiation in excess of the limits in §§1.1310 and 2.1093 of this chapter. Applications to the Commission for construction permits, licenses to transmit or renewals thereof, equipment authorizations or modifications in existing facilities must

contain a statement confirming compliance with the limits unless the facility, operation, or transmitter is categorically excluded, as discussed below. Technical information showing the basis for this statement must be submitted to the Commission upon request. Such compliance statements may be omitted from license applications for transceivers subject to the certification requirement in §25.129 of this chapter.

(1) The appropriate exposure limits in §§1.1310 and 2.1093 of this chapter are generally applicable to all facilities, operations and transmitters regulated by the Commission. However, a determination of compliance with the exposure limits in §1.1310 or §2.1093 of this chapter (routine environmental evaluation), and preparation of an EA if the limits are exceeded, is necessary only for facilities, operations and transmitters that fall into the categories listed in table 1, or those specified in paragraph (b)(2) of this section. All other facilities, operations and transmitters are categorically excluded from making such studies or preparing an EA, except as indicated in paragraphs (c) and (d) of this section. For purposes of table 1, *building-mounted antennas* means antennas mounted in or on a building structure that is occupied as a workplace or residence. The term *power* in column 2 of table 1 refers to total operating power of the transmitting operation in question in terms of effective radiated power (ERP), equivalent isotropically radiated power (EIRP), or peak envelope power (PEP), as defined in §2.1 of this chapter. For the case of the Cellular Radiotelephone Service, subpart H of part 22 of this chapter; the Personal Communications Service, part 24 of this chapter and the Specialized Mobile Radio Service, part 90 of this chapter, the phrase *total power of all channels* in column 2 of table 1 means the sum of the ERP or EIRP of all co-located simultaneously operating transmitters owned and operated by a single licensee. When applying the criteria of table 1, radiation in all directions should be considered. For the case of transmitting facilities using sectorized transmitting antennas, applicants and licensees should apply the criteria to all transmitting channels in a given sector, noting that for a highly directional antenna there is relatively little contribution to ERP or EIRP summation for other directions.

**TABLE 1—TRANSMITTERS, FACILITIES AND OPERATIONS SUBJECT TO ROUTINE ENVIRONMENTAL EVALUATION**

| Service (title 47 CFR rule part) | Evaluation required if: |
|---|---|
| Experimental Radio Services (part 5) | Power >100 W ERP (164 W EIRP). |
| Commercial Mobile Radio Services (part 20) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1000 W ERP (1640 W EIRP). Building-mounted antennas: power >1000 W ERP (1640 W EIRP). |
| | Consumer Signal Booster equipment grantees under the Commercial Mobile Radio Services provisions in part 20 are required to attach a label to Fixed Consumer Booster antennas that: |
| | (1) Provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transmitting antennas; and |
| | (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in §1.1310. |
| Paging and Radiotelephone Service (subpart E of part 22) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1000 W ERP (1640 W EIRP). |
| | Building-mounted antennas: power >1000 W ERP (1640 W EIRP). |
| Cellular Radiotelephone Service (subpart H of part 22) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and total power of all channels >1000 W ERP (1640 W EIRP). |

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| | Building-mounted antennas: total power of all channels >1000 W ERP (1640 W EIRP). |
| Personal Communications Services (part 24) | (1) Narrowband PCS (subpart D): |
| | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and total power of all channels >1000 W ERP (1640 W EIRP). |
| | Building-mounted antennas: total power of all channels >1000 W ERP (1640 W EIRP). |
| | (2) Broadband PCS (subpart E): |
| | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and total power of all channels >2000 W ERP (3280 W EIRP). |
| | Building-mounted antennas: total power of all channels >2000 W ERP (3280 W EIRP). |
| Satellite Communications Services (part 25) | All included. |
| | In addition, for NGSO subscriber equipment, licensees are required to attach a label to subscriber transceiver antennas that: |
| | (1) provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and |
| | (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in §1.1310 of this chapter. |
| Miscellaneous Wireless Communications Services (part 27 except subpart M) | (1) For the 1390-1392 MHz, 1392-1395 MHz, 1432-1435 MHz, 1670-1675 MHz, and 2385-2390 MHz bands: |
| | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and total power of all channels >2000 W ERP (3280 W EIRP). |
| | Building-mounted antennas: total power of all channels >2000 W ERP (3280 W EIRP). |
| | (2) For the 698-746 MHz, 746-764 MHz, 776-794 MHz, 2305-2320 MHz, and 2345-2360 MHz bands: |
| | Total power of all channels >1000 W ERP (1640 W EIRP). |
| Broadband Radio Service and Educational Broadband Service (subpart M of part 27) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1640 W EIRP. |
| | Building-mounted antennas: power >1640 W EIRP. |
| | BRS and EBS licensees are required to attach a label to subscriber transceiver or transverter antennas that: |

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| | (1) provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and |
| | (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in §1.1310. |
| Upper Microwave Flexible Use Service (part 30) | Non-building-mounted antennas: Height above ground level to lowest point of antenna <10 m and power >1640 W EIRP. |
| | Antennas are mounted on buildings. |
| Radio Broadcast Services (part 73) | All included. |
| Auxiliary and Special Broadcast and Other Program Distributional Services (part 74) | Subparts G and L: Power >100 W ERP. |
| Stations in the Maritime Services (part 80) | Ship earth stations only. |
| Private Land Mobile Radio Services Paging Operations (subpart P of part 90) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1000 W ERP (1640 W EIRP). |
| | Building-mounted antennas: power >1000 W ERP (1640 W EIRP). |
| Private Land Mobile Radio Services Specialized Mobile Radio (subpart S of part 90) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and total power of all channels >1000 W ERP (1640 W EIRP). |
| | Building-mounted antennas: Total power of all channels >1000 W ERP (1640 W EIRP). |
| 76-81 GHz Radar Service (part 95) | All included. |
| Amateur Radio Service (part 97) | Transmitter output power >levels specified in §97.13(c)(1) of this chapter. |
| Local Multipoint Distribution Service (subpart L of part 101) and 24 GHz (subpart G of part 101) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1640 W EIRP. |
| | Building-mounted antennas: power >1640 W EIRP. |
| | LMDS and 24 GHz Service licensees are required to attach a label to subscriber transceiver antennas that: |
| | (1) provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and |
| | (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in §1.1310. |
| 70/80/90 GHz Bands (subpart Q of part 101) | Non-building-mounted antennas: height above ground level to lowest point of antenna <10 m and power >1640 W EIRP. |

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|---|---|
| | Building-mounted antennas: power >1640 W EIRP. |
| | Licensees are required to attach a label to transceiver antennas that: |
| | (1) provides adequate notice regarding potential radiofrequency safety hazards, e.g., information regarding the safe minimum separation distance required between users and transceiver antennas; and |
| | (2) references the applicable FCC-adopted limits for radiofrequency exposure specified in §1.1310. |

(2)(i) Mobile and portable transmitting devices that operate in the Commercial Mobile Radio Services pursuant to part 20 of this chapter; the Cellular Radiotelephone Service pursuant to part 22 of this chapter; the Personal Communications Services (PCS) pursuant to part 24 of this chapter; the Satellite Communications Services pursuant to part 25 of this chapter; the Miscellaneous Wireless Communications Services pursuant to part 27 of this chapter; the Upper Microwave Flexible User Service pursuant to part 30 of this chapter; the Maritime Services (ship earth stations only) pursuant to part 80 of this chapter; the Specialized Mobile Radio Service, the 4.9 GHz Band Service, and the 3650 MHz Wireless Broadband Service pursuant to part 90 of this chapter; the Wireless Medical Telemetry Service (WMTS), the Medical Device Radiocommunication Service (MedRadio), and the 76-81 GHz Band Radar Service pursuant to part 95 of this chapter; and the Citizens Broadband Radio Service pursuant to part 96 of this chapter are subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§2.1091 and 2.1093 of this chapter.

(ii) Unlicensed PCS, unlicensed NII, and millimeter-wave devices are also subject to routine environmental evaluation for RF exposure prior to equipment authorization or use, as specified in §§15.255(g), 15.257(g), 15.319(i), and 15.407(f) of this chapter.

(iii) Portable transmitting equipment for use in the Wireless Medical Telemetry Service (WMTS) is subject to routine environmental evaluation as specified in §§2.1093 and 95.2385 of this chapter.

(iv) Equipment authorized for use in the Medical Device Radiocommunication Service (MedRadio) as a medical implant device or body-worn transmitter (as defined in subpart I of part 95 of this chapter) is subject to routine environmental evaluation for RF exposure prior to equipment authorization, as specified in §§2.1093 and 95.2585 of this chapter by finite difference time domain (FDTD) computational modeling or laboratory measurement techniques. Where a showing is based on computational modeling, the Commission retains the discretion to request that supporting documentation and/or specific absorption rate (SAR) measurement data be submitted.

(v) All other mobile, portable, and unlicensed transmitting devices are categorically excluded from routine environmental evaluation for RF exposure under §§2.1091, 2.1093 of this chapter except as specified in paragraphs (c) and (d) of this section.

(3) In general, when the guidelines specified in §1.1310 are exceeded in an accessible area due to the emissions from multiple fixed transmitters, actions necessary to bring the area into compliance are the shared responsibility of all licensees whose transmitters produce, at the area in question, power density levels that exceed 5% of the power density exposure limit applicable to their particular transmitter or field strength levels that, when squared, exceed 5% of the square of the electric or magnetic field strength limit applicable to their particular transmitter. Owners of transmitter sites are expected to allow applicants and licensees to take reasonable steps to comply with the requirements contained in §1.1307(b) and, where feasible, should encourage co-location of transmitters and common solutions for controlling access to areas where the RF exposure limits contained in §1.1310 might be exceeded.

(i) Applicants for proposed (not otherwise excluded) transmitters, facilities or modifications that would cause non-compliance with the limits specified in §1.1310 at an accessible area previously in compliance must submit an EA if emissions from the applicant's transmitter or facility would result, at the area in question, in a power density that exceeds 5% of the power density exposure limit applicable to that transmitter or facility or in a field strength that, when squared, exceeds 5% of the square of the electric or magnetic field strength limit applicable to that transmitter or facility.

(ii) Renewal applicants whose (not otherwise excluded) transmitters or facilities contribute to the field strength or power density at an accessible area not in compliance with the limits specified in §1.1310 must submit an EA if emissions from the applicant's transmitter or facility results, at the area in question, in a power density that exceeds 5% of the power density exposure limit applicable to that transmitter or facility or in a field strength that, when squared, exceeds 5% of the square of the electric or magnetic field strength limit applicable to that transmitter of facility.

(c) If an interested person alleges that a particular action, otherwise categorically excluded, will have a significant environmental effect, the person shall submit to the Bureau responsible for processing that action a written petition setting forth in detail the reasons justifying or circumstances necessitating environmental consideration in the decision-making process. (*See* §1.1313). The Bureau shall review the petition and consider the environmental concerns that have been raised. If the Bureau determines that the action may have a significant environmental impact, the Bureau will require the applicant to prepare an EA (*see* §§1.1308 and 1.1311), which will serve as the basis for the determination to proceed with or terminate environmental processing.

(d) If the Bureau responsible for processing a particular action, otherwise categorically excluded, determines that the proposal may have a significant environmental impact, the Bureau, on its own motion, shall require the applicant to submit an EA. The Bureau will review and consider the EA as in paragraph (c) of this section.

NOTE TO PARAGRAPH (d): Pending a final determination as to what, if any, permanent measures should be adopted specifically for the protection of migratory birds, the Bureau shall require an Environmental Assessment for an otherwise categorically excluded action involving a new or existing antenna structure, for which an antenna structure registration application (FCC Form 854) is required under part 17 of this chapter, if the proposed antenna structure will be over 450 feet in height above ground level (AGL) and involves either:

1. Construction of a new antenna structure;

2. Modification or replacement of an existing antenna structure involving a substantial increase in size as defined in paragraph I(C)(1)(3) of Appendix B to part 1 of this chapter; or

3. Addition of lighting or adoption of a less preferred lighting style as defined in §17.4(c)(1)(iii) of this chapter. The Bureau shall consider whether to require an EA for other antenna structures subject to §17.4(c) of this chapter in accordance with §17.4(c)(8) of this chapter. An Environmental Assessment required pursuant to this note will be subject to the same procedures that apply to any Environmental Assessment required for a proposed tower or modification of an existing tower for which an antenna structure registration application (FCC Form 854) is required, as set forth in §17.4(c) of this chapter.

(e) No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the regulations contained in this chapter concerning the environmental effects of such emissions. For purposes of this paragraph:

(1) The term *personal wireless service* means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(2) The term *personal wireless service facilities* means facilities for the provision of personal wireless services;

(3) The term *unlicensed wireless services* means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services; and

(4) The term *direct-to-home satellite services* means the distribution or broadcasting of programming or services by satellite directly to the subscriber's premises without the use of ground receiving or distribution equipment, except at the subscriber's premises or in the uplink process to the satellite.

[51 FR 15000, Apr. 22, 1986]

EDITORIAL NOTE: For FEDERAL REGISTER citations affecting §1.1307, see the List of CFR Sections Affected, which appears in the Finding Aids section of the printed volume and at *www.govinfo.gov.*

EFFECTIVE DATE NOTE: At 85 FR 18142, Apr. 1, 2020, §1.1307 was amended by revising paragraph (b). At 85 FR 33578, June 2, 2020, this revision was delayed indefinitely.

**47 C.F.R. Section 1.1320**

**§1.1320 Review of Commission undertakings that may affect historic properties.**

(a) *Review of Commission undertakings.* Any Commission undertaking that has the potential to cause effects on historic properties, unless excluded from review pursuant to paragraph (b) of this section, shall be subject to review under section 106 of the National Historic Preservation Act, as amended, 54 U.S.C. 306108, by applying—

(1) The procedures set forth in regulations of the Advisory Council on Historic Preservation, 36 CFR800.3-800.13, or

(2) If applicable, a program alternative established pursuant to 36 CFR 800.14, including but not limited to the following:

(i) The Nationwide Programmatic Agreement for the Collocation of Wireless Antennas, as amended, Appendix B of this part.

(ii) The Nationwide Programmatic Agreement for Review of Effects on Historic Properties for Certain Undertakings, Appendix C of this part.

(iii) The Program Comment to Tailor the Federal Communications Commission's Section 106 Review for Undertakings Involving the Construction of Positive Train Control Wayside Poles and Infrastructure, 79 FR 30861 (May 29, 2014).

(b) *Exclusions.* The following categories of undertakings are excluded from review under this section:

(1) *Projects reviewed by other agencies.* Undertakings for which an agency other than the Commission is the lead Federal agency pursuant to 36 CFR 800.2(a)(2).

(2) *Projects subject to program alternatives.* Undertakings excluded from review under a program alternative established pursuant to 36 CFR 800.14, including those listed in paragraph (a)(2) of this section.

(3) *Replacement utility poles.* Construction of a replacement for an existing structure where all the following criteria are satisfied:

(i) The original structure—

(A) Is a pole that can hold utility, communications, or related transmission lines;

(B) Was not originally erected for the sole or primary purpose of supporting antennas that operate pursuant to the Commission's spectrum license or authorization; and

(C) Is not itself a historic property.

(ii) The replacement pole—

(A) Is located no more than 10 feet away from the original pole, based on the distance between the centerpoint of the replacement pole and the centerpoint of the original pole; *provided* that construction of the replacement pole in place of the original pole entails no new ground disturbance (either laterally or in depth) outside previously disturbed areas, including disturbance associated with temporary support of utility, communications, or related transmission lines. For purposes of this paragraph, "ground disturbance" means any activity that moves, compacts, alters, displaces, or penetrates the ground surface of previously undisturbed soils;

(B) Has a height that does not exceed the height of the original pole by more than 5 feet or 10 percent of the height of the original pole, whichever is greater; and

(C) Has an appearance consistent with the quality and appearance of the original pole.

(4) *Collocations on buildings and other non-tower structures.* 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:

(i) There is an existing antenna on the building or structure;

(ii) One of the following criteria is met:

(A) *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;

(B) *Visible Replacement Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that

(1) It is a replacement for a pre-existing antenna,

(2) The new antenna will be located in the same vicinity as the pre-existing antenna,

(3) The new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna,

(4) The new antenna is not more than 3 feet larger in height or width (including all protuberances) than the pre-existing antenna, and

(5) No new equipment cabinets are visible from the adjacent streets or surrounding public spaces; or

(C) *Other Visible Antennas.* The new antenna is visible from adjacent streets or surrounding public spaces, provided that

(1) It is located in the same vicinity as a pre-existing antenna,

(2) The new antenna will be visible only from adjacent streets and surrounding public spaces that also afford views of the pre-existing antenna,

(3) The pre-existing antenna was not deployed pursuant to the exclusion in this paragraph,

(4) The new antenna is not more than three feet larger in height or width (including all protuberances) than the pre-existing antenna, and

(5) No new equipment cabinets are visible from the adjacent streets or surrounding public spaces;

(iii) 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;

(iv) The deployment of the new antenna involves no new ground disturbance; and

(v) The deployment would otherwise require the preparation of an Environmental Assessment under 1.1304(a)(4) solely because of the age of the structure.

NOTE 1 TO PARAGRAPH (b)(4): 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. 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. 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.

(c) *Responsibilities of applicants.* Applicants seeking Commission authorization for construction or modification of towers, collocation of antennas, or other undertakings shall take the steps mandated by, and comply with the requirements set forth in, Appendix C of this part, sections III-X, or any other applicable program alternative.

(d) *Definitions.* For purposes of this section, the following definitions apply:

*Antenna* means an apparatus designed for the purpose of emitting radiofrequency (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. For most services, an antenna will be mounted on or in, and is distinct from, a supporting structure such as a tower, structure or building. However, in the case of AM broadcast stations, the entire tower or group of towers constitutes the antenna for that station. For purposes of this section, the term antenna does not include unintentional radiators, mobile stations, or devices authorized under part 15 of this title.

*Applicant* means a Commission licensee, permittee, or registration holder, or an applicant or prospective applicant for a wireless or broadcast license, authorization or antenna structure registration, and the duly authorized agents, employees, and contractors of any such person or entity.

*Collocation* means 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, whether or not there is an existing antenna on the structure.

*Tower* means any 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.

*Undertaking* means a project, activity, or program funded in whole or in part under the direct or indirect jurisdiction of the Commission, including those requiring a Commission permit, license or approval. Maintenance and servicing of towers, antennas, and associated equipment are not deemed to be undertakings subject to review under this section.

[82 FR 58758, Dec. 14, 2017]

**47 C.F.R. Section 1.6002**

**§1.6002 Definitions.**

Terms not specifically defined in this section or elsewhere in this subpart have the meanings defined in this part and the Communications Act of 1934, 47 U.S.C. 151 *et seq.* Terms used in this subpart have the following meanings:

(a) *Action* or *to act* on a siting application means a siting authority's grant of a siting application or issuance of a written decision denying a siting application.

(b) *Antenna,* consistent with §1.1320(d), means an apparatus designed for the purpose of emitting radiofrequency (RF) radiation, to be operated or operating from a fixed location pursuant to Commission authorization, for the provision of personal wireless service and any commingled information services. For purposes of this definition, the term antenna does not include an unintentional radiator, mobile station, or device authorized under part 15 of this chapter.

(c) *Antenna equipment,* consistent with §1.1320(d), means equipment, switches, wiring, cabling, power sources, shelters or cabinets associated with an antenna, located at the same fixed location as the antenna, and, when collocated on a structure, is mounted or installed at the same time as such antenna.

(d) *Antenna facility* means an antenna and associated antenna equipment.

(e) *Applicant* means a person or entity that submits a siting application and the agents, employees, and contractors of such person or entity.

(f) *Authorization* means any approval that a siting authority must issue under applicable law prior to the deployment of personal wireless service facilities, including, but not limited to, zoning approval and building permit.

(g) *Collocation,* consistent with §1.1320(d) and the Nationwide Programmatic Agreement (NPA) for the Collocation of Wireless Antennas, appendix B of this part, section I.B, means—

(1) Mounting or installing an antenna facility on a pre-existing structure; and/or

(2) Modifying a structure for the purpose of mounting or installing an antenna facility on that structure.

(3) The definition of "collocation" in §1.6100(b)(2) applies to the term as used in thatsection.

(h) *Deployment* means placement, construction, or modification of a personal wireless service facility.

(i) *Facility* or *personal wireless service facility* means an antenna facility or a structure that is used for the provision of personal wireless service, whether such service is provided on a stand-alone basis or commingled with other wireless communications services.

(j) *Siting application* or *application* means a written submission to a siting authority requesting authorization for the deployment of a personal wireless service facility at a specified location.

(k) *Siting authority* means a State government, local government, or instrumentality of a State government or local government, including any official or organizational unit thereof, whose authorization is necessary prior to the deployment of personal wireless service facilities.

(l) *Small wireless facilities* are facilities that meet each of the following conditions:

(1) The facilities—

(i) Are mounted on structures 50 feet or less in height including their antennas as defined in §1.1320(d); or

(ii) Are mounted on structures no more than 10 percent taller than other adjacent structures; or

(iii) Do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater;

(2) Each antenna associated with the deployment, excluding associated antenna equipment (as defined in the definition of antenna in §1.1320(d)), is no more than three cubic feet in volume;

(3) All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;

(4) The facilities do not require antenna structure registration under part 17 of this chapter;

(5) The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and

(6) The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in §1.1307(b).

(m) *Structure* means a pole, tower, base station, or other building, whether or not it has an existing antenna facility, that is used or to be used for the provision of personal wireless service (whether on its own or comingled with other types of services).

[83 FR 51884, Oct. 15, 2018, as amended at 84 FR 59567, Nov. 5, 2019]

# City of Newport

**Community Development Department**

# Memorandum

To: Planning Commission / Commission Advisory Committee

From: Derrick I. Tokos, AICP, Community Development Director

Date: October 26, 2020

Re: Transportation System Plan Fall Virtual Events

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Enclosed is a flyer advertising two upcoming Transportation System Planning virtual events that the City will be holding. The drop-in Open House will run for 4-weeks and will be structured such that people can participate as much or little as they want to, when they have time. The interactive virtual workshop will be a one-time event on November 21st where the consulting team will be available for back and forth dialogue. **The interactive virtual workshop is something that you will need to register for, and a link is included on the flyer.** Please fee free to share the flyer with anybody you think might be interested. Also, I need to know if you are planning to participate in the interactive workshop so that we can properly notice the meeting in the event there is a quorum.

The Open House and Workshop will cover the same topics, including an introduction to the project, and opportunity for participants to review key assumptions (i.e. existing issues, future needs, etc.). An online preference survey is being developed, along with a number of potential solutions. They are being organized by topic area and geography so participants can zero in on areas or transportation needs that they are most interested in.

A hard copy survey will be mailed to target populations that may lack access to online resources or are uncomfortable with technology. This will include mailings to the Council of Government's "Meals on Wheels" customers and 60+ Newport Recreation Center clients. We are also coordinating with Centro de Ayuda, Newport, to push the surveys out to households they serve. The survey will be in English and Spanish.

Here are some of the key upcoming fall outreach dates:

- Mail Flyer with Utility Billing: 10/23
- Citywide Postcard Mailing: 11/6
- Hardcopy Survey to Target Households: 11/11
- Online Open House: 11/17 - 12/13
- Virtual Work Session: 11/21

In addition to the mailings, we will advertise the events via press releases, school district email distribution lists, outreach to interviewed stakeholders, newspaper, social media, and radio.

Let me know if you have any questions.

Attachments
Flyer for Virtual Outreach Event No. 1


# Transportation System Plan
## Online Open House and Virtual Workshop

**Fall 2020**

The City of Newport and the Oregon Department of Transportation are updating the Transportation System Plan (TSP). This is a long-range plan that all future transportation improvements in the city are based on. The plan will guide how we develop and invest in our transportation system to meet the current and future needs of Newport and surrounding areas. It helps determine which projects, policies and programs may receive funding.

Share your input on (and learn more about) the future of Newport's transportation system at these two virtual opportunities.

**11/16 – 12/13 Drop-in Online Open House**
**www.NewportTSP.org**

**Saturday, 11/21 10 am Interactive Virtual Workshop, register at**
**https://tinyurl.com/Virtual1121**

### How your input will help

Newport's TSP needs to be updated to better reflect the current conditions and growing needs of the community.

Your input through this planning process will inform how future dollars should be spent.

**For more information, please visit: www.NewportTSP.org**

*For ADA Title II or Civil Rights Title VI accommodations, translation/interpretation services or for additional information call TTY (800) 735-2900 or use the statewide Oregon Relay Service: 7-1-1.*

NEWPORT
OREGON

**CONTACT**
**Derrick Tokos AICP, City of Newport**
*Community Development Director*
**541-574-0626 | d.tokos@newportoregon.gov**

Oregon Department of Transportation


# Actualización del Plan de Transporte
## Casa Abierta en línea y Taller Virtual

**OTOÑO 2020**

La ciudad de Newport y el Departamento de Transporte de Oregón están actualizando el Plan del Sistema de Transporte (TSP). Este es un plan de largo alcance en el que se basan todas las mejoras futuras en el transporte de la ciudad. El plan guiará cómo desarrollamos e invertimos en nuestro Sistema de transporte para satisfacer las necesidades actuales y futuras de Newport y sus alrededores. También ayuda a determinar qué proyectos, políticas y programas pueden recibir financiamiento.

Comparta su opinión (y aprenda más) sobre el futuro del sistema de transporte de Newport en estas dos oportunidades virtuales.

**16/11 - 13/12 Casa Abierta en línea sin cita previa**
**www.NewportTSP.org**

**Sábado 21/11 Taller 10 am Virtual Interactivo**
**registrarse en**
**https://tinyurl.com/Virtual1121**

### Cómo ayudará su opinion

El TSP de Newport necesita ser actualizado para reflejar major las condiciones actuales y las crecientes necesidades de la comunidad.

Su opinión a través de este proceso de planificación informará cómo se debe gastar el dinero futuro.

**Para más información, visite: www.NewportTSP.org**

*Para adaptaciones de ADA Title II o Civil Rights Title VI, servicios de traducción/interpretación o información adicional llame a TTY (800) 735-2900 o utilice el Servicio de Retransmisión de Oregon en todo el estado: 7-1-1.*

**CONTACTO**
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*Director de Desarrollo Comunitario*
**541-574-0626 | d.tokos@newportoregon.gov**

# Tentative Planning Commission Work Program

*(Scheduling and timing of agenda items is subject to change)*

**October 12, 2020** Work Session

- City of Newport COVID-19 Virtual, Hybrid, and In-Person Meeting Policy (Discussion Item)
- File 5-Z-20, Review Initial Draft of NMC Chapter 9.25, 5G Small Wireless Facility Ordinance
- DLCD Regional Housing Needs Analysis Report and Outreach (Informational)

**October 15, 2020** Special Session

- File 2-MISC-20, Appeal of Director Decision Confirming the Proportionality of Public Improvements required with Development of 1515, 1525 and 1535 NW Spring Street (Continued to 11/9/20)

**October 26, 2020** Work Session

- File 5-Z-20, Second Review of NMC 9.25, 5G Small Wireless Facility Ordinance
- Review Initial Draft of Small Wireless Facility Design Standards

**November 9, 2020** Work Session

- File 5-Z-20, Initial Discussion of Adjustments to Large Wireless and Other Telecommunications Land Use Standards. Will include Provisions for Small Wireless Facilities Outside of the Right-of-Way
- Second Review of Small Wireless Facility Design Standards

**November 9, 2020** Regular Session

- Continued Hearing File 2-MISC-20, Appeal of Director Decision Confirming the Proportionality of Public Improvements required with Development of 1515, 1525 and 1535 NW Spring Street
- Recommendation to City Council on NMC Chapter 9.25, 5G Small Wireless Ordinance/Standards

**November 23, 2020** Work Session

- Initial Review of Land Use Code Amendments to Implement HB 2001 Duplex Standards. This is being Merged with Related Amendments for Tiny Homes and MFDs on Individual Lots
- File 5-Z-20 Second Review of Adjustments to Large Wireless and Other Telecommunications Land Use Standards. Will include Provisions for Small Wireless Facilities Outside of the Right-of-Way

**November 23, 2020** Regular Session

- File 1-SV-20, Vacation of a portion of SW 2nd Street between SW Angle and US 101 (placeholder)
- File 7-NCU-20, Expand Non-conforming 14-unit Mobile Home Park at 4263 S Coast Hwy (placeholder)
- File 5-Z-20, Initiate legislative amendments NMC Chapter 14 for Large Wireless and Other Telecommunications Land Use Standards, including provisions for small wireless outside ROWs

**December 14, 2020** Work Session

- Second Review of Land Use Code Amendments to Implement HB 2001 Duplex Standards. This is being Merged with Related Amendments for Tiny Homes and MFDs on Individual Lots

File 1-CP-17, Review Results from Fall TSP Outreach, Preferred Alternatives, Next Steps

**December 14, 2020** Regular Session

- File 1-UGB-20/1-CP-20, Amending the Urban Growth Boundary adding 39.8 ac at NE Harney and 36th and Removing 71.39 ac from the Wolf Tree Destination Resort Site
- Initiate Legislative Amendments to NMC Chapter 14 Related to HB 2001 Duplex Standards, Tiny Home, and MFD Revisions

**December 28, 2020** Work Session

- Initial Review of Draft Revisions to Transportation Standards in NMC Chapters 13 and 14 Related to Transportation System plan Update

**December 28, 2020** Regular Session

- TBD