

CITY COUNCIL STUDY SESSION

Response to Federal Communications Commission (FCC) Order preempting local authority to regulate small cell deployment.

Mark Poch, Assistant Director, 452-6137
Transportation Department

Carol Helland, Code and Policy Director, 452-2724
Development Services Department

Monica Buck, Assistant City Attorney, 452-4082
City Attorney's Office

DIRECTION NEEDED FROM COUNCIL**DIRECTION**

Direct staff to finalize amendments to the Telecommunications Title of the Bellevue City Code (BCC) and the Master License Agreement template for deployment of small cell in City rights-of-way in response to FCC preemption order.

RECOMMENDATION

Direct staff to return on January 22 for adoption of amendments to the Telecommunications Title of the BCC and approval of the Master License Agreement template for deployment of small cell in City rights-of-way.

BACKGROUND & ANALYSIS**Evolution of Wireless Technology – Small Cell, 4G, and 5G Wireless**

Current wireless providers rely on both traditional cell tower equipment that can carry signals and data over a greater geographic range (distances over 520 feet) and newer small cell technology that consists of smaller antenna and equipment which can be mounted on a light pole. The range of this small cell equipment is shorter, about 300 feet, and requires more locations for coverage. Small cell technology is associated with both fourth generation (4G) and fifth generation (5G) cellular service. Each generation represents better service in terms of capacity to transmit data and speed with which data is transmitted.

Providers have indicated a need to deploy small cell in Bellevue to meet current 4G service expectations in areas where customer demand outpaces the current capacity. The information in this memorandum relates to small cell deployments and its use in providing 4G service in Bellevue. The changes and actions described here are anticipated to be foundational for 5G as the technology, standards and requirements are still in development.

Wireless Technology Regulation – Federal, state and local laws

Since the consumer use of cellular technology was introduced, the technology has been regulated on

the federal level with increasing levels of specificity. Initial federal law focused on ensuring competitive neutrality between new technologies and older telephone service technology. Federal law has evolved with the technology since those early rules. Most recently, the FCC issued an order specific to small cell technology which institutes detailed requirements for local treatment of these facilities. This FCC Order was approved in September 2018 and came during Bellevue discussions with wireless providers over how to deploy small cell technology in the City.

The City developed a comprehensive set of land use regulations for wireless facilities when technology was largely separate cell towers, or large facilities added to the tops of utility poles. The evolution of the hardware related to wireless service, particularly small cell equipment, prompted a need to review the approach, and this need to adapt was first discussed with the Council in December 2016. At that time, Verizon requested approval of several small cell arrays in Bellevue neighborhoods, and the City's codes and processes revealed the need for changes to address the nature of small cell facilities. In response, Council directed staff to develop updates to the City's codes and processes that would balance the need for universal, affordable access to reliable service with concerns about proliferation of these facilities, especially within neighborhoods.

Consistent with the December 2016 discussion, staff worked with providers to create a more streamlined approach to process and deploy small cell on City-owned poles in rights-of-way. The assumptions were that the City would develop a form of Master License Agreement workable for all providers allowing attachment of small cell equipment to existing City-owned street light poles. That equipment would be required to meet the size and design requirements already included in the City's land use code. Compliance with the terms of the Master License Agreement and associated design would then present a more straightforward and predictable permitting path, creating an incentive to meet the City's preferred design and size requirements. As a result of the FCC's Order in September 2018, this approach to the Master License Agreement had to be adapted to comply with limitations imposed by that Order. In addition, the FCC Order further prescribes City authority to regulate the size and location of small cell equipment leading to the need for changes to the City codes to comply with federal requirements.

The remainder of this memorandum describes the proposed Master License Agreement and the recommended changes to City code, considering the limitations imposed by federal law, and the City's existing policy interests. Small cell deployment is a technology that could support the Council's vision for a high quality built and natural environment by advancing implementation of the connectivity element in the Smart City Strategy. The City's interests remain balancing the need for access to reliable, affordable service throughout the City with proliferation of technology in a manner compatible with the character of the various neighborhoods. The City faces additional limitations in balancing these interests as a result of continued state and federal regulation limiting local authority.

Federal Law - FCC Order and Litigation

FCC Order & New "Small Wireless Facility" Regulations. On September 26, 2018, the FCC issued an order and regulations (effective January 14, 2019 unless stayed, see "Challenges" below) providing an expansive interpretation of the preemptive scope of the Telecommunications Act of 1996, including:

1. **Rent (\$270/yr/pole) and Permitting Fees Must be Cost-Based**. The FCC ruled that fees charged by local governments for permit application review and recurring fees for use of the rights-of-way and use of government-owned structures in the right-of-way are limited to the cost the local government incurs to review the permit and to maintain its rights-of-way and support structures. The following fees are to be presumptively permissible:
 - \$500 for an application to attach one to five antennas to an existing pole;
 - \$1,000 for an application to install a new pole; and
 - \$270 per year for use of the right-of-way and attachment to a City-owned pole.
2. **Aesthetic Design Requirements Must be Reasonable**. The FCC ruled that aesthetic requirements imposed by local governments for the installation of antennas and support structures must be “(1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) objective and published in advance.” The FCC later acknowledged the difficulty regarding aesthetic requirements and delayed the effective date of the new rules for aesthetics until April 15, 2019.
3. **Small Wireless Facility (SWF)**. The FCC adopts new definition, “small wireless facility” (SWF):
 - **SWF Size Limitations**. Facilities that:
 - Are 28 cubic feet for SWF equipment – both pole-mounted and ground-based;
 - Are 3 cubic feet for antennas, no limit on quantity.
 - **SWF Height Limitations**. Facilities that:
 - Are mounted on structures 50 feet or less in height including the antennas;
 - Are mounted on structures no more than 10% taller than adjacent structures; or
 - 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.
4. **Shot Clocks for Permitting Review**. The FCC ruled that delays in approving antenna installation applications constitute a prohibition on the provision of service and imposed “shot clocks” of sixty days for the issuance of permits to attach antennas to existing structures and ninety days for the issuance of permits to install new antenna support structures.
5. **Radio Frequency Emissions**. The FCC ruling expressly prohibits regulation of the placement and modification of wireless communication facilities based on radio frequency (RF) emissions. The FCC does set standards/guidelines (MPE, Maximum Permissible Exposure) limitations for human exposure to radio frequency emissions.

Challenges to FCC Order

Several cities, including Bellevue, joined in challenges to the enforceability of the FCC Order. Bellevue’s interest in joining these challenges is to preserve local authority over issues like appropriate charges for use of the publicly-developed and maintained rights-of-way, the way that our codes prioritize and incentivize deployments that fit with surrounding neighborhood character, and the impact of the permit shot clocks on the processing of all other types of development permits. The outcome of

this litigation or the timing of any interim or final decision is uncertain. If successful, a Court might stay the Order, or invalidate, vacate, or require new regulations in whole or part.

Response to the FCC Order

An interdepartmental team of staff have been collaborating on a response to the FCC Order. In preparation for the required response, staff have researched the approach of other cities, consulted with qualified outside Counsel, and coordinated with the telecommunication carriers and infrastructure developers that deploy small cell in Bellevue. The staff proposed response has two prongs. The first requires amendments to the Telecommunications title (Title 6) of the BCC. The second requires approval of a Master License Agreement (MLA) template. This proposed two-prong approach is described in greater detail below.

Title 6 Code Amendments: Amendments to Title 6 BCC are necessary to regulate the deployment of Small Wireless Facilities (SWFs) in rights-of-way consistent with the FCC Order. Currently, all telecommunication facilities in the rights-of-way are regulated under the terms of the Telecommunications Code and the Land Use Code (LUC), even though LUC regulations were originally created when wireless facilities were larger, taller, and served much greater geographic areas than the current small cell deployments. Bellevue code needs to be updated now to align with the evolution in Federal law.

Two amendments to the City Code are proposed in response to the FCC Order:

1. Chapter 6.02 BCC would be amended to include a new authority section, clarify that SWFs are regulated exclusively under the terms of Title 6, clarify that SWFs are not regulated under the LUC, and expand the definitions section. Draft amendments to Chapter 6.02 BCC are provided in Attachment A.
2. A new Chapter 6.08 BCC would be created. This new chapter would provide the regulatory framework necessary for permitting SWFs within federally mandated timeframes (referred to as shot clocks). This new chapter would authorize the Transportation Director to permit all SWF collocations on poles located in the rights-of-way, provide deployment requirements (including design standards), create minimum application requirements, provide for permitting and post installation inspections of SWFs, including certification of compliance with FCC radio frequency (RF) emissions if requested, and include parameters for modification and removal of SWFs. A draft new Chapter 6.08 BCC is provided in Attachment B.

Amendments to the Comprehensive Plan and LUC are not necessary at this time, because the newly defined SWFs will be regulated exclusively under the terms of the Telecommunications Title. The policy discussion contained in the Comprehensive Plan and exemptions provided in the LUC could be updated to reflect the new regulatory framework for SWFs as part of the 2019 policy and code development work program.

In addition to a SWF permit, deployments proposed on City-owned poles would be required to execute a lease under the Telecommunication Facilities Lease provisions of Chapter 6.06 BCC. An MLA template is proposed as the mechanism for the Transportation Director to administer the leasing program for SWFs on City-owned poles in the rights-of-way.

MLA Template: The MLA is an umbrella license to use any City-owned streetlights for the deployment of SWF. The MLA establishes the rules and regulations for attaching to City owned streetlights, including insurance, bonding, indemnification and hold harmless provisions protecting the City from liability resulting from the presence or operation of the SWF on the City property. As carriers identify individual poles they would like to attach to, they must apply for an addendum to the MLA (referred to as a site license addendum or SLA), to be vetted and approved by the Transportation Department. Each SLA would be subject to all the terms and conditions of the MLA. The proposed MLA is for a term of ten (10) years with one-year extensions thereafter (assuming neither party terminates) and includes provisions for rent (\$270/year per pole if the FCC Order is upheld and \$1,500/year per pole if the Order is stayed or overturned), and requirements for compliance with BCC and FCC safety requirements for RF emission. It is anticipated that in most cases, the City's existing streetlight pole will require replacement to accommodate the structural requirements of SWF. The Transportation Department is developing a new standard metal pole design to be used throughout the City to accommodate SWF. This will result in a mix of pole types in the initial stages of SWF rollout, particularly in the Downtown where most poles are concrete. A copy of the MLA template is provided as Attachment C.

Radio Frequency Emissions. Federal law preempts local authority to regulate wireless facility placement based on RF emissions. The FCC has sole national authority to set RF emissions standards and has issued rules requiring providers to comply with RF exposure guidelines and thus safeguard human exposure to RF emissions. The FCC rules adopt standards set by the National Council on Radiation Protection and Measurements, the American National Standards Institute, and the Institute of Electrical and Electronics Engineers.

Although the City is preempted from regulating the siting of facilities based on RF emissions to the extent that they comply with FCC regulations, the City can require providers demonstrate compliance with FCC safety standards for RF emissions and remedy any facility that fails to meet such requirements. Both the proposed Title 6 code amendments and the MLA include provisions for compliance with FCC RF emissions regulations and standards, require providers submit certification that facilities comply with applicable RF emissions limits, and provide the City with the option to request providers conduct on-site RF emissions testing to certify actual compliance with applicable RF emissions limits.

Council Authorization to Execute

All lease agreements for telecommunications facilities must be approved by the City Council (BCC 6.06.010). We anticipate several carriers applying for MLAs shortly after Council approval. Rather than bring each MLA to Council separately, we propose that Council approve the form of the MLA at the January 22 Study Session and authorize execution with each carrier administratively without

subsequent Council approval.

POLICY & FISCAL IMPACTS

Policy Impact

Bellevue's existing policy and code is based on initial wireless technology that needed to support larger equipment needs. In 2016, Council directed staff to update the code and processes to better match the evolution of wireless communication technology, and the desire to support high functioning and reliable wireless service for residents and businesses consistent with the Bellevue Smart City Strategy. Council also acknowledged the need to balance wireless facilities and their benefits with proliferation and aesthetic concerns, especially in Bellevue neighborhoods. Staff advanced work to meet this direction by beginning a Master License Agreement process to ensure providers had a more straightforward and predictable process while establishing terms to meet existing size and aesthetic requirements of the LUC.

In September 2018, the FCC's Order required a modified approach that recognized limitations on local ability to regulate size and location of SWF equipment. Specifically, the telecommunications code is proposed to provide the regulations necessary to permit SWF within the framework of the FCC Order including timeframes and design standards. This approach also streamlines the application process and provides the City the ability to require providers to notify the public of pending installations of SWF. This approach is a shift in the connectivity/aesthetic balance originally sought due to the change in local control but will result in consistent and predictable design standards and process. The LUC can be updated to reflect the FCC Order and resulting new process as part of the 2019 code and policy updates.

Refer to Attachment E for policy applicable to proposed Code changes and Master License Agreement.

Fiscal Impact

The proposed approval of the Master License Agreement template should have minimal direct negative fiscal impact on the City because: (i) the City plans to charge and recover permit review and inspection time on an hourly basis (\$188/hour is City rate for 2019) depending on the number of hours required, and (ii) a recurring fee of either \$270/year per pole if the FCC Order is upheld or \$1,500/year per pole if the Order is stayed or overturned will be collected.

Code Changes might result in additional administrative time. However, this will be billable to the applicants on an hourly basis, resulting in a minimal direct negative fiscal impact. The City plans to charge and recover permit review and inspection time on an hourly basis. This arrangement is the same approach used by the City for most plan review permitting and inspection.

OPTIONS

1. Direct staff to return on January 22 for adoption of amendments to the Telecommunications Title of the BCC and the Master License Agreement template for deployment of small cell in City rights-of-way.
2. Provide alternative direction to staff.

ATTACHMENTS & AVAILABLE DOCUMENTS

- A. Draft Code Update – Chapter 6.02 BCC
- B. Draft New Code – Chapter 6.08 BCC
- C. Master License Agreement-template
- D. Proposed 4G Small Cell design
- E. Policy applicable to proposed code changes and Master License Agreement

AVAILABLE IN COUNCIL LIBRARY

FCC Order (Declaratory Ruling and Third Report and Order, released September 26, 2018

<https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf>

New FCC Federal Regulations (CFR), including “Small Wireless Facilities” (SWF) definition, and shot clocks

OET, Bulletin 65: Evaluating Compliance with FCC Guidelines for Human Exposure to Radiofrequency Electromagnetic Fields (1997)

<https://transition.fcc.gov/bureaus/oet/info/documents/bulletins/oet65/oet65.pdf>

FCC’s “A Local Government Official’s Guide to Transmitting Antenna RF Emission Safety: Rules, Procedures, and Practical Guidance” http://wireless.fcc.gov/siting/FCC_LSGAC_RF_Guide.pdf