



Small Antenna & Microtower ZTA Community Meeting

Montgomery County, Maryland

October 9, 2017





Federal Law – Three Facts

- Under federal law, the County may regulate placement of telecom towers and antennas, but may not prohibit the provision of telecom service.
- The County Transmission Facilities Coordinating Group enforces FCC radio frequency (RF) emissions standards, but under federal law, the County may not deny telecom siting because of concerns about RF emissions.
- The County Executive believes that RF emissions is an issue worthy of study. CE Leggett, Council VP Riemer, Rep. Raskin, and all members of the Montgomery County delegation have called on the FCC to complete its 2013 proceeding examining the health effects of RF emissions.





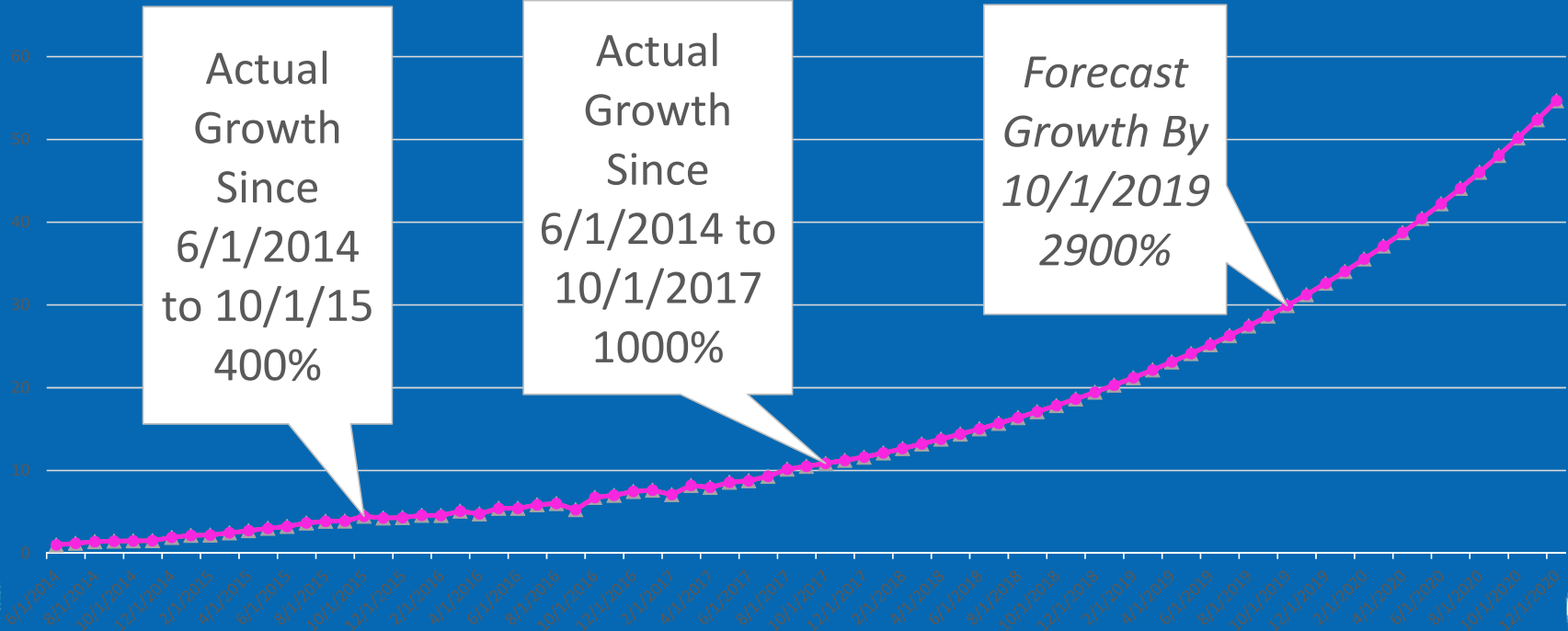
Montgomery Co. Is Using More Mobile Broadband

- More consumer consumption of data (especially video) on mobile devices – especially in urban areas
- More use of wireless networks in homes and roads – for entertainment, telecommuting, and nascent Internet of Things
- The FCC wants to impose more preemptive mandates to support small antennas as one means to deliver mobile broadband
- Rather than wait for one-sized fits all federal solutions to be imposed, the County Executive is seeking community input on how we prefer to this to be done. We zoned for macro towers in 1990s; now we need to zone for microtowers and small antennas.

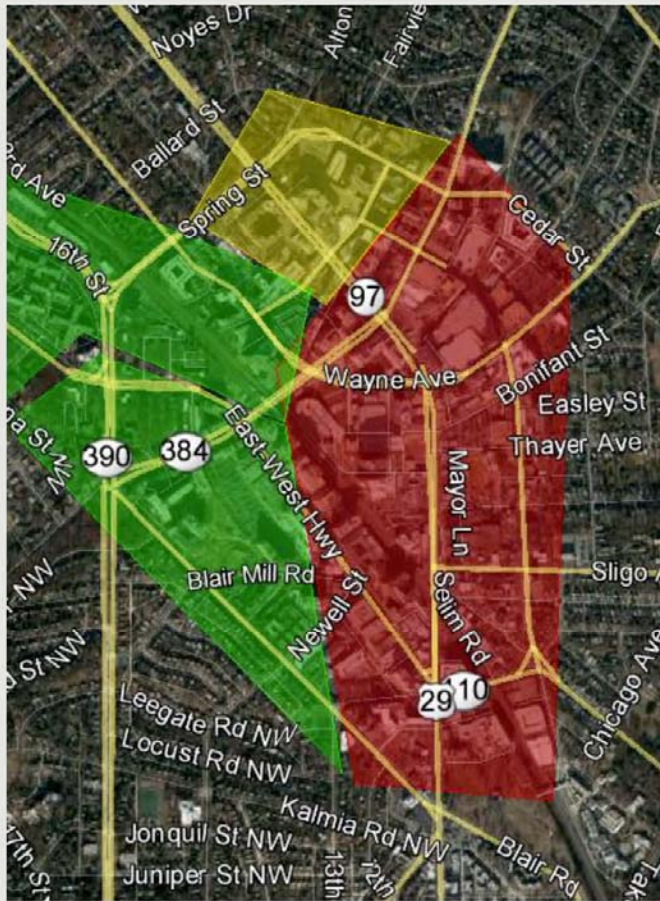




T-Mobile Data Usage Growth In Montgomery Co.

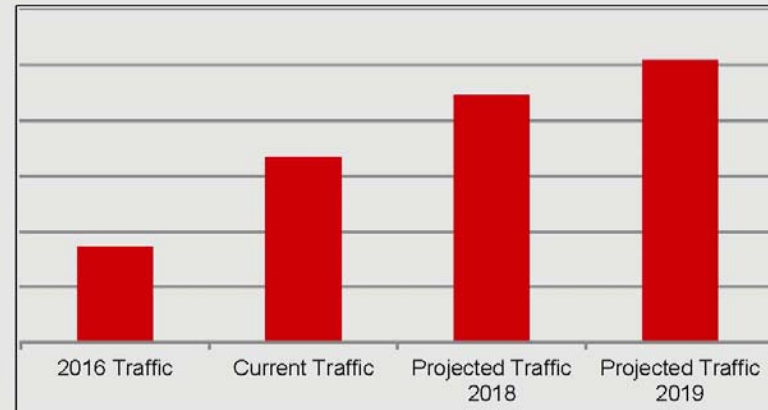


Silver Spring



The data capacity in these areas will begin to exhaust and the network performance will be degraded in the following years:

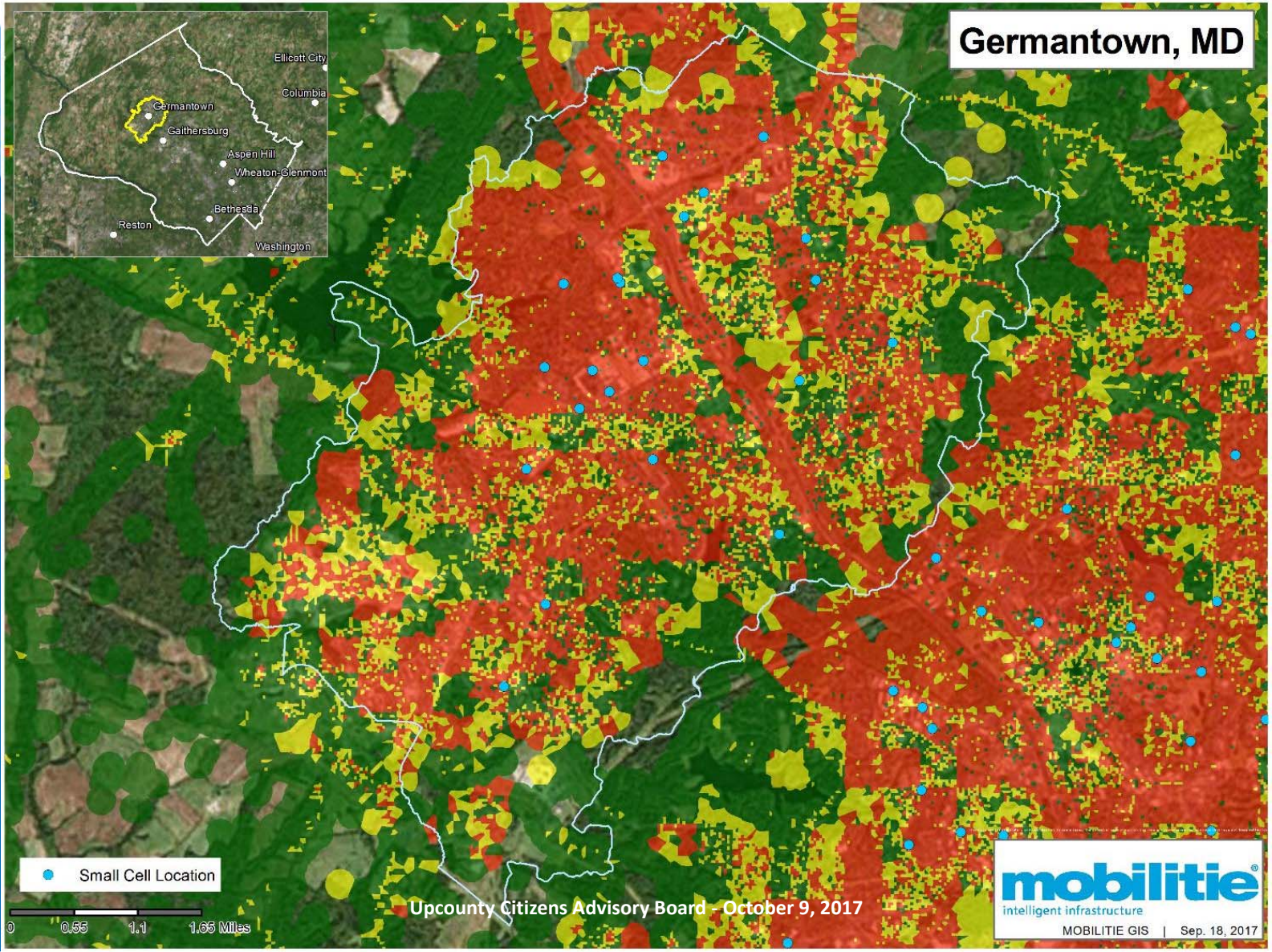
■ 2018
 ■ 2019
 ■ 2020



Silver Spring data usage is predicted to increase 50% within the next (2) years



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Germantown, MD



Local Solutions Are Better Than State/Federal Preemption

- It is better to be the master of our own destiny and create a local solution that protects community interests
- 2 states adopted legislation to preempt local siting in 2016
- 11 states adopted preemption in 2017
- FCC is working to further preempt at end of 2017





Federal Restrictions on Managing Antennas

47 U.S.C. Section 332(c)(7)

- The County cannot enact laws that prohibit or have the effect of prohibiting service, nor deny permits based on the environmental effects of radio frequency emissions other than FCC's standards
- We have to process applications within specific time limits:
 - 60-day "deemed granted" shot clock under Section 6409(a) of the Spectrum Act
 - 90-day shot clock, FCC interpretation of Sec. 332(c)(7) of the Communications Act
 - 150-day shot clock, FCC interpretation of Sec. 332(c)(7) of the Communications Act





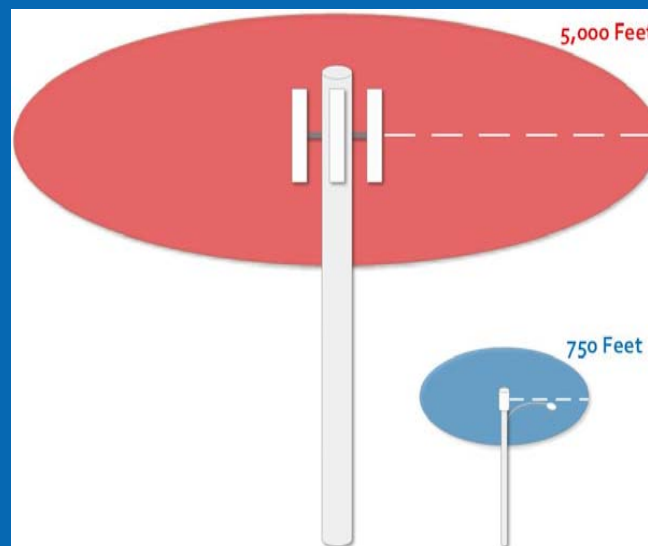
Recent FCC Actions

- Opened 3 new proceedings asking for ways to further preempt local zoning, suggesting:
 - Even shorter time frames to process applications
 - Limiting regulatory fees and compensation to cost
 - Enact preemptory zoning (or “deemed granted”) for failure to act within time limits instead of courts
- Opened Broadband Deployment Advisory Committee (BDAC) and stocked it with industry representatives
- Expects BDAC report Nov 2017, and to issue Order in Dec 2017



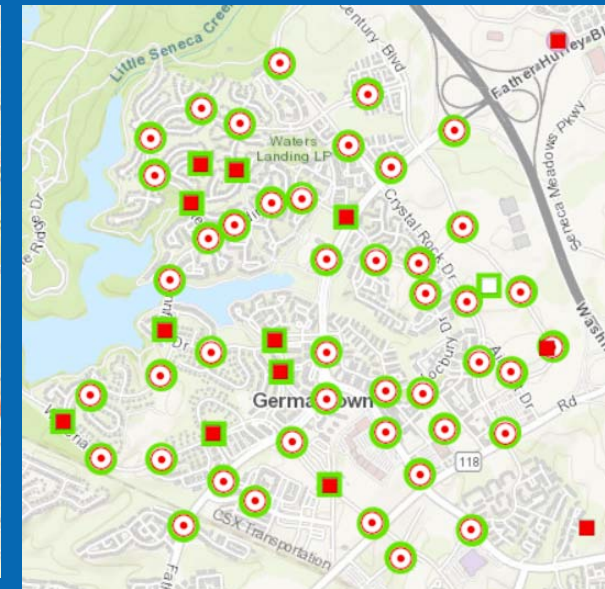
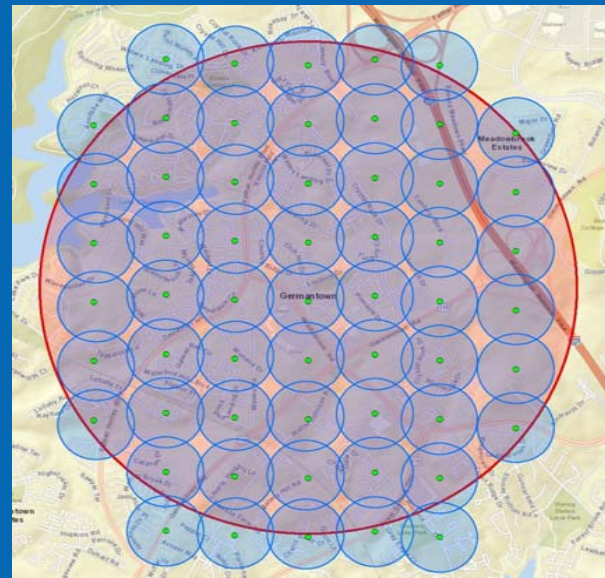
Why So Many New Small Antennas? “DENSIFICATION”

- Small antennas are one means to deliver more mobile broadband
- 100-foot antenna covering 1 mile radius provides same capacity as 20-foot antenna with 750 ft radius
- Current technology cannot be used to put all the new antennas on the macrotower



Upcounty Case Study

- Appx 57 microtower antennas fit in diameter of the microtower
- Build microtowers to add coverage as needed
- Newer 5G spectrum won't travel as far – microtowers are needed





Summary of the Zoning Text Amendment

The County released a suggested proposal in July 2017 to get input on:

- Allowing antennas on lower height buildings as Limited Use
- Allowing replacement poles with 5'-10' additional feet as Limited Use (additional feet on wider and widest roads)
- Keeping Conditional Use process – with a public hearing – for installation of new poles

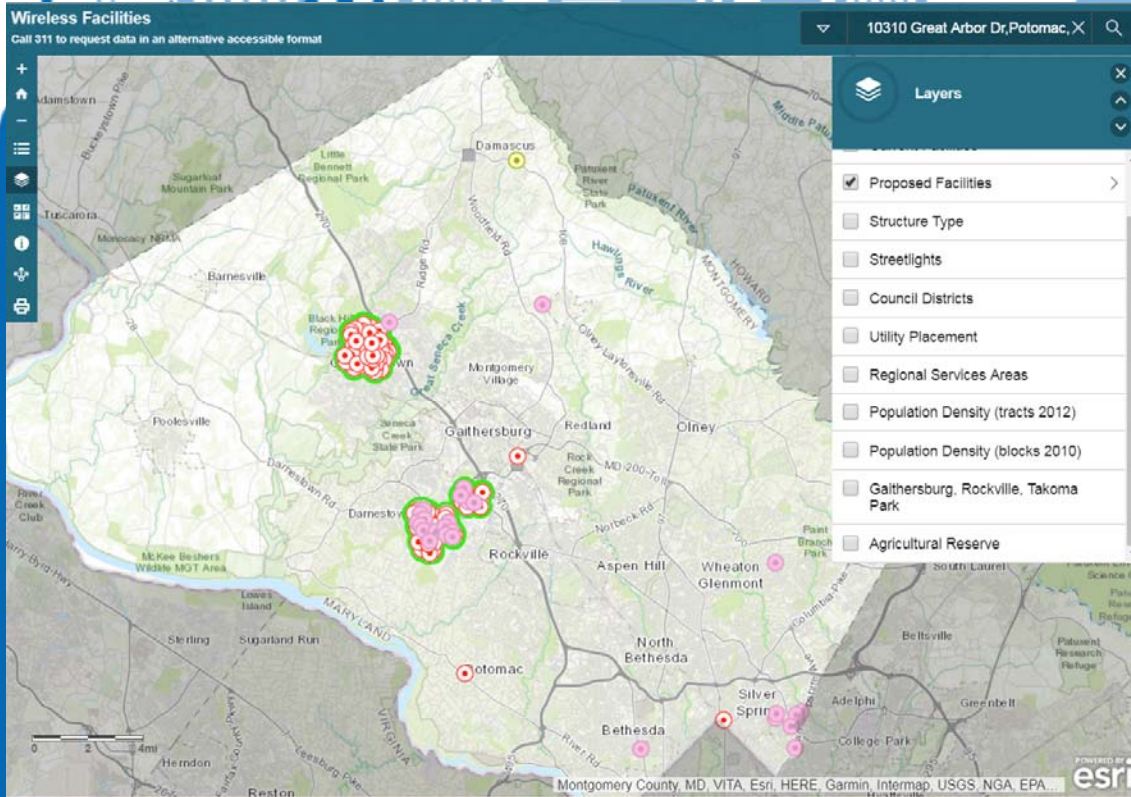




Process Improvements (in internal review)

- Use on-line submission to weed out worst of incomplete applications and increase transparency (in beta testing now)
- Add feature to automatically notify HOA when completed TFCG application is received
- \$500 fee for incomplete applications and 30 day time limit to submit missing information
- 60-90 time limit to use TFCG Recommendation
- Require applicant to submit post-construction photo (need to address enforcement)
- Review antenna size and technical requirements every 3 years to see if smaller antennas and equipment can be required





New Mapping Tool

Also at

www.montgomerycountymd.gov/towers



MAP

<https://gis3.montgomerycountymd.gov/WirelessAntennasAndTowers/>





Upcoming Community Meeting

Monday October 23, 2017 7-9PM

Council Office Building - Rockville

The community hearing will be televised and streamed on the County's website, Facebook, and YouTube, and will be recorded

www.MontgomeryCountyMD.gov/AntennaZTA





More Information and Input

www.MontgomeryCountyMD.gov/AntennaZTA

<https://mococtfcg.blogspot.com/p/home.html>

AntennaZTA@montgomerycountymd.gov

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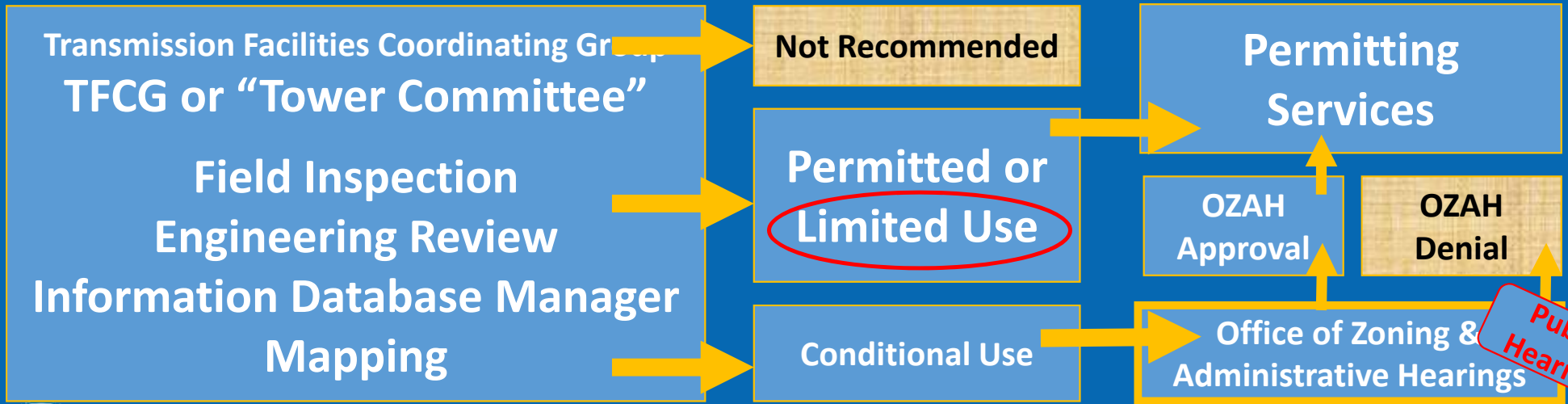


County's Antenna Siting Process

Also need property owner's permission

→ → → 30 – 60 Days → → →

→ → 90 Days



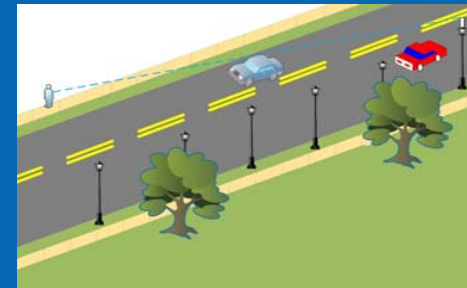
→ → → 30 – 60 Days → → →

→ → 150 Days



Summary of Draft ZTA – Limited Use Changes

- Allow pole replacements as Limited Use
 - Current height plus 5' if road is less than 30 ft wide
 - Current height plus 10' if road is 30-60 ft wide
 - Up to 45' on roads wider than 60 ft
 - Wires in pole/conduit on wood, pole painted same color
 - **Need to address utility pole safety distances**
- Streetlights and utility poles, and parking lot lights in commercial areas could be replaced as Limited Use – pole owner must consent
- **Should additional equipment should be at base or top of pole**
- **Should taller (9' vs 4'), 1.25' canister antenna be allowed in some areas**





Summary of Draft ZTA – Conditional Use Changes

- Need to avoid prohibiting service in neighborhoods with underground utilities where pole owner will not consent to pole use
 - Conditional Use public hearing with notice provided
 - New pole should be same distance from street as current streetlights
 - Same height restrictions
- **Add – new poles only at property line**
- **Revise setback – replaced 300 ft setback with one-to-one; amend to keep 300 ft setback, with exception for poles 45 feet or shorter**





14' to 16' Colonial Streetlight Replaced with 19' to 20' side mounted or ground cabinet



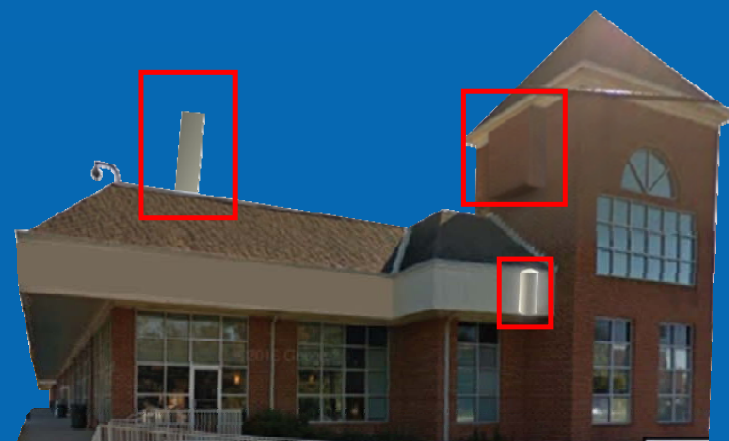


27' Cobrahead-Style Pole with Panel Antennas & Equipment





**Allow antennas on shorter buildings
but increase camouflage requirements
if placed on shorter buildings**





Summary of Antenna Changes for Buildings

Type	Size	Towers & Watertanks	Utility & Light Poles	Residential Detached, Rural Residential, PUD		Residential MDU, Commercial/Retail, Employment & Industrial		
				Bldg Rooftop	Façade w/ paint/screen	Rooftop	Façade w/ paint/screen	Rooftop or façade
Bldg Ht				35 feet or taller		20 ft	20 ft	15 ft
A	2.5CF / 2.5'	Yes	Yes	Yes	Yes	Yes	Yes	Yes
B	6CF / 4' in can	Yes	Yes	Yes	Yes	Yes	Yes	
C	46 CF / Wide 4'	Yes		Yes		Yes	Yes	
D	30 CF / Wide 6'	Yes		Yes		Yes		
E	9 CF / Slim 9'	Yes		Yes		Yes	Yes (30' bldg)	
F	1 CF / Slim 15'	Yes		Yes		Yes		



What Else Is County Doing to Address RF Concerns?

- FCC has exclusive authority to regulate radio frequency (RF) emissions standards – it last updated rules in 1996; it opened 2013 proceeding to address health effects of RF emissions.
- CE Leggett, Council VP Riemer, Rep Raskin and staff from entire congressional delegation met with FCC Chairman in May. CE specifically asked FCC to complete 2013 proceeding before issuing new zoning preemption rules.
- Wireless Industry Association – trade association for tower builders – has agreed to join County to ask FCC to complete RF proceeding; County is working to find Republican Congressional members to join as well.





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Purpose of 4 Community Meetings

- Public meetings provide another forum, in addition to email and a website, to obtain public input on the draft ZTA.
- The Community Meeting is not a public hearing. The County Council will schedule a public hearing after the County Executive submits legislation. The public hearing will be televised, Internet streamed, and recorded.
- The County Council will have opportunity to amend legislation submitted by the County Executive for Council consideration.





More Information and Input

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