



PUBLIC WORKS DEPARTMENT

CITY HALL
10300 TORRE AVENUE • CUPERTINO, CA 95014-3255
TELEPHONE: (408) 777-3354 • FAX: (408) 777-3333
CUPERTINO.ORG

CITY COUNCIL STAFF REPORT

Meeting: October 7, 2025

Subject

Introduce amendments to Cupertino Municipal Code, adding Title 14, Chapter 14.30 Small Wireless Facilities In Public Rights-Of-Way, pertaining to regulation of wireless facilities within City streets.

Recommended Action

1. Conduct the first reading of Ordinance 25-____ “An Ordinance of the City Council of the City of Cupertino adding City Code Title 14 Chapter 14.30 Small Wireless Facilities In Public Rights-Of-Way.”
2. Adopt Resolution No. 25-___ approving the “Regulations for Construction, Operation, and Maintenance of Small Wireless Facilities in the Public Right of Way.”
3. Find that the proposed actions are exempt from CEQA.

Executive Summary

Staff presented a draft ordinance and regulations to City Council on December 6, 2022, and received feedback regarding further refinement to finalize the documents. This information has been incorporated into the proposed ordinance and regulations. The ordinance and regulations strengthen the City’s permitting process for small wireless facilities while complying with federal regulations and state law. The updated ordinance and regulations:

- 1) Establish standards for more- and less-preferred locations for small wireless facilities.
- 2) Include procedures for RF exposure verification and authorizes the Public Works Director to obtain a peer review of RF exposure analyses.
- 3) Amend the timing of certain pre-application notification activities to ensure consistency with shot clock requirements.
- 4) Grant applicants and residents or owners within 300 feet of a proposed wireless facility the right to appeal the Public Works Director’s decision regarding a permit application to the City Manager.
- 5) Authorize the Public Work’s Director to revoke or modify permits based on changes in the state or federal law that expand the City’s authority.

- 6) Work to create a 1,000-foot separation radius between small wireless facilities from the same carrier.

Background

Small cell wireless communication facilities, often mistakenly referred to as "5G", are a type of wireless infrastructure. Traditionally, wireless facilities were large antennas placed high above the ground that service a wide area (referred to as "macrocells"). Small wireless facilities provide spot coverage to a relatively small area, and therefore a denser network of small wireless facilities has generally been needed to enhance wireless capacity. Small wireless facilities are typically installed on existing infrastructure such as streetlights.

However, because small wireless facilities are often installed in close proximity to homes and businesses, local jurisdictions have developed targeted regulations to aid in addressing the impacts of the facilities.

The City has held seven City Council study sessions on the subject of small wireless facilities. These study sessions have covered many matters including legal issues, aesthetic concerns, permitting guidelines, noticing requirements, and siting preferences. Much of what was discussed at these meetings, including the federal and state laws governing the installation of these facilities, remains relevant. Links to videos of these meetings, as well as additional information on small cell facilities, can be found on the City's webpage here: <https://www.cupertino.org/our-city/departments/public-works/permitting-development-services/small-cell-information>.

At the City Council meeting on April 20, 2021, Council was presented with updated permitting guidelines for small cell wireless facilities in the public right of way. Council requested at this meeting that staff consider creating an ordinance to further support the permitting guidelines and to establish objective criteria for the siting of the facilities. Staff presented a draft ordinance and regulations to City Council on December 6, 2022, and received feedback regarding further refinement to finalize the documents. Staff has incorporated this input and has prepared an ordinance and regulations that strengthens the City's permitting process for small wireless facilities while complying with federal regulations and state law and incorporating recommendations from City Council.

Background on Relevant State and Federal Law and Regulations

Under state and federal law, wireless communications providers are given the right to install wireless facilities, including small wireless facilities, within the public right of way, subject to certain preserved local powers. Local authority to regulate small wireless facilities is limited under these same laws. In particular, the Federal Communications Commission (FCC) has established certain limits and regulations regarding the permitting of small wireless facilities. These limits are designed to facilitate rapid deployment of small wireless ("5G") cellular networks. These limits include generally:

- Time limits on the processing of small cell permit applications (Shot Clocks).

- Federal preemption of state or local regulations relating to the health effects of small wireless facilities.
- Federal preemption of any local regulation that “materially inhibits” the construction of small wireless facilities.

Local jurisdictions retain the ability to regulate small wireless facilities based on public safety and reasonable aesthetic concerns. To reduce the aesthetic impacts of small wireless facilities, a local government can set design standards such as requiring screening or shrouding of facilities and having equipment coloring match the pole. These design standards must be technically feasible and directed at addressing aesthetic harms and may not have the effect of prohibiting installations or preventing a carrier from improving the quality of their service.

Federal and state law restrict the City’s authority to regulate small wireless services. However, the City retains the authority to address aesthetic and public safety concerns arising from the installation of small wireless facilities, subject to the conditions discussed below.

- Regulation of Wireless Facilities May Be Based on Aesthetic and Public Safety Concerns

State and federal law and regulations, including the Federal Telecommunications Act (FTC) of 1996 and provisions of the California Government Code and Public Utilities Code, govern how local jurisdictions may regulate wireless facilities, including small wireless facilities installed in the public right of way. Local governments retain the authority to establish aesthetic conditions for land use, including the authority to regulate small wireless facilities’ design and placement, as long as placement regulations do not inhibit a carrier’s ability to enhance their services. They also have authority to manage the right of way to ensure public safety and to coordinate uses.

These powers enable local governments to enact regulations that would prevent small cell facilities from interfering with use of the right of way and to protect public safety by ensuring the poles on which small cells are mounted will securely bear their weight. To reduce the aesthetic impacts of small cell facilities, a local government can set design standards such as requiring screening of facilities and having equipment coloring match the pole. Under FCC regulations, local aesthetic requirements are not preempted if they are (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) published in advance.

- Regulation of Wireless Facilities Must Not Be Based on Health Concerns

Under federal law, a local government may not set standards for wireless facilities based on concern over Radio Frequency (RF) emissions from those facilities, beyond requiring that those facilities’ emissions meet the FCC’s established emission limits. RF emissions from small wireless facilities in Cupertino typically fall around 100 times below the FCC’s limits. So long as a small wireless facility complies with FCC

standards, the City may not establish location requirements, deny a permit application, or impose permit conditions for the facility based on concerns over its perceived health effects.

- Regulation Must Not Have the Effect of Prohibiting Wireless Service

Federal law also requires that local government regulation of wireless service not prohibit or have the effect of prohibiting the provision of personal wireless services. The FCC's September 2018 Order specified that "an effective prohibition occurs" when a regulation "materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service." It further specified that a local jurisdiction's regulation of wireless services can amount to an effective prohibition where it prevents a carrier from improving the quality of their service or from adding new technologies and services, not just where it prevents a carrier from filling gaps in service.

This means that a jurisdiction cannot deny a service provider's wireless facility application on the basis that the jurisdiction finds the provider's existing coverage or range of services adequate. Local governments also may not enact a blanket prohibition on installation of small wireless facilities in a particular area of the City or in specific neighborhoods. However, a jurisdiction could have grounds to deny a specific placement of a small cellular facility if there is a reasonable alternative location available

- "Shot Clocks" for Review of Small Cell Facility Applications

Federal law also requires local governments to act on applications for new wireless facilities within "a reasonable period of time." The FCC's September 2018 Order sets time limits, or "shot clocks," defining presumptively reasonable periods of time for review of small cell facility applications. Under the FCC's Order, a jurisdiction has 60 days to review an application for collocation of a small wireless facility on an existing structure and 90 days for review of an application to permit a new small wireless facility.

Aesthetics

The City of Cupertino, through coordination with various wireless providers, has developed aesthetic standards for small cell facilities on street light poles that accommodate equipment from all wireless providers while ensuring a generally homogenous appearance for the facilities. The intent of the aesthetic standards is to ensure the City had an objective design standard for each carrier to follow and to ensure consistency of design among different facilities. The City Council recommended developing a homogenous design in 2016 and recognized the aesthetic design standards for small wireless facilities (Attachment D) in 2017, when it approved the AT&T master agreement.

Distances between small wireless facilities

The FCC's September 2018 Order states that "a minimum spacing requirement [for small cells] that has the effect of materially inhibiting wireless service would be considered an effective prohibition of service" (FCC 18-133 paragraph 87).

The proposed regulations set a preferred distance between small cell facilities of the same carrier at 1,000', unless a carrier can provide documentation showing that a location that is closer than 1,000' is the only feasible location that meets their service needs.

Noticing of planned installations

Cupertino has also worked to enhance transparency of the permitting process for its residents through various avenues, including mailed notices, extensive online information, e-notification of permitting activities and other means, including the longest notification period of any jurisdiction in Santa Clara County.

Due to the FCC's September 2018 Order which sets time limits for completion of the review of small cell facility applications, the City typically has 90 days to review an application for a small cell facility. As part of the regulations, the City has incorporated a public notification process whereby carriers are required to notify all property owners located within 300' of the proposed location. Property owners may comment to the applicants or directly to the City. The applicants are required to track and provide to the City a log of all comments and responses received.

The City has set a 21-day period in which the public can comment on the installation before the City will consider issuing a permit for installation of a small wireless facility. Although the comment period is 21-days, in practice, the City accepts and reviews all correspondence from residents regarding small cell facilities, even after the comment period has ended. It should be noted that Cupertino has the longest comment period of any of its surrounding communities, with other cities having comment periods that range from 7 days to 20 days:

Cupertino	-	21 Days
Campbell	-	10 Days
Los Altos	-	15 Days
Los Gatos	-	20 Days
Mountain View	-	7 Days
Palo Alto	-	14 Days
San Jose	-	20 Days
Sunnyvale	-	14 Days

To provide further notification, transparency, and information to Cupertino residents, the City has created an online GIS map and e-notification sign-up list. The GIS Map shows all proposed, permitted, and active small wireless facilities within the city, and the e-notification signup will alert interested parties, via email, of any updates to the

map. The GIS map and e-notification signup can be found on the Cupertino website here: <https://www.cupertino.org/our-city/departments/public-works/permitting-development-services/small-cell-information>.

Site Preference Guidelines

The wireless regulations include revised location preferences. The site preference standards incorporate input from City Council and help ensure permitted small cell facilities are installed to minimize visual impacts and to prioritize commercial locations. The standards provide twelve tiers of preference, which range from Preferred Facilities (1) to Least Preferred Facilities (12). The preferences are described as follows:

- 1) Locations where collocation of equipment with existing wireless facilities is feasible within preferred facility tiers 2 through 7.
- 2) Locations within mixed use or non-residential districts.
- 3) Locations within residential districts on or along boulevards (arterials), as shown on the circulation network of the General Plan.
- 4) Locations within residential districts on or along avenues designated as major collector streets, as shown on the circulation network of the General Plan.
- 5) Locations within residential districts on or along avenues designated as minor collector streets, as shown on the circulation network of the General Plan.
- 6) Other locations within residential districts.
- 7) Any location within 1,000 feet of an existing or proposed wireless facility serving the same carrier and/or network.
- 8) Any location within 100 feet of a property that is eligible for protection under the State Public Resources Code Section 5020.1(j).
- 9) Any location within 25 feet of an occupied structure, residential dwelling, or school.
- 10) New standalone poles that serve only the wireless facility and which do not house City owned streetlights or other publicly owned facilities.
- 11) Installations on wooden utility poles.
- 12) Any location where strand-mounted equipment of any kind is proposed.

A facility shall not be permitted within 1,000 feet of an existing or proposed wireless facility serving the same carrier and/or network, unless the applicant can provide documentation showing that a specific site is the only feasible option available to meet the carrier's needs.

Wireless Ordinance

Cupertino has historically regulated small wireless facilities using encroachment permits and formal administrative written guidelines. Staff has prepared this wireless ordinance

tailored specifically to wireless facilities in the public right of way. Staff has also prepared regulations that include siting preferences and design requirements. The adoption of the regulations would be authorized by the draft ordinance. The intent of the proposed ordinance and regulations is to ensure that local control over the placement of small wireless facilities is retained to the greatest extent permitted under state and federal law, while also creating clear, enforceable rules that can be applied by the Public Works staff who administer the program.

The ordinance includes the following provisions:

- Requires carriers to obtain a “wireless ROW permit” (encroachment permit) for any installation of a wireless facility in the public right of way.
- Authorizes the adoption of regulations to implement the provisions of the ordinance. The ordinance requires any revisions to the regulations other than a minor modification, as defined, to be approved by the City Council.
- Establishes an application procedure and requires that applicants provide notice to all residents and property owners within 300-feet of a proposed small wireless facility.
- Authorizes the City Council to establish a fee for processing a wireless ROW permit application.
- Authorizes the Public Works Director to make findings to approve or deny a wireless ROW permit application and provides for an administrative appeal of the Director’s decision.
- Includes provisions for the revocation of permits and the removal of equipment following the revocation or termination of a wireless ROW permit.

The wireless regulations include the following provisions:

- Establishes specific application requirements, including requirements to evaluate alternative locations for the proposed small wireless facilities and to prepare a RF compliance report for each facility. The regulations also incorporate RF testing requirements described in the City’s master license agreements.
- Encourages a voluntary pre-submittal community meeting, consistent with the FCC rulemaking.
- Authorizes the peer review of applicant submittals, including RF compliance reports, at the expense of the applicant.
- Establishes standard conditions of approval.
- Establishes siting and placement preferences for small wireless facilities, with collocated equipment, and mixed-use and non-residential districts being the most preferred locations.
- Includes detailed design standards, including standards for noise, landscaping, concealment, lighting, and facility size.
- Establishes a 1,000-foot separation radius, based on Council input, between small wireless facilities from the same carrier unless the applicant demonstrates that installation of the facility located within the radius is required by applicable state or federal law, or the Director determines a less-preferred location is necessary to

protect public health, safety, or welfare, based on clear and convincing evidence and specific characteristics of the location of the proposed facility.

The redlined versions of the ordinance and regulations provided in the attachments, show the changes that were made to the previously presented draft ordinance and draft regulations. These changes were based on City Council input and legal review.

Staff is recommending that City Council conduct a first reading of the ordinance and adopt the draft resolution for approval of the regulations.

Sustainability Impact

No sustainability impact.

Fiscal Impact

No fiscal impact.

City Work Program (CWP) Item/Description

Yes, FY 25-26

5G Ordinance: Prepare an ordinance that regulates small cellular facilities in the public right of way.

Council Goal:

Quality of Life

California Environmental Quality Act

No California Environmental Quality Act impact.

Prepared by: Chad Mosley, Director of Public Works

Reviewed by: Floy Andrews, Interim City Attorney

Approved for Submission by: Tina Kapoor, Interim City Manager

Attachments:

A – Ordinance – Chapter 14.30 (Clean)

B - Ordinance – Chapter 14.30 (Redlines)

C – Wireless Regulations (Clean)

D - Wireless Regulations (Redlines)

E - Draft Resolution