



# Frequently Asked Questions: Design Standards for Small Wireless Facilities (SWF) on Poles

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## Why is the City adopting design standards for wireless technology?

Wireless technology deployed in our City should safely and effectively meets the needs of residents, businesses and visitors. The wireless industry is increasing the capacity of its networks to meet the growing demand placed on current mobile networks. The network expansion includes placing wireless antennas with smaller coverage areas than traditional cell towers. Poles located in the public street right-of-way are prime locations for this wireless equipment and the number of pole attachment applications has greatly increased in volume and is expected to remain high for the next few years. These updated design standards for wireless equipment are part of process improvements to help City staff more effectively review the high volume of pole attachment applications and balance the aesthetics of wireless deployments with the technical necessities of equipment placement.

## Why the need for more wireless antennas?

Seattle residents, businesses, and visitors have an expectation of access to fast, reliable mobile technology. Mobile data projections show U.S. carriers’ 4G networks will run out of capacity starting in 2022. Wireless antennas with smaller coverage areas (“small cells”) are being deployed to give more network capacity to places with a lot of mobile traffic. This densification of 4G networks will improve the cellular experience for any customer on a carrier’s network, without having to upgrade a phone or buy a different service plan. This benefits all residents, especially those who rely on mobile phones for internet connectivity, which data tells us is often community members of lower income. The development of the next generation of mobile broadband networks (5<sup>th</sup> Generation or “5G”) also includes the use of many low-powered wireless antennas to enhance connectivity capacity and speeds.



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### Who is subject to the City's design standards for small cell facilities?

Any private company seeking to place wireless equipment on poles in the public street right-of-way.

### Where can small cells be installed?

The City does not direct the placement of wireless industry deployments. Carriers determine their network engineering needs and where to place equipment to meet current and projected capacity demands.

### Are small cells safe?

The Federal Communications Commission (FCC), in consultation with numerous other federal agencies, including the Environmental Protection Agency, the Food and Drug Administration, and the Occupational Safety and Health Administration, developed the safety standards that govern radio frequency (RF) emissions for small cells. The FCC notes that its standards *"incorporate prudent margins of safety"* and that *"radio frequency emissions from antennas used for cellular and PCS [personal communications services] transmissions result in exposure levels on the ground that are typically thousands of times below safety limits."* Any wireless technologies deployed in the City are required to meet the FCC's radio frequency (RF) emissions standards.

The FCC provides information about the safety of RF emissions from wireless telecommunications facilities on its website [www.fcc.gov](http://www.fcc.gov) (specifically, [www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/fag/rf-safety](http://www.fcc.gov/engineering-technology/electromagnetic-compatibility-division/radio-frequency-safety/fag/rf-safety)). You can contact the FCC directly if you have concerns about RF emission standards or the safety of new wireless networks.

**Federal Communications Commission: 1-888-225-5322**

### Can residents have a say in the placement of wireless antennas?

The City doesn't direct locations for wireless industry deployments. Carriers request locations to place their equipment that will meet their system capacity demands. The City reviews pole attachment applications to ensure an installation meets all engineering and safety standards, and that it will meet the design standards. Other than ensuring all standards and codes are met for each proposed placement, cities, counties and states are specifically prohibited by federal law (the Telecommunications Act of 1996) from taking any action that would prohibit (or have the effect of prohibiting) the deployment of wireless systems.

If you have questions about wireless equipment in your neighborhood, you can contact the City's Wireless Telecommunications Line at (206) 727-8700 or email [telecom.wireless@seattle.gov](mailto:telecom.wireless@seattle.gov)

### Is a City permit required for wireless pole attachments?

Yes. Seattle City Light issues a permit for each installation of wireless facilities on poles the utility owns (for example, wood and metal utility poles, light poles). The Seattle Department of Transportation also issues a permit for the installation of wireless facilities in the public right-of-way.



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### Can the City deny the aesthetic appearance of wireless attachments?

Yes, the City can deny applications for wireless attachment that do not meet locally approved design standards. However, federal law (the Telecommunications Act of 1996), administered by the Federal Communications Commission (FCC), governs the telecommunications industry and specifically prohibits cities, counties or states from enacting any moratorium or prohibition on the installation of small cell wireless equipment.

### What is the notification process for a wireless attachment on a pole?

For attachments to utility and light poles, **Seattle City Light** requires carriers to mail a project notification to residents and businesses within 300 feet of the project a minimum of 5 days prior to installation. The notice includes information on the equipment attachments, the project timing, and contact information for residents to submit questions related to the construction. A sample public notification form about construction of small cell facilities is [here](#).

The installation of wireless equipment in the public street right-of-way also requires a Street Use permit from the **Seattle Department of Transportation** (SDOT). If a mode of travel (e.g. pedestrian, bicycle, or vehicle closures) in the public street right-of-way will be disrupted by construction there are notification requirements. The requirements vary by project type and duration and detail is available in SDOT's Client Assistance Memo 2217: [Notification Requirements For Street Use Permittees](#).

### Can I protest the approval of a wireless attachment permit?

There is no City appeal process related to wireless attachment permit approval. Under federal law, the City must allow telecommunication carriers to attach wireless facilities to poles. Once a carrier's attachment application is found to meet all engineering, safety, and design standard requirements, the City cannot deny a permit for the placement of wireless attachments.

### Can I request the relocation of a small cell site?

While the City can't deny a permit to place small cell equipment on a pole based on health concerns or aesthetic impacts beyond pole design requirements, residents can contact the mobile carrier to request reconsideration of the site location. For help determining which carrier(s) have equipment on a specific pole, please provide the pole number to the City's Wireless Telecommunications Line at (206) 727-8700 or email [telecom.wireless@seattle.gov](mailto:telecom.wireless@seattle.gov). Staff will identify the appropriate carrier for you to contact regarding location concerns.

### I have other questions on wireless facilities in the City

The City of Seattle Information Technology Department has set up a direct line to help address any additional questions you may have:

*City of Seattle Wireless Telecommunications Line: 206-727-8700*

Alternatively, you can contact the Federal Communications Commission directly if you have concerns about federal authority over wireless network deployments, RF emission standards, or new 5G networks:

*Federal Communications Commission: 1-888-225-5322*