

LARIMER COUNTY



# WIRELESS COMMUNICATION FACILITIES REGULATIONS WORK SESSION

PLANNING COMMISSION AND BOARD OF COUNTY  
COMMISSIONERS - AUGUST 21, 2019



# THIS WORK SESSION

## **1. Presentation**

1. Process (Ellis)
2. Legal framework (Fellman)
3. Draft regulations (Ellis)

**2. Q&A and Discussion:** Do you want changes in proposed regulations?

**3. Next Steps**



# OVERVIEW – THIS PROCESS



# WHY ARE WE UPDATING CH. 16 LAND USE REGULATIONS?

**Better examples**



**Worse  
examples**



## WHAT IS THE SCOPE?

### Land Use regulations for what we can regulate:


- Type of facility and where
- Heights
- Setbacks
- Appearance
- Screening
- Procedures (shot clock limitations)
- In right-of-way

**Ken Fellman will discuss state and federal framework**

Larimer County – Wireless Regulations

## 2 – What can the County Regulate?

**The Federal Communications Commission (FCC) and State of Colorado Regulations Govern how Larimer County Can Regulate Wireless Facilities**



1996 Congress passed the Telecommunications Act. They generally preserved local government approval authority with a few exceptions:



1. Any denial of a wireless facility had to be in writing (47 U.S.C. 332(c)(7)(B)(i)).
2. Regulations could not prohibit or have the effect of prohibiting wireless service (47 U.S.C. 332(c)(7)(B)(xii)), and
3. Wireless regulations could not be based on the health effects of RF (Radio Frequency) (47 U.S.C. 332(c)(7)(B)(iv)).

2017, the State of Colorado passed the state small cell bill, which further restricted cities and counties, by requiring that small cell facilities be allowed in all zones, however the state small cell bill still generally preserved a local government's ability to regulate wireless facilities (C.R.S. 29-27-404(3)).

September of 2018, the FCC Order on small cells came out, further restricting local government's ability to regulate (FCC WT Docket No. 17-79 (Sep. 27, 2018)). Local governments cannot prohibit or create regulations that make it so difficult to essentially prohibit wireless facilities. This 2018 Small Cell Order is currently being appealed in the 9th Circuit.

**What does this really mean?**  
 Cities and Counties are limited in their ability to regulate wireless facilities. Larimer County can regulate:

1. Type of facility (concealed, not concealed, attached, small cell, temporary)
2. Height of tower or facility
3. Setbacks from property lines & residential uses
4. Appearance of the facility (concealed or not)
5. Screening of the ground-based equipment, for example landscaping and fencing
6. Process, however must comply with rigid time frames, referred to as the "Shot Clock"
7. Within ROW – quantity, size, and location

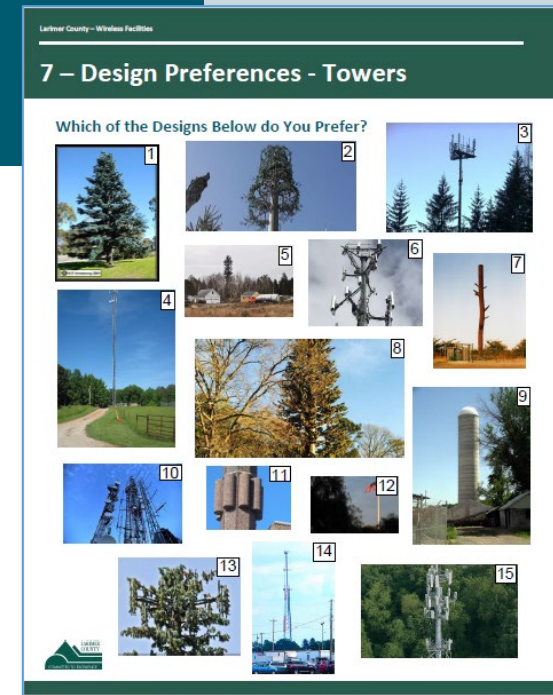
# PROCESS AND NEXT STEPS

## Previously

- Work session on small cell (Oct. 2018)
- Work sessions in spring 2019 (2 in April)
- Public open house (May)
- Online public engagement and emails (May, to now)
- Joint work session (May)
- Hearing June 19, tabled...revisions, and today's session

## Next Steps, if ready:

- Final revisions
- **Sept. 11** public hearing with PC – recommendation
- **Oct. 7** public hearing with BCC – decision



# QUESTIONS AND COMMENTS FROM COMMUNITY

- Safety (fire)
- Security and privacy
- Health (RF emission sensitivity)
- Signage
- ADA compliance
- Design and compatibility
- Locational differences (e.g., GMAs vs. outside)
- Locational preferences (e.g., not in residential areas or fire stations)
- Property values
- Local authority (how much?)
- Dig Once (disruptions in right-of-way)
- Master License Agreement and what it covers
- Impact to electrical system
- Concerns about 5G (health, impacts especially )
- Allow/not allow in residential zoning districts
- Etc.

## OTHER EXPERTISE AND RESOURCES

- Coordinated with other county staff (engineer, emergency services, IT) and fire districts
- Reviewed other community regulations
  - (e.g., Boulder County and City, Weld County, Douglas County, Petaluma, CA, Syracuse, NY, Marin County, etc.)
- Shared draft with ESAB for feedback
- Shared with cities; feedback from Fort Collins
- Watched panel discussion about 5G



## CURRENT REGULATIONS (CH. 16)

1. Allow concealed antennas in all zone districts; no height limitations; administrative review; no public notice requirement
2. Include preferred order for facilities (co-location, attached antennas, concealed antennas, microcell antenna towers, antenna towers)
3. Allow only concealed facilities on residential properties not other tower types
4. Allow attached facilities to extend 15 feet above the height of the underlying zone district
5. Require screening for ground-based equipment
6. Setbacks of the underlying zone district apply

# CURRENT REGULATIONS DON'T ADDRESS...

1. New technology (small cell facilities)
2. Use of public right-of-way
3. Clear camouflage/concealment and context standards
4. Height limitation for concealed/stealth facilities
5. Notice to adjacent properties for administrative decisions and notice of decision



# LEGAL FRAMEWORK (FELLMAN)



# WHAT I'M GOING TO COVER

1. Colorado's Small Cell Bill: HB17-1193
2. FCC Small Cell Order: September 2018
3. Conflicts between the two
4. Challenges to the FCC order
5. Radio Frequency concerns
6. What other jurisdictions are doing

# COLORADO'S SMALL CELL LAW HB 17-1193

- Small cells are a use by right in any zone district
- Subject to local police powers (including zoning requirements)
- Applies existing state shot clock for wireless facilities
- Provides for “batched” applications
- Authorizes use of local government light poles, light standards, traffic signals, or utility poles in the rights-of-way
- Does not limit fees for attachments to government-owned poles unless fees would be limited if the local government were regulated pursuant to federal pole attachment rules

# FCC SMALL CELL ORDER – SEPTEMBER 2018

- Interprets “prohibit or effectively prohibit” under Sections 253 and 332 to mean “materially inhibit”
- Creates tests to see if local government action exceeds “materially inhibit” standard:
  - Tests for when fees, aesthetics, undergrounding & spacing, “act in a timely manner,” and other requirements materially inhibit service.
  - Creates “cost caps” for regulatory fees both inside and outside of rights-of-way; caps rent within ROW
  - Creates 2 new shot clocks for “small cells”
  - Redefines “Collocation”

# CONFLICTS BETWEEN COLORADO STATUTE AND FCC SMALL CELL ORDER

- FCC order conflicts with State statute in multiple ways
  - Key definitions, like what is a small cell facility and what is collocation
  - Shot clocks
  - Fees that can be charged for licenses and permits
  - Use of government-owned structures in the ROW
  - Aesthetics
- We are trying to comply with both, but where conflict, State law should control

# CONFLICTS BETWEEN COLORADO STATUTE AND FCC SMALL CELL ORDER – SPECIFIC ISSUES RELATED TO AESTHETICS AND PUBLIC SAFETY

- Aesthetics under State law: local zoning preserved, which includes authority to impose aesthetic requirements
- FCC Rules: aesthetics requirements are not preempted if they are
  - objectively reasonable,
  - no more burdensome than those applied to other types of infrastructure deployments, and
  - objective and published in advance





## FCC ORDER LEGAL CHALLENGE

- Order being challenged by many local governments in US District Court, 9<sup>th</sup> Circuit (including many Colorado jurisdictions through the Colorado Communications and Utility Alliance – Larimer County is a member)
- Briefing underway – hope to have decision first or second quarter of next year
- Related case from same FCC docket: UNITED KEETOOWAH BAND OF CHEROKEE INDIANS IN OKLAHOMA, ET AL., PETITIONERS v. FEDERAL COMMUNICATIONS COMMISSION, DC Circuit, No. 18-1129, August 9, 2019 – overturned part of FCC order which eliminated NEPA and NHPA review for small cells, based on FCC’s “arbitrary and capricious” determination that small cell deployment will not have significant environmental or historic preservation impact.
  - Will not be determinative of small cell order appeal, but is helpful

# COMMON PUBLIC CONCERN: RADIO FREQUENCY EMISSIONS

- Telecom Act of 1996: any state or local laws seeking to regulate based on the environmental (including health) effects of radio frequency emissions is preempted
- Case law has supported this preemption
- FCC has sole federal authority to set health emissions standards
- It has had standards in place for many years, and has had a docket open to update the standards for the last 6 years
- Some communities have created restrictions that likely violate federal law; others that have been held out as examples of stopping 5G deployment are described inaccurately

# COMMON PUBLIC CONCERN: RADIO FREQUENCY EMISSIONS

- The County can require certification that sites will comply with FCC standards; County can undertake its own testing; authority for requiring company testing is less clear
- Concerns about RF are usually about cumulative levels, not necessarily from one particular site – one possible item to consider – periodic testing after multiple sites added to determine cumulative impacts
- Resources:  
[http://wireless.fcc.gov/siting/FCC\\_LSGAC\\_RF\\_Guide.pdf](http://wireless.fcc.gov/siting/FCC_LSGAC_RF_Guide.pdf)  
<https://www.fcc.gov/general/fcc-policy-human-exposure>

## OTHER COLORADO JURISDICTIONS

- Many are updating codes, addressing updates in federal law from 2014 and 2018, and state law in 2017
- Adopting design (aesthetic) standards
- Some examples:
  - Denver (very comprehensive design standards)
  - Douglas County (aesthetic/design standards adopted 4/15/19)
  - Arapahoe County (Design standards for small cell facilities in the ROW, plus checklist for applications adopted April 2019)
  - Developed master license agreement for small cells in ROW and working on code revisions/design standards



# LARIMER COUNTY PROPOSED REGULATIONS



## WHAT'S CHANGED SINCE JUNE DRAFT? ATTACHMENT B

- Definitions consistent with state and federal
- Removal of redundancies
- Cleaner organization
- Some new standards and changes in zoning districts (noted)
- Carrying forward some current standards (noted)

## QUESTIONS TO DISCUSS

To make the draft adoption-ready, do you want to see changes to any of the following?

- Operational requirements
- Locations/heights
- Design standards
- Review procedures
- Application and submittal requirements
- Questions or input regarding Master License Agreement?

# PROPOSED REGULATIONS (ATTACHMENT A) SECTIONS

1. Intent and Purpose
2. Applicability
3. Zoning Districts
4. Design Standards (facilities not in the right of way, small cell facilities in right-of-way)
5. Administrative Waiver
6. Procedures
7. Application submittal requirements
8. Definitions



# APPLICABILITY

## Regulations apply to:

- Base Stations, Alternative Tower Structures, Towers, and Small Cells.

## Exclude:

- Amateur radio antenna, Over-the-Air Receiving Device
- Pre-existing WCFs
- A WCF installed for an emergency by public entity
- A temporary WCF

Would not preempt underlying zoning regulations and building permits are required – or right-of-way permit.

# DEFINITIONS / TYPES

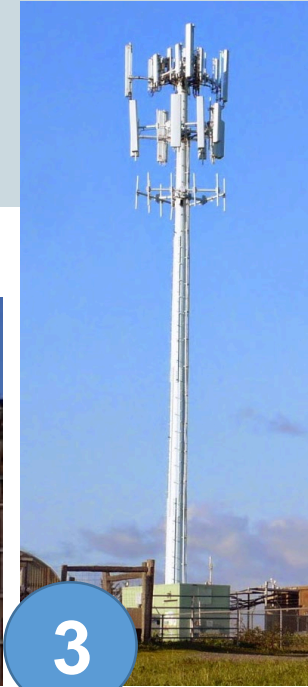
1. Base station



2. Attached Facility



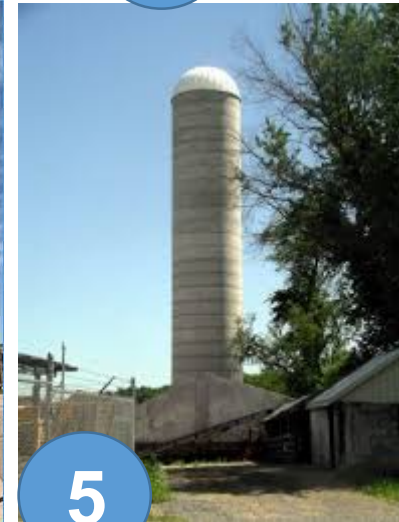
3. Tower (not concealed)



4. Small Cell Facility



5. Alternative Tower Structure (concealed)



# ALLOWED LOCATIONS AND HEIGHT

**Table 16.A:  
Zoning Districts  
Where WCFs  
are Allowed**

ZONING DISTRICT	Attached Facility on Existing Structure (including Eligible Facilities)	Small Cell Facility	Alternative Tower Structure (concealed)	Tower (non-concealed)
E and E-1 Estate RE and RE-1 Rural Estate R, R-1, and R-2 Residential M and M-1 Multiple Family	SP	SP ≤ 40 feet high	SP ≤ 40 feet high PSP ≤ 60 feet high	Not permitted
FA and FA-1 Farming FO and FO-1 Forestry	SP	SP ≤ 40 feet high	SP ≤ 40 feet high PSP ≤ 60 feet high	PSP ≤ 60 feet high MS ≤ 80 feet high
A Accommodations T Tourist	SP	SP ≤ 40 feet high	SP ≤ 40 feet high PSP ≤ 60 feet high	PSP ≤ 60 feet high MS ≤ 80 feet high
B Business RFLB Red Feather Lakes Business	SP	SP ≤ 40 feet high	SP ≤ 40 feet high PSP ≤ 80 feet high	PSP ≤ 60 feet high MS ≤ 100 feet high
C – Commercial I – Industrial I-1 – Heavy Industrial PD – Planned Development	SP	SP ≤ 40 feet high	SP ≤ 40 feet high PSP ≤ 80 feet high	PSP ≤ 60 feet high MS ≤ 120 feet high
O-Open	SP	SP ≤ 40 feet high	SP ≤ 40 feet high MS ≤ 100 feet high	PSP ≤ 60 feet high MS ≤ 120 feet high SR ≤ 160 feet high
AP – Airport	SP	SP ≤ 40 feet high	SP ≤ 40 feet	PSP ≤ 40 feet

# WHAT ABOUT RESIDENTIAL PROPERTIES AND AREAS?

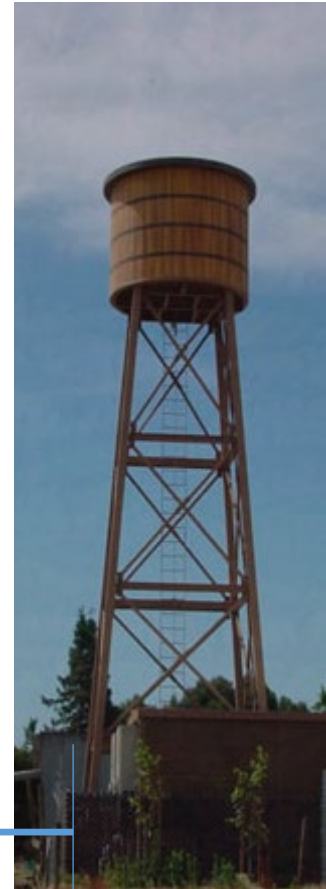
- The current regulations prohibit facilities on residential properties and buildings.
- Proposed regulations include:
  - Better screening requirements,
  - Larger setbacks (next slide)
  - Address adjacencies and siting (p. 6)
  - Address GMA referral
  - Address notification

# SETBACKS

2:1 when adjacent to properties, buildings, or structures with residential uses

1:1 when adjacent to any right-of-way

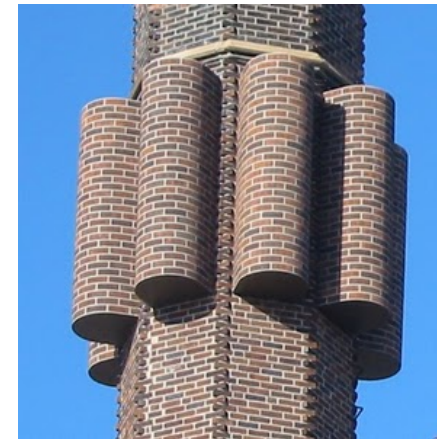
Otherwise, 30%



# DESIGN AND CAMOUFLAGE

**Blend the WCF into the natural setting and/or built environment through materials, colors, textures, screening, undergrounding, or other design options.**

*READILY APPARENT. Will the WCF be easily recognizable... in the context of any adjacent improvements and landscaping from publicly accessible locations?*



# SPECIFIC STANDARDS FOR SMALL CELL FACILITIES

- Allowed on private properties all zoning districts by right; review limited to aesthetics, spacing, height
- Must allow in the right-of-way - Use of Master License Agreement
- Short review time (“shot clock”) – 90 days

# PROCEDURAL REVIEW TYPES

**Table 16.B – Review Procedures and Requirements for Different Facility Types**

Procedure	Applies to	Notice Given	Referral	Type of Decision	Appeal to	Time-frame
<b>Site Plan (SP)</b> – Sec. 6.0 and 6.1 of Code	<ul style="list-style-type: none"> <li>• See Table 16 A for zoning districts and tower types</li> <li>• Eligible facilities requests</li> </ul>	<ul style="list-style-type: none"> <li>• notice of administrative decision sent to abutting property owners following administrative decision</li> </ul>	<ul style="list-style-type: none"> <li>• Sent to referral agencies within 14 days</li> <li>• Notice sent to cities if in a GMA</li> </ul>	Administrative decision	BCC	60 days
<b>Public Site Plan (PSP)</b> – Sec. 6.2 of Code	<ul style="list-style-type: none"> <li>• See Table 16 A for zoning districts and tower types</li> </ul>	<ul style="list-style-type: none"> <li>• notice sent to neighboring properties within 500 feet of the property</li> </ul>	<ul style="list-style-type: none"> <li>• Sent to referral agencies within 14 days</li> <li>• Notice sent to cities if in a GMA</li> </ul>	Administrative decision but may be approved by Board of County Commissioners.	BCC	90 days
<b>Minor Special Review (MS)</b> – Sec. 4.5 of Code	<ul style="list-style-type: none"> <li>• See Table 16 A for zoning districts and tower types</li> </ul>	<ul style="list-style-type: none"> <li>• notice sent to neighboring properties within 500 feet of the property</li> </ul>	<ul style="list-style-type: none"> <li>• Sent to referral agencies within 14 days</li> <li>• Notice sent to cities if in a GMA</li> </ul>	BCC approval including a public hearing		90 days
<b>Special Review (SR)</b> – Sec. 4.5 of Code	<ul style="list-style-type: none"> <li>• See Table 16 A for zoning districts and tower types</li> </ul>	<ul style="list-style-type: none"> <li>• notice sent to neighboring properties within 500 feet of the property</li> </ul>	<ul style="list-style-type: none"> <li>• Sent to referral agencies within 14 days</li> <li>• Notice sent to cities if in a GMA</li> </ul>	Two public hearings: PC recommendation and BCC approval		150 days



# APPLICATION SUBMITTAL REQUIREMENTS

Applicants provide:

1. Vicinity Map.
2. Project Description.
3. Proof of Ownership or Lease Rights.
4. Photo-Realistic Simulations or Renderings.
5. Elevation Drawings.
6. Plan.
7. Signal Non-Interference Letter.
8. Radio Frequency Emissions Letter.
9. Submittal fees.
10. Landscaping Agreement, as relevant.
11. Federal Aviation Administration (FAA) letter, as relevant.
12. Inventory of Existing Sites.
13. For small cell facilities in the right-of-way inventory.
14. Abandonment and Removal letter.

## QUESTIONS - DIRECTION

1. Do you have feedback on the draft standards (list in your memo)?
2. Are you ready to move toward hearing in September?