



Wireless Facilities in Our Rights-of-Way

Whose Streets are These Anyway?

Monterey, CA

May 9, 2019



Big Questions about Small Cells

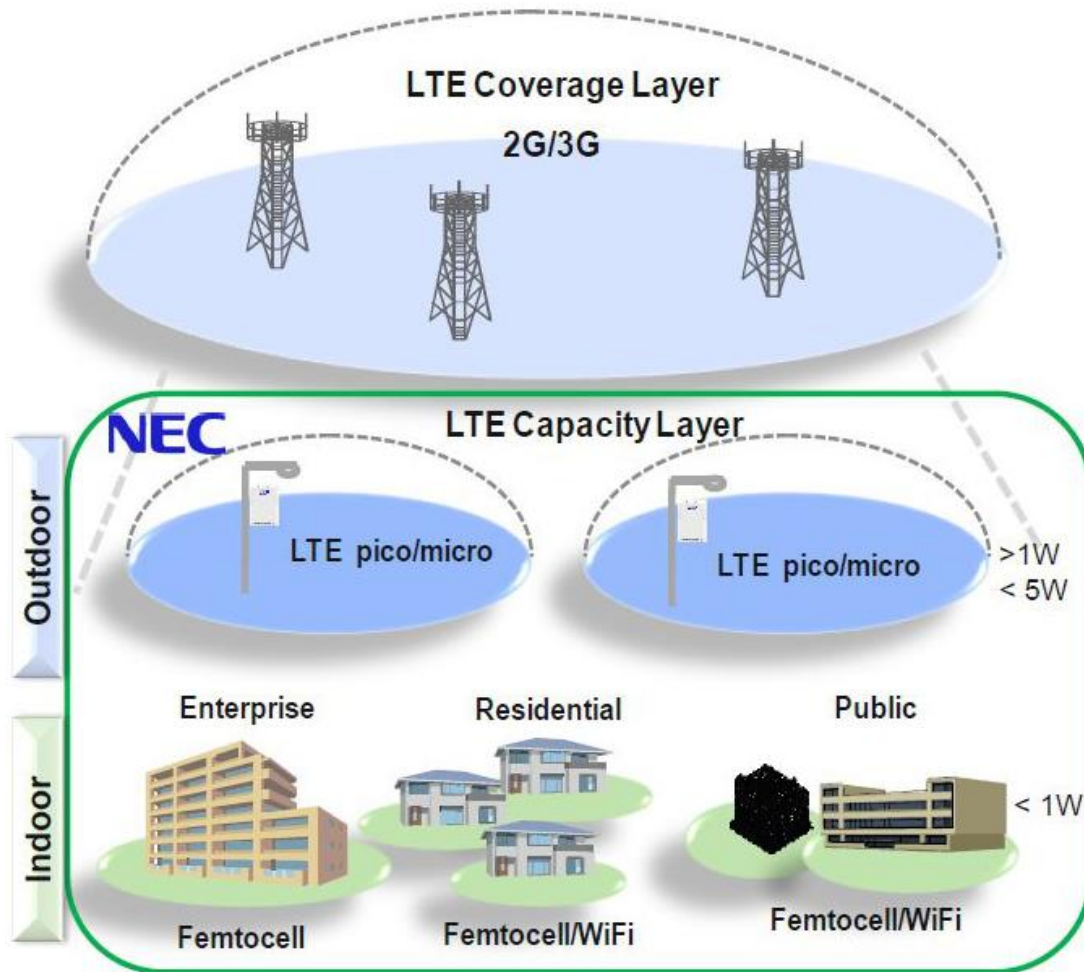
What Purpose Do These Facilities Serve?

What Do These Facilities Look Like?

How Does State and Federal Law Impact Local Authority?

What Purpose Do These Facilities Serve?

Network Densification and Het-Nets



macrocells provide coverage;
small cells provide enhanced
capacity, **reduced latency**
and **data throughput**

het-nets (heterogeneous networks)
allow users (both human and machine)
to access core networks thru multiple cell
layers and/or technologies based on the
fastest connection

Other Purposes

Groundwork for 5G Networks

- early phase for mobile deployments
- mixed mid- and high-band frequencies
- enhanced features

Platform for Fixed Wireless Services

- wireless competing with cable and ISPs for video and internet subscribers
- uses wireless signals rather than a physical line to the subscriber's premises

What Do These Facilities Look Like?



unconcealed antenna with
exposed jumper cables

weatherhead for utilities
routed thru external
conduits

equipment cage
RRUS, DC suppressor,
fiber distribution

optional backup battery

power meter,
distribution panel and
disconnect switch



The Walrus

The Spear Gun





The Bayonet

The Backpack





The Fannypack



concealed antenna with tapered shroud

utilities routed thru internal conduits

equipment shroud
RRUS, DC suppressor,
fiber distribution

flat-rate service
obviates the need for
an electric meter



bracket-mounted antenna

internal conduit risers

accessory equipment
concealed in faux mailbox

flat-rate electric
meter and backhaul
utilities in handholes

How Does State and Federal Law Impact Local Authority?

Public Utilities Code

- **Section 7901**

- grants telephone corporations a state-wide franchise to access and use the public rights-of-way necessary to provide telephone services
- providers cannot **incommode** the public's use
- preserves **aesthetic control** over ROW facilities

- **Section 7901.1**

- preserves reasonable **time, place and manner** regulations over how telephone corporations access and use the ROW
- regulations must be applied equally to all providers

T-Mobile v. San Francisco **(Cal. Supreme Ct. 2019)**

- **facts:** SF adopts new ordinance that requires a discretionary permit for ROW facilities; T-Mobile, Crown Castle and ExteNet sue under PUC § 7901
- **held:** localities can exercise aesthetic control through a discretionary permit scheme; the legislature intended state and local control to co-exist and did not preempt the field
- **takeaway:** extreme positions prohibited – carriers cannot build whatever and wherever, localities must reasonably allow access to ROW

T-Mobile v. San Francisco **(Cal. Supreme Ct. 2019)**

The gist of plaintiffs' argument is that section 7901's purpose is to encourage technological advancement in the state's telecommunications networks and that, because enforcement of the Ordinance *could* hinder that purpose, the Ordinance is preempted. **But no legislation pursues its objectives at all costs.** (*Pension Ben. Guar. Corp. v. LTV Corp.* (1990) 496 U.S. 633, 646-647.) Moreover, the Legislature made clear that the goal of technological advancement is not paramount to all others by including the incommode clause in section 7901, thereby leaving room for local regulation of telephone line installation.

- **unanswered question:** how do local gov'ts reconcile state law authority with limitations in the federal Communications Act?

47 U.S.C. § 332(c)(7)

Substantive Limitations

- cannot explicitly or **effectively prohibit** wireless services or wireless facilities
- cannot **unreasonably discriminate** between functionally equivalent services or providers
- cannot regulate based on **environmental effects from RF emissions** to the extent such emissions comply with FCC regulations

47 U.S.C. § 332(c)(7)

Procedural Limitations

- must act on wireless application with a **reasonable time** given scope and project type
- must issue a **written decision** based on **substantial evidence** in the written record
 - reasons for denial must appear either on the denial notice or in a contemporaneously available record
 - evidence must be specific to the project and not a generalized complaint about wireless facilities

47 U.S.C. § 253

- § 253(a) preempts local regulations that effectively prohibit **any entity's** ability to provide **telecommunications services**
- § 253(c) preserves **competitively neutral, non-discriminatory** local ROW management rules
 - **safe harbor:** most ROW management rules OK even if it might have a prohibitory effect
 - rules can't favor one provider/service over others

FCC Orders

August Order

- primarily addresses two unrelated issues:
 - preempting *de jure* and *de facto* moratoria by local governments
 - one-touch/make-ready rules applicable to joint pole attachments
- moratoria now per se illegal
- includes moratoria for resurfaced streets
- very limited exceptions
- adopted on Aug. 2, 2018; effective now

FCC Orders

September Order

- abrogates proprietary/regulatory capacity distinction
- restricts all compensation to cost recovery (or less)
- re-writes judicial interpretations for effective prohibitions under two different provisions in the Communications Act
- new “shot clocks” requiring local gov’ts to do more with less time and fewer resources
- new evidentiary presumptions and remedies
- adopted on Sep. 27, 2018; partially effective Jan. 14, 2019, fully effective Apr. 15, 2019

What's a Small Cell?

Small cells are the
size of a pizza box!



FCC Chairman Ajit Pai

What's a Small Cell?

(l) *Small wireless facilities*, consistent with section 1.1312(e)(2), are facilities that meet each of the following conditions:

(1) The facilities—

(i) are mounted on structures 50 feet or less in height including their antennas as defined in section 1.1320(d), or

(ii) are mounted on structures no more than 10 percent taller than other adjacent structures, or

(iii) 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;

(2) Each antenna associated with the deployment, excluding associated antenna equipment (as defined in the definition of antenna in section 1.1320(d)), is no more than three cubic feet in volume;

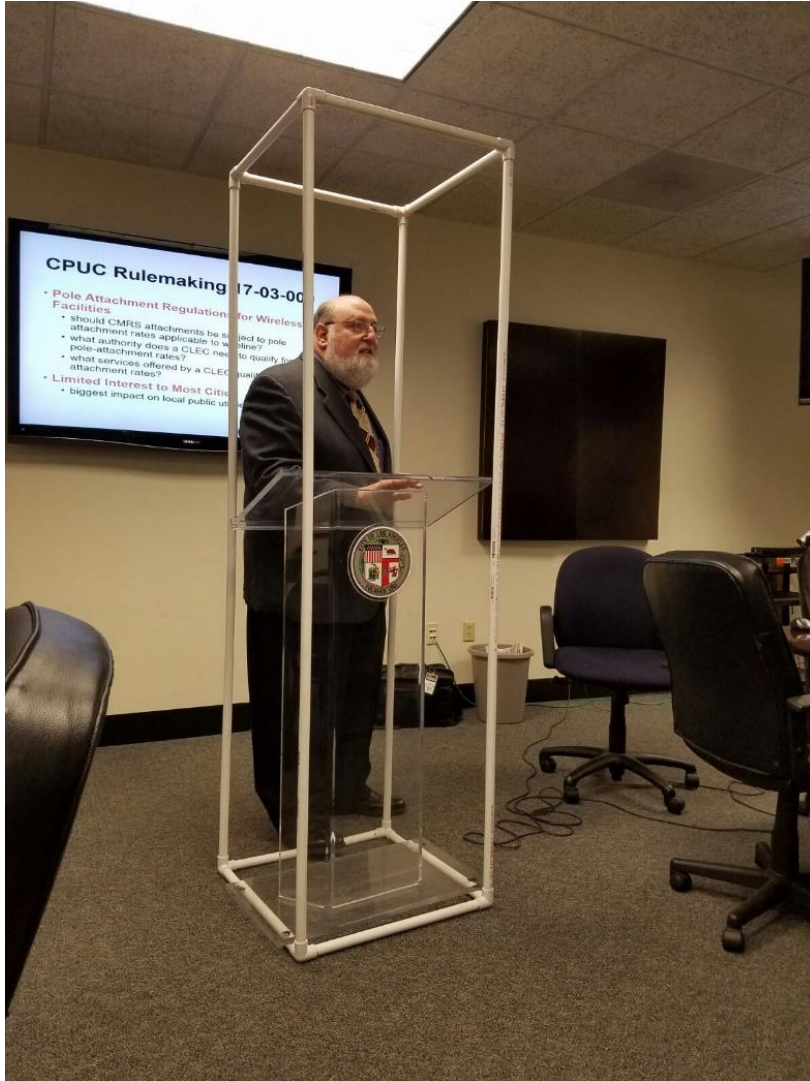
(3) All other wireless equipment associated with the structure, including the wireless equipment associated with the antenna and any pre-existing associated equipment on the structure, is no more than 28 cubic feet in volume;

(4) The facilities do not require antenna structure registration under part 17 of this chapter;

(5) The facilities are not located on Tribal lands, as defined under 36 CFR 800.16(x); and

(6) The facilities do not result in human exposure to radiofrequency radiation in excess of the applicable safety standards specified in section 1.1307(b).

How Big is 28 Cubic Feet?







22.5 cubic feet



Effective Prohibitions

General Rule

a state or local requirement effectively prohibits deployment when it “materially limits or inhibits **any competitor’s or potential competitor’s** ability to compete in a fair and balanced legal and regulatory environment.”

Effective Prohibitions

Fee Requirements must be:

- (1) reasonably approximate to cost;
- (2) objectively reasonable to pass to applicant; and
- (3) no higher than fees charged to competitors in similar circumstances

Effective Prohibitions

Non-Fee Requirements (aesthetics) must be:

- (1) reasonable (i.e. technically feasible);
- (2) no more burdensome than those applied to other infrastructure deployments;
- (3) objective; and
- (4) published in advance

New Shot Clock Rules

Shorter Timeframes

60 days

- small wireless facilities on existing structures
- all eligible facilities requests under Section 6409

90 days

- small wireless facilities on new structures
- collocations not covered as an eligible facilities request or small wireless facility

150 days

- everything else...
- new, freestanding non-small wireless facilities

Events on the Horizon

Portland v. FCC

- briefing schedule established (conclude by Sep. 18, 2019)
- decision possible by early 2020

Legislative Repeal Efforts

- H.R. 530 (Eshoo) [introduced Jan. 14, 2019]
- S. _____ (Feinstein) [anticipated in April]

Congressional Investigations

OTARD NPRM

- extend same rules on customer-end satellite TV dishes to provider-end fixed wireless antennas

Practical Tips

- **Simplify the Site License Process**

- use template forms with a narrow scope and short term
- consider provisions for what happens if the FCC rules are invalidated
- require PE template license for a complete application

- **Track Your Actual Costs and Recover Them**

- your costs will exceed the FCC's presumptive limit
- you will be challenged on some level by applicants
- you should prepare to defend your costs

Practical Tips

- **Adopt Flexible Regulatory Structures**

- what we do today will be wrong tomorrow so let's make the adjustments easier on staff and electeds
- consider ordinances that delegate authority
- consider resolutions and design guidelines that are quicker to amend

- **Translate Existing Aesthetic Requirements into Objective Standards**

- this includes findings for approval

Practical Tips

- **Be Realistic About Time Limitations**

- 60 days will be the predominantly applicable shot clock
- that's not enough time for the traditional zoning process
- initial decisions should be at a staff level; consider whether to offer an appeal and how much time will be needed

- **Communicate Issues to Staff, Officials and the Public**

- staff training is critical – especially on shot clock processes
- decisionmakers need to know the legal limitations
- the public needs to be informed about where these restrictions come from and potential consequences of noncompliance

Questions?