



City of Somerville

Small Cellular / 5G

An Introduction

Somerville City Council Presentation
June 27, 2019

Agenda

- **What is 5G / Small Cellular**
 - **Process:**
 - **Master License Agreement**
 - **Review for Consistency with Standards**
 - **Grant of Location**
 - **FCC Small Cell Order**
 - **Next Steps**
-



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What is a Small Cellular Facility

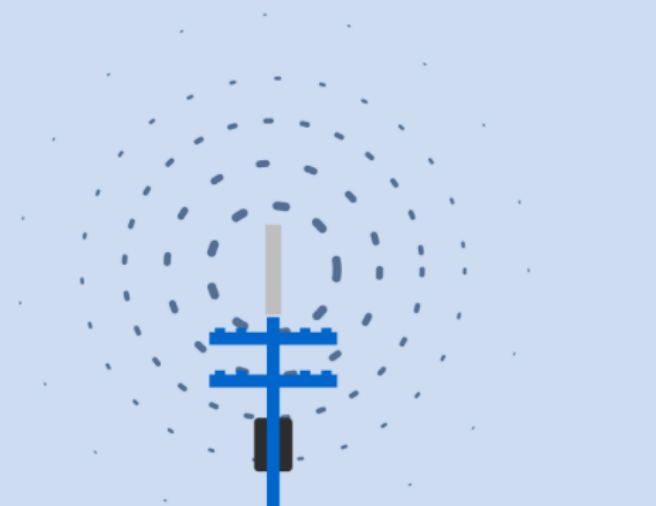
TRADITIONAL CELL:

- LARGE TOWERS
- HIGH POWER
- HIGH EMISSION



SMALL CELL:

- HIDDEN ON EXISTING INFRASTRUCTURE
- LOW POWER
- LOW EMISSION



What is a Small Cellular Facility

Towers

Tall. Visually prominent.

Small cells

Discreet. Lower to the ground.



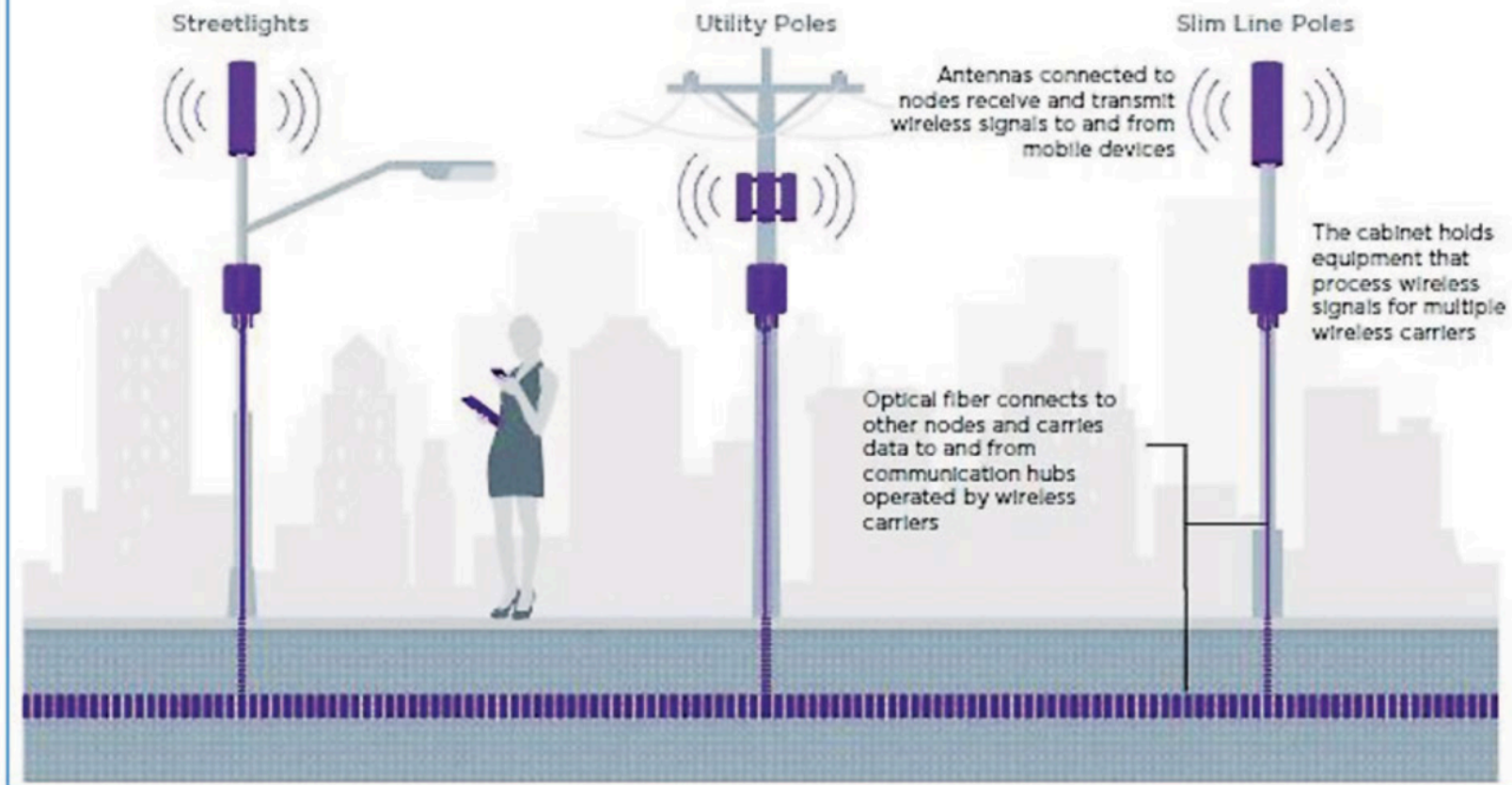
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What is a Small Cellular Facility

What Are Small Cell Deployments?

Small cell deployments are complementary to towers, adding much needed coverage and capacity to urban and residential areas, venues, and anywhere large crowds gather



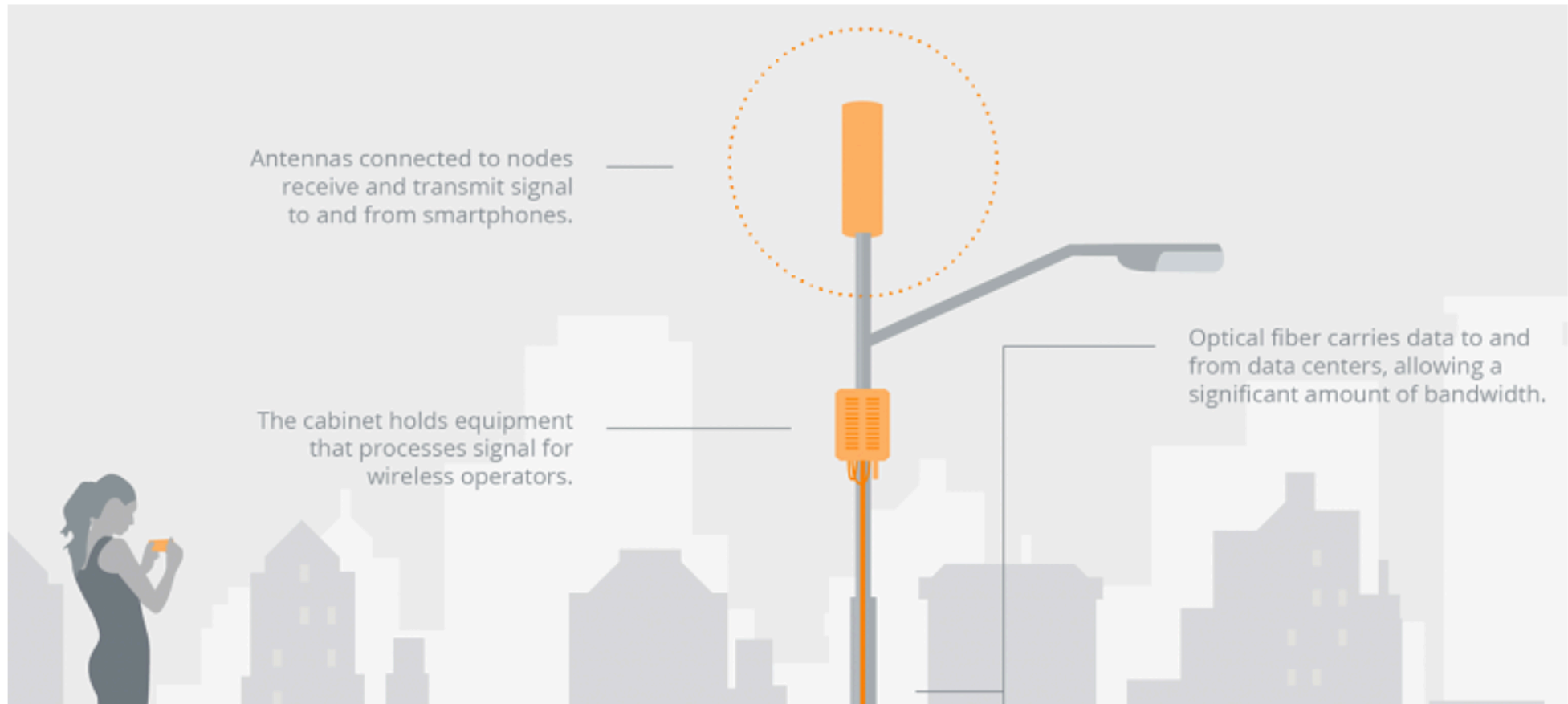
Source: Crown Castle



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What is a Small Cellular Facility



The Texas 5G Alliance created this graphic to illustrate the use of small cells. (Texas 5G Alliance)

What is a Small Cellular Facility



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What is a Small Cellular Facility



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Process

- **Master License Agreement**
- **Review for Consistency with Standards**
- **Grant of Location**



License Agreement

- Master License Agreement
 - Content:
 - Basic rules for maintenance, safety, etc.
 - Designated liaison for issues
 - Removal of unused infrastructure
 - Liability
 - Insurance
 - Fees
 - Carriers and the City want these agreements to accept the rules of engagement



License Agreement

- Executed:
 - ExteNet
 - Mobilitie
 - Crown Castle (awaiting signatures)
- Pending
 - AT&T
 - Verizon



Standards

- Standards for Small Cell Wireless Facility Placement
 - Establishes requirements:
 - No facility to extend beyond 5 feet over an existing pole
 - May not obstruct traffic signals, signage, etc.
 - One installation per pole
 - Color should match the color of the pole
 - Signage limited to emergency information
 - No illumination or fencing
 - To address:
 - Concrete poles
 - Decorative poles
- Published by DPW Engineering Department on May 15, 2019
 - Edited version forthcoming



Grant of Location

- Council approval per city regulations
- Each forwarded applicant will have been reviewed for consistency with the license agreement and published standards
- First applications expected to be before the council on July 11, 2019



The FCC Order

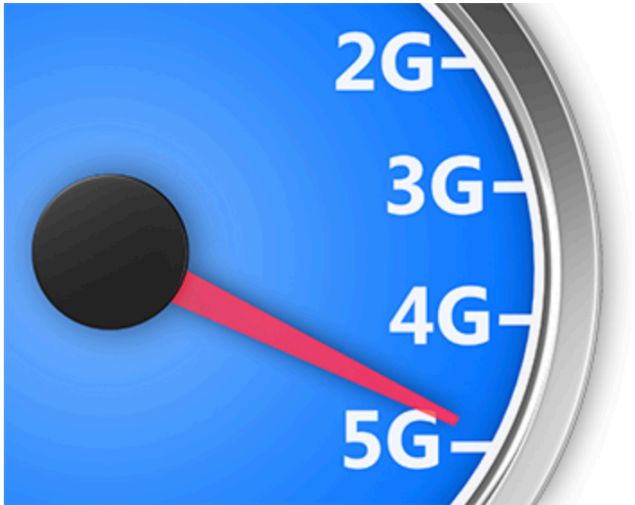


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The FCC Order

The FCC's 5G FAST Plan



Under Chairman Pai, the FCC is pursuing a comprehensive strategy to Facilitate America's Superiority in 5G Technology (the 5G FAST Plan). The Chairman's strategy includes three key components: (1) pushing more spectrum into the marketplace; (2) updating infrastructure policy; and (3) modernizing outdated regulations.

"Forward-thinking spectrum policy, modern infrastructure policy, and market-based network regulation form the heart of our strategy for realizing the promise of the 5G future." – FCC Chairman Pai



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The FCC Order

- Speeding Up State and Local Review of Small Cells:
“The FCC reformed rules designed decades ago to accommodate small cells. The reforms ban short-sighted municipal roadblocks that have the effect of prohibiting deployment of 5G and give states and localities a reasonable deadline to approve or disapprove small-cell siting applications.”

-FCC



The FCC Order

- Approved September 2018
- Key elements:
 - "Shot clock"
 - 60 days from complete application to approval
 - Limits scope of local review
 - Limits on fees (\$270 per year per installation)
 - Published and predictable review standards



The FCC Order

- 12 filed appeals are now consolidated in the 9th circuit court of appeals
- The court DID NOT stay the order, therefore it remains in effect





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Thank you