



Small Cell Wireless/5G An Oregon City Perspective

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ROW and Construction Services

September 19, 2018



Major Points

Telecommunication
Industry Changes
(5G)

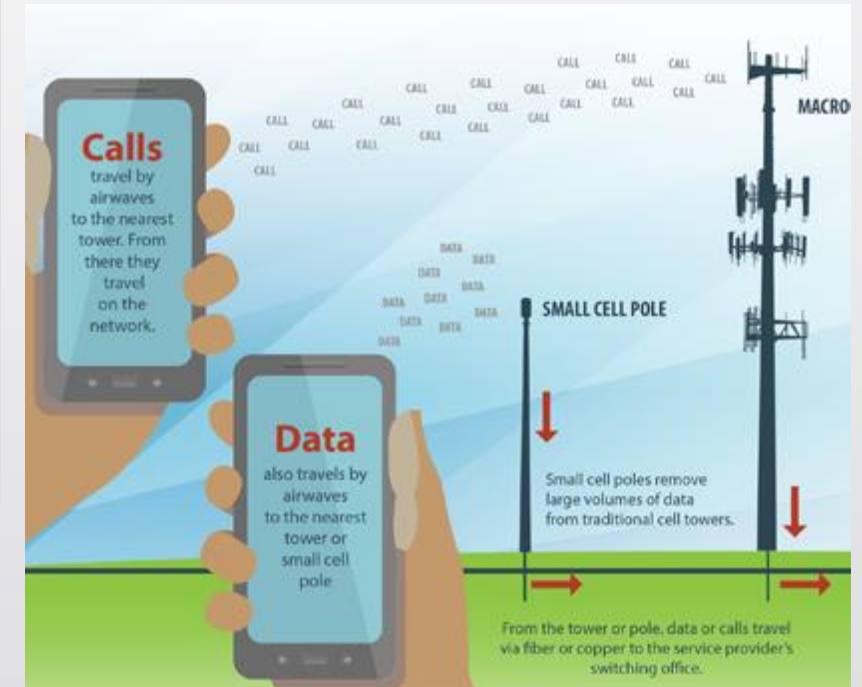
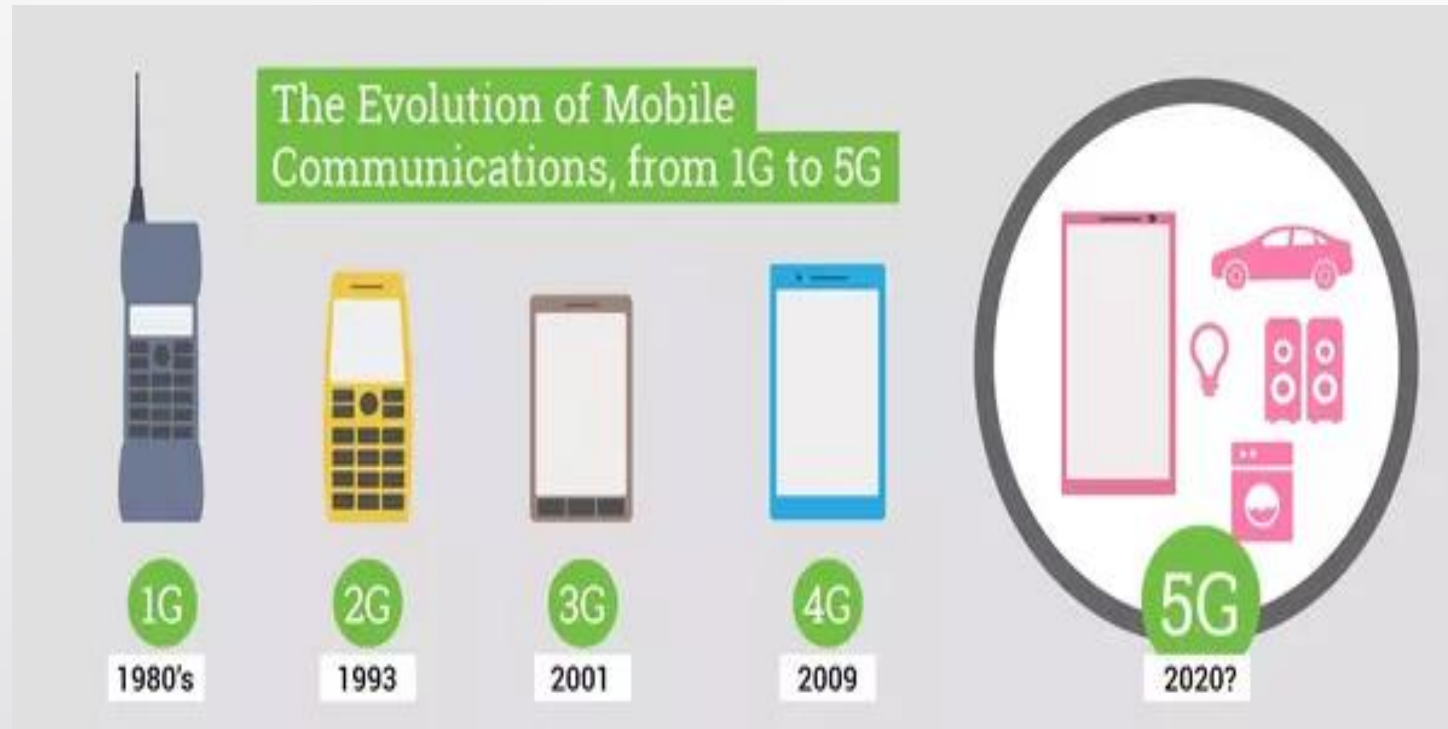
Wireless Networks –
Small Cell and
Macro Sites

Governing Bodies
and Legislation

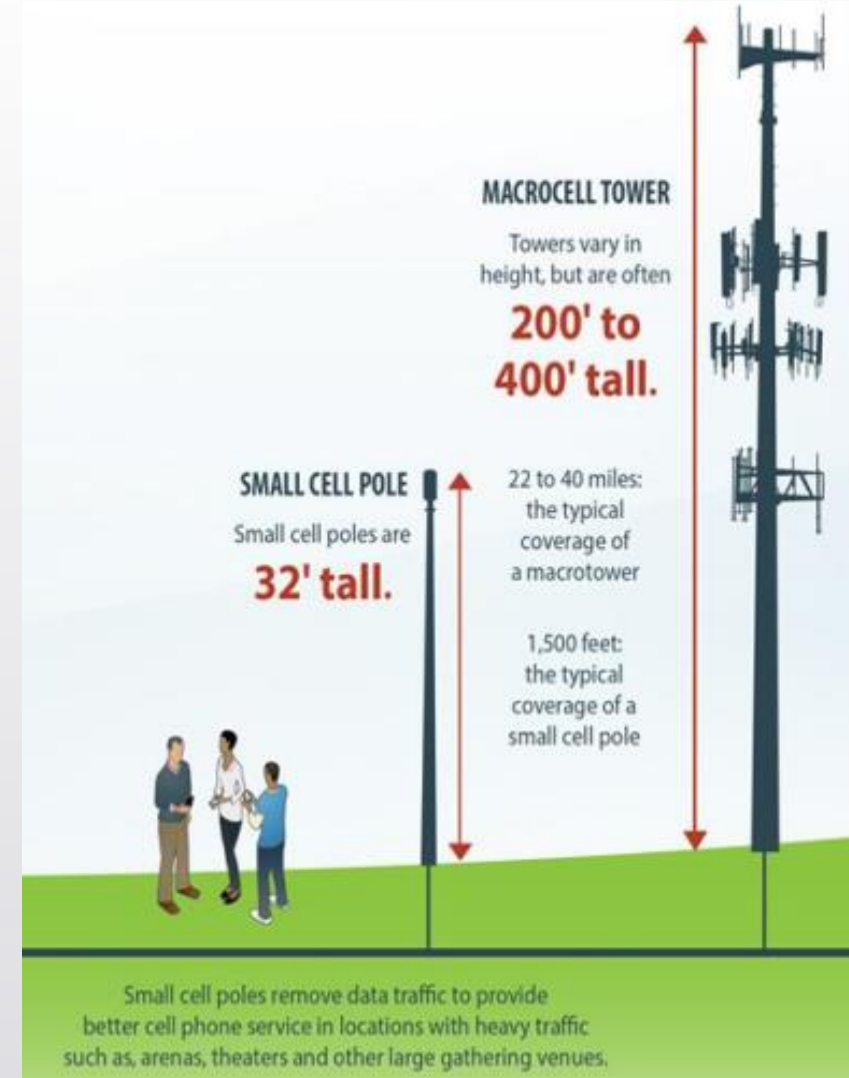
Impacts on
Oregon City

Planned Action

5G Capabilities and Needs



Macro Cells vs. Small Cell



Wireless Network Growth

The Way Oregon Communicates is Changing...

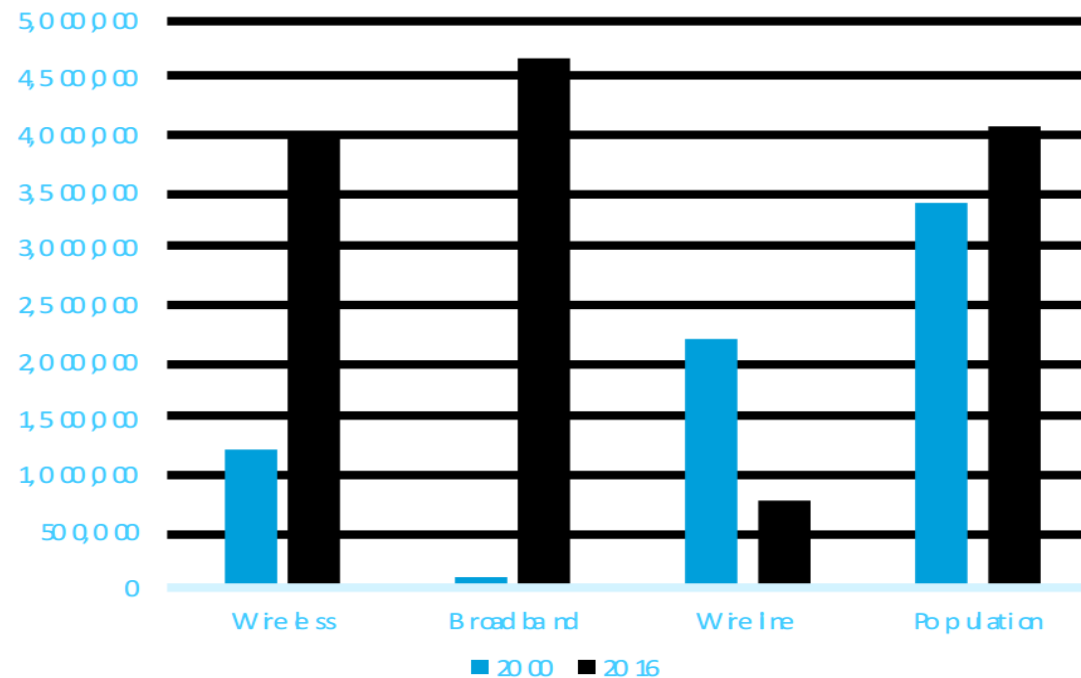
From 2000-2016,
Oregon has seen:

235% increase in wireless phone subscribers¹

5,960% increase in broadband subscribers²

66% decrease in switched access lines³

20% increase in population⁴



1 FCC Local Competition Report May 2001 (as of 12/31/00), Table 9; FCC Voice Telephone Services Report April 2017 (as of 06/30/16), Supplemental Table 1.
 2 FCC High-Speed Services for Internet Access: Status as of December 2000 (Table 7); FCC Internet Access Service Report April 2017 (as of 06/30/16) *Connections/lines over 200 Kbps.
 3 FCC Local Competition Report May 2001 (as of 12/31/00), FCC Voice Telephone Services Report April 2017 (as of 06/30/16), Supplemental Table 1.
 4 U.S. Census Bureau Quick Facts 2016 (July 1) Estimate New Mexico; U.S. Census Bureau New Mexico 2000.



Wireless Networks in Oregon City

Current ROW users

- AT&T
- Verizon
- Comcast
- CenturyLink

Current Private Property Macro site users

- AT&T
- Verizon
- Sprint
- T-Mobile
- Cricket Wireless



Small Cell Legislation

United States Congress

- [June 28, 2018--S.3157-Streamline Small Cell Deployment Act](#)

Federal Communications Commission

- [January 31, 2017- Broadband Deployment Advisory Committee](#)
- [September 5, 2018- Accelerating Wireless Broadband deployment](#)

National Conference of State Legislatures

- [20 States have enacted legislation](#)

National Governors Association

- [July 27, 2018--https://www.nga.org/letters-nga/streamline-small-cell-deployment/](https://www.nga.org/letters-nga/streamline-small-cell-deployment/)

National League of Cities

- [Model code August 2018](#)

National Association of Telecommunication Officers and Advisors





Oregon City Code

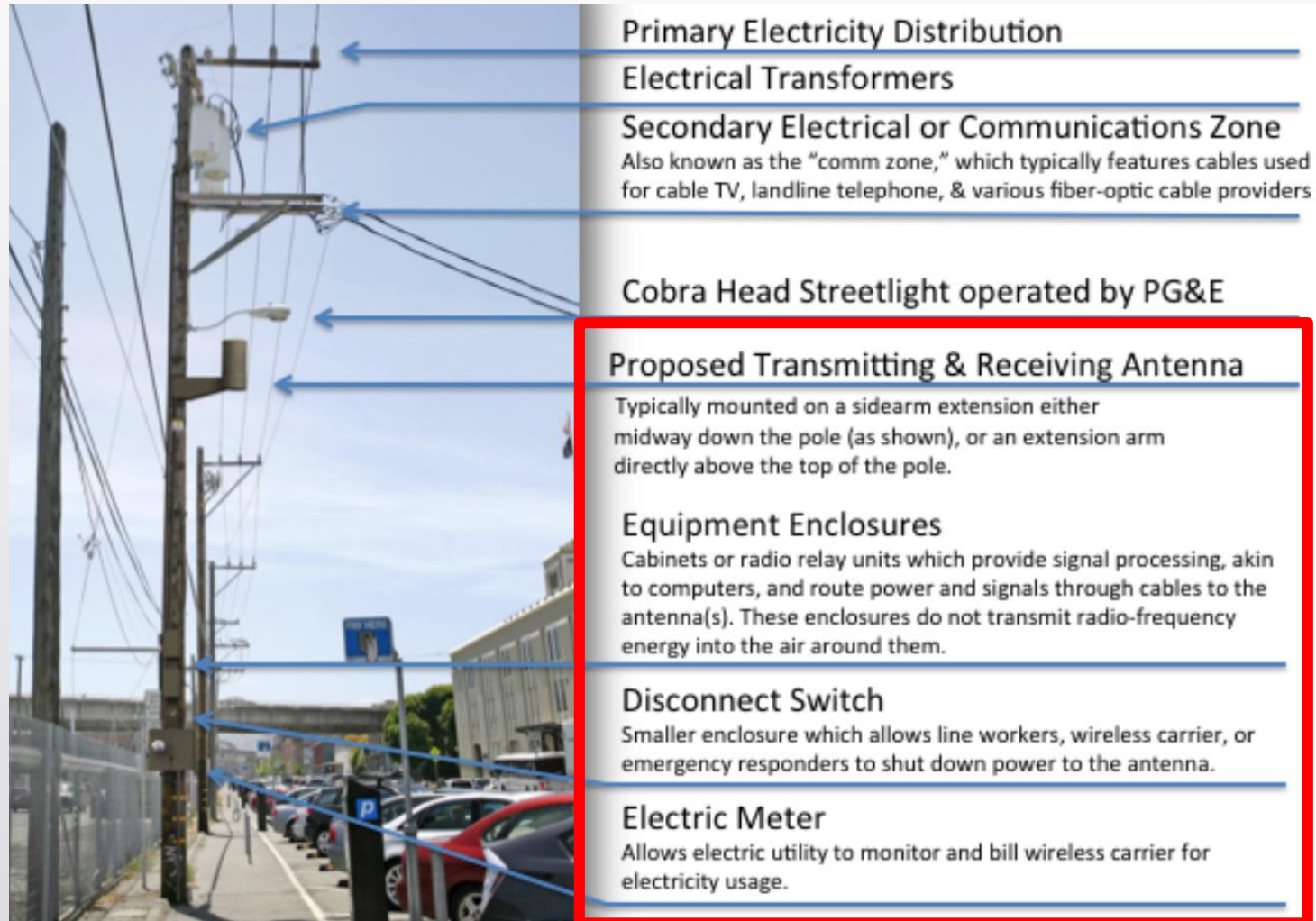
Oregon City Municipal Code 13.24 - Telecommunication Facilities

- Permit and manage access to City's ROW
- Fair and reasonable compensation
- Public safety, health and welfare
- Encourage competitive and advancing utility services
- Comply with Oregon City Code, State, and Federal Law

Oregon City Municipal Code 17.80 - Communication Facilities

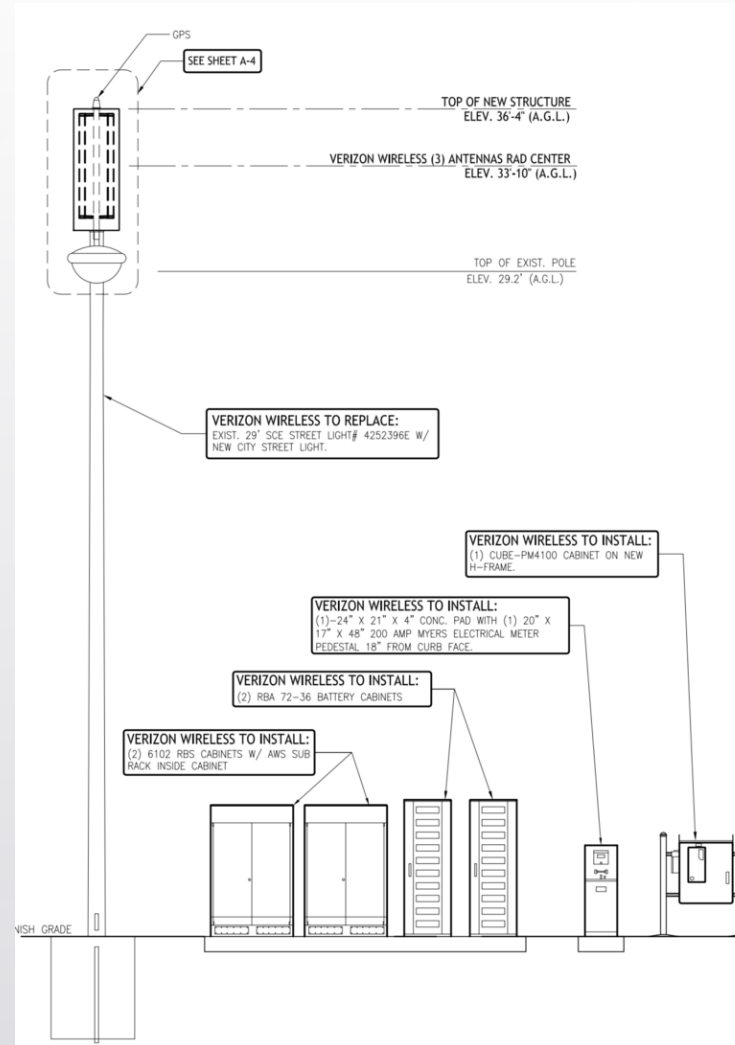
- Promote maximum utilization and colocation
- Minimal impacts on community, views, and historical areas
- Existing infrastructure use
- Encourage location in non-residential areas

Small Cell Installations



Standards

- Location
- Zoning
- Street classifications
- Infrastructure
- Permissions
- Permits
- Removal



Typical Installations



Portland, Oregon

Antenna Canister



**Monopole
Shrouded**



Usage Fees

Oregon City Current

Communications
5% gross revenue
Attachment Fee \$5,000

Other Agency Fees

San Jose, California

\$2,600 - \$17,750 annual; 3% annual escalation

Eugene, Oregon

\$600 quarterly; 5 yr. term; 3% annual escalation

Portland General Electric – Attachment Fee

Oregon City Considerations for Future Fees

Communications 5% Gross Revenue

Attachment Fee

- Municipality Comparison
- Antenna & Ground Equipment Size
- Capacity Output
- Radio Frequency Propagation Maps
- Residential Zone Classification
- Review & Processing Permit Fee



Oregon City – Next Steps 6-12 months

Implement Reasonable, Fair Management of the ROW

Establish Small Cell Code

Establish Small Cell Standards within ROW

Establish Usage Fee Resolution Consistent with Neighboring Oregon Municipalities



Questions?