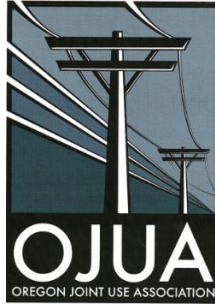


Oregon Joint Use Association



Small Cell Deployment Resources

The following are resources available to local government, pole owners, telecommunication and power utilities for guidance about small cell deployment. Listing does not imply endorsement. These types of documents are frequently updated so you may need to look at the agency or firm's website for more current information.

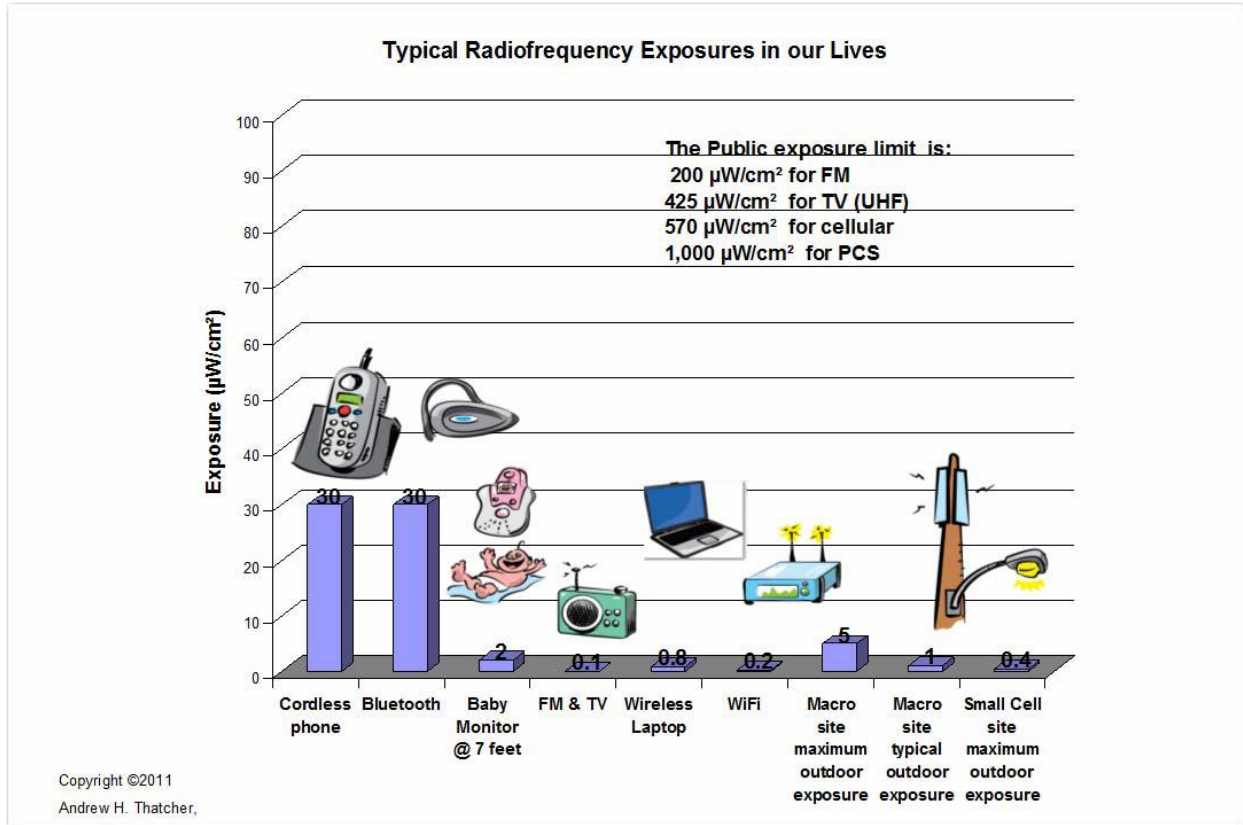


Figure 1 RF Exposure from Various Sources

Technical Design

City of Tigard - http://www.tigard-or.gov/engineering/COT_Wireless_Facilities_Standards.pdf

City of Seattle Utility Standards - <http://www.seattle.gov/light/engstd/docs2/0095.15.pdf> and <http://www.seattle.gov/light/engstd/docs2/0093.02.pdf>

City of Eugene – <https://www.eugene-or.gov/4114/Wireless-Installations-in-the-Right-of-Way>

Asset Management

EWEB Pole Selection Spreadsheet – to be hosted on OJUA site

City of Eugene GIS app - <https://eugene-pwe.maps.arcgis.com/apps/webappviewer/index.html?id=cfb1e048f8964ed38a1d37cfb29a5e4e>

Geographic Information Systems (GIS) – ESRI - <https://www.esri.com/en-us/arcgis/products/arcgis-online/overview>

Commercial Asset Management services/software

Varasset - <https://www.varasset.com/>

CityWorks – <https://www.cityworks.com/>

Alden Systems - <https://www.aldensys.com/>

Land Use – Development Code

City of Denver Small Cell infrastructure Design Guidelines - https://www.denvergov.org/content/dam/denvergov/Portals/705/documents/guidelines/PWE_S-016.0-Small_Cell_Infrastructure_Design_Guidelines.pdf

City of Richland, WA – from Washington Model Code <https://www.ci.richland.wa.us/home/showdocument?id=8134>

City of Cannon Beach, OR - http://www.qcode.us/codes/cannonbeach/view.php?topic=17-17_75-17_75_040&frames=on

National Model Code (NATOA and National League of Cities) – August 2018 – prior to FCC 2018 orders <https://www.natoa.org/documents/NATOA%20NLC%20Alternative%20Model%20Code%20for%20Municipalities%20August%202018.pdf>

Smart Cities

City of Denver - <https://www.denvergov.org/content/denvergov/en/denver-smart-city.html>

Safety

NESC – National Electrical Safety Code - <https://catalog.nfpa.org/National-Electrical-Safety-Code-2017-Edition-P17436.aspx> or <https://standards.ieee.org/products-services/nesc/index.html> See also: OR PUC NESC Quick Reference Guide - <https://www.puc.state.or.us/safety/nescref.pdf>

NEC – National Electrical Code - <https://www.nfpa.org/codes-and-standards/all-codes-and-standards/list-of-codes-and-standards/detail?code=70>

OR-OSHA – Oregon Occupational Safety and Health Administration

PUC – Public Utility Commission Safety Division -

<https://secure.sos.state.or.us/oard/displayDivisionRules.action?selectedDivision=4038>

RF - Radio Frequency



Exposure

Figure 2 RF Warning Sign

Federal Communications Commission – RF exposure:

https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf

Dr. Andrew “Drew” Thatcher - <http://www.rfthatcher.com/> see also his site for this glossary of terms: <http://www.rfthatcher.com/RF-Terms.html>

The Swedish Radiation Safety Authority’s (SSM) Scientific Council on Electromagnetic Fields <https://www.stralsakerhetsmyndigheten.se/contentassets/f34de8333acd4ac2b22a9b072d9b33f9/201809-recent-research-on-emf-and-health-risk>

US Food & Drug Administration - report on radiofrequency energy exposure

<https://www.fda.gov/NewsEvents/Newsroom/PressAnnouncements/ucm595144.htm>

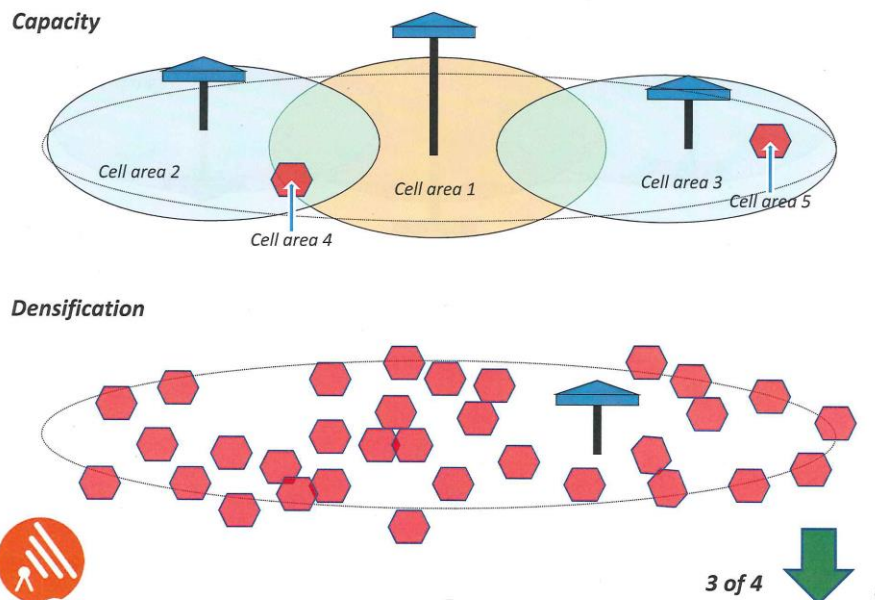


Figure 3 Objectives of Small Cell Deployment

Pole Rental/License Agreements

An OJUA Wireless Committee Work Product

Spring 2019

Salem: <https://www.cityofsalem.net/Pages/install-wireless-communication-facilities.aspx>

EWEB - <http://www.eweb.org/>

Springfield - <http://www.springfield-or.gov/city/development-public-works/standard-construction-specifications-standard-drawings/>

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Standards Manual - <https://www.ojua.org/wp-content/uploads/2018/09/FINAL-Standards-Manual-Updated-09-18-2017-1.pdf>

Federal Communications Commission – Small Cell Deployment

3rd Order on Wireless Deployment (2018) - <https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf>

Other Organizations

Oregon Association of Telecommunication Officers & Administrators (OATOA) – contact President Reba Crocker (crockerr@milwaukieoregon.gov)

National Association of Telecommunications Officers & Administrators (NATOA) – <https://natoa.org/>

Oregon Broadband Advisory Council – managed by Business Oregon <https://www.orinfrastructure.org/Infrastructure-Programs/Telecommunications/OBAC/>

League of Oregon Cities – www.orcities.org

Oregon Telecommunications Association - <https://www.ota-telecom.org/>

Oregon Municipal Electric Utilities Association - <https://www.omeu.org/>

Telecommunication Firms

Verizon - <https://www.verizon.com/about/news/5g-here>

AT&T - <https://about.att.com/pages/5G> and https://about.att.com/story/2019/2019_and_beyond.html

Mobilitie - <http://mobilitie.com/>

Sprint - <https://www.sprint.com/en/allfor5g.html>

T-Mobile - <https://www.t-mobile.com/news/mwc-2018-5g>

Crown Castle - <https://www.crowncastle.com/municipalities/>

others

Pole Owners

Portland General Electric - <https://www.portlandgeneral.com/>

PacifiCorp - <http://www.pacificorp.com/index.html>

Consumers Power - <https://www.cpi.coop/>

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Columbia River PUD - <https://www.crpud.net/>

Lane Electric Cooperative - <https://laneelectric.com/>

McMinnville Water and Light - <http://www.mc-power.com/>

Monmouth Power and Light - <http://www.ci.monmouth.or.us/pView.aspx?id=4747&catid=552>

Springfield Utilities Board - <http://www.subutil.com/>

others