ZTA 22-01 September 13, 2022

I want Montgomery County to be a leader in telecommunications by showing how we can have the excellent communications without altering neighborhoods:

- fiber to all premises.
- industry moving to longer range 5G signals outside of residential areas.

I'm disappointed with how council members:

- refused to meet with constituents.
- reduced of our speaking time from three minutes to two minutes
- one in particular making up total fantasizes about health
- one in particular talked down to residents
- misrepresented the role of Livhu Ndou, Esq. Her client is the PHED committee and in particular the chair. She isn't presenting balanced information. She advocates for cell towers.

It's total nonsense that Montgomery County is required to place cell towers in the residential rights-of-way. Gaithersburg has banded cell towers in their residential rights-of-way.

Congress writes the laws. FCC transforms laws into regulations. Circuit courts adjudicate any disagreements. Court decisions are final. FCC has no right to change court rulings.

Court of Appeals for the Second Circuit Court rejected the FCC's "material inhibition" standard:

- Village Lynbrook wins over Clear Wireless
- Village of Flower Hill wins over ExteNet

The "effective prohibition" stands unchanged.

You need to invite Andrew Campanelli or Scott McCollough to speak. Both are nationally recognized telecommunications lawyers.

There is no legal nor technical need for 22-01. Don't waste your time on it.

Setback from residential housing:

1,500 feet

- Bar Harbor, Maine
- Copake, New York
- Sallisaw, Oklahoma
- Walnut City, California

Why all this emphasis on legacy 5G technology promoted by a losing candidate?

The council's statement that cell rights-of-way are required is based on FCC's illegal action.

4G/5G Wireless & "Small Antennas" Fact Sheet
Children, Pregnant Women, and Adolescents Harm

- Children and adolescents are considered **a population at risk** in all matters relating to the health effects of exposure to radiation. The mental and physical characteristics of the young differ from those of adults. Therefore, exposure to radiation may affect their health in a different way.[1]
- The **President of the American Academy of Pediatrics** wrote to the Federal Communications Commission and the U.S. Food and Drug Administration in 2013 that "Current FCC standards do not account for the unique vulnerability and use patterns specific to pregnant women and children." The AAP also said, "The current metric of RF exposure available to consumers, the Specific Absorption Rate, is not an accurate predictor of actual exposure."[2] AAP represents 60,000 pediatricians. The FCC has yet to respond and propose standards appropriate to children, pregnant women for actual use.
- The **World Health Organization** (WHO) declared in 2010 that high priority should be given to research on the effect of radiofrequency radiation on the health of children. Accordingly, a number of large population studies are being conducted throughout the world, aimed at detecting potential effects of exposure of children to non-ionizing radiation emitted by various technologies.
- **Harvard Medical School** professor Dr. Martha Herbert, PhD, MD, a leading neuroscientist and autism expert: "EMF/RFR from Wi-Fi and cell towers can exert a **disorganizing effect on the ability to learn and remember**, and can also be destabilizing to immune and metabolic function. This will make it harder for some children to learn, particularly those who are already having problems in the first place." **Autism Spectrum Disorders** are consistent with physiological impacts of EMF and Radiofrequency Radiation exposure.[3]
- **Depression and widespread neuropsychiatric effects** – "26 studies have EMFs associated with neuropsychiatric effects," with 5 criteria showing causality. "EMFs cause at least 13 neuropsychiatric effects…."[4] due to voltage-gated calcium channel (VGCC) activation in the brain which controls neurotransmitters and neuroendocrine hormones. **ADHD** symptoms were documented in a study under the supervision of Hugh Taylor, MD, Yale University Chair of Obstetrics, **Yale School of Medicine** in mice exposed to cell phone radiation prenatally. The Yale study found "experimental evidence of neuropathology due to in-utero cellular telephone radiation."[5]
- **Children absorb more microwave radiation** (MWR) than adults because their brain tissues are more absorbent, their skulls are thinner and their relative size is smaller. MWR from wireless devices has been declared a possible human carcinogen. Children are at greater risk than adults when exposed to any carcinogen. **Because the average latency time between first exposure and diagnosis of a tumor can be decades, tumors induced in children may not be diagnosed until well into adulthood. The fetus is particularly vulnerable to microwave radiation.**[6]

  The **American Academy of Environmental Medicine** has issued an Open Letter to School Superintendents that it "strongly supports the use of wired Internet connections, and encourages avoidance of radiofrequency such as from Wi-Fi, cellular and mobile phones and towers, and "smart meters." **The AAEM letter said, "The evidence is irrefutable."**[7]

4G/5G Wireless & "Small Antennas" Fact Sheet
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Reported short-term health effects from exposure to microwave radiation including children[8]

- Dizziness, headaches, nausea
- Fatigue, weakness
- Anxiety, depression
- Insomnia
- Numbness, tingling, joint pain
- Muscle spasms
- Skin rashes, allergies, asthma
- Blurred vision, impaired vision
- Nose bleeds, impaired sense of smell
- Shortness of breath
- Concentration problems, memory loss
- Behavioral problems, learning problems, ADHD Hyperactivity, heart palpitation

Potential long-term health effects from microwave radiation as indicated in scientific studies

- Brain cancers, acoustic neuromas and other tumors
- Leukemia
- Lymphoma
- Melanoma
- Reduced production of Melatonin
- Impaired fertility
- DNA damage
- Pre-natal damage, miscarriages, birth defects
- Immune dysfunction, chronic allergic responses and inflammatory responses
- Neurological and behavioral effects
- Dementia and Alzheimer's Disease
- Epilepsy

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[1] Electromagnetics expert Dr. Om Ghandi published in IEEE [Institute of Electrical and Electronic Engineers] Access, "Yes the Children Are More Exposed to Radiofrequency Energy From Mobile Telephones Than Adults": http://ieeexplore.ieee.org/document/7131429/?reload=true&arnumber=7131429&contentType=Journals%20%26%20Magazines

[2] Letter from American Academy of Pediatrics (President Dr. Thomas McInerny) to FCC (Acting Commissioner Clyburn) and U.S. FDA (Commissioner Hamburg), August 29, 2013. https://ecfsapi.fcc.gov/file/7520941318.pdf

[3] https://bioinitiative.org/wp-content/uploads/pdfs/sec20_2012_Findings_in_Autism.pdf

[4] Pall, M. L. (2016). Microwave frequency electromagnetic fields (EMFs) produce widespread neuropsychiatric effects including depression. Journal of Chemical Neuroanatomy, 75(Pt B), 43–51. https://doi.org/10.1016/j.jchemneu.2015.08.001

[5] https://www.ncbi.nlm.nih.gov/pubmed/22428084

[6] Why Children Absorb More Microwave Radiation than Adults: The Consequences. Morgan, Kesari, et al. Journal of Microscopy and Ultrastructure 2(4):196-204 (2014). http://www.jmau.org/article.asp?issn=2213-879X;year=2014;volume=2;issue=4;spage=197;epage=204;aulast=Morgan;type=0

[7] https://www.aaemonline.org/pdf/WiredSchools.pdf

[8] http://www.wifi-in-schools-australia.org/p/emr.html

SEPTEMBER 04, 2020

5G "Small Cell" Proliferation Takes a Hit in Cambridge MA

By Scott McCollough, McCollough Law Firm, PC

(Mr. McCollough is CHD's attorney in its Case against the Federal Communications Commission).

In an important win for those who are concerned about 5G and small cell wireless proliferation, on August 26, 2020 the U.S. District Court for the District of Massachusetts dismissed a lawsuit by "neutral host" provider ExteNet Systems, Inc. against the City of Cambridge, MA.

The case could have far-reaching impacts when "neutral host providers" like American Tower, Crown Castle and ExteNet try to secure approval to occupy municipal rights-of-way. Neutral host providers build wireless infrastructure and then lease space to the wireless companies (like AT&T, T-Mobile and Verizon) that provide the wireless service.

ExteNet filed several applications in Cambridge to replace utility light poles with new ones that housed equipment to be leased to AT&T. AT&T, not ExteNet, would supply the fiber connections and electric power. Cambridge's Pole and Conduit Siting Policy requires applicants working on a proposed project with other companies to designate a lead company for the application.

In practical terms this means the local authority can identify deficiencies at any time and/or deny the application because of a deficiency at the very end.

The lead company has responsibility for coordinating the applications, permitting, constructions, wiring, and operation and acts as the point of contact. As such, the lead company must obtain all the necessary information and provide it to the planning commission as part of the application. In this case, ExteNet did not obtain or provide any information about how the facilities would obtain power or fiber connections, even though the policy expressly required that information. Nor was ExteNet able to provide sufficient information to demonstrate actual need for the wireless coverage that would be supported by the facility, which was another substantive Cambridge requirement.

The City denied ExteNet's permit applications because of the missing information. ExteNet contended the City's procedure was unlawful because it unreasonably waited until the end of the allowed period for the review of the application (shot clock) before it advised ExteNet of the deficiencies. ExteNet also challenged the substantive requirement that ExteNet provide information that only its customer (AT&T) could provide.

The district court rejected ExteNet's procedural and substantive claims.

First, the court ruled that the FCC's procedural shot clock rules do not require a local permitting authority to provide notice of any deficiencies to the applicant within 10 days. It interpreted the rules to say that notice of deficiency within 10 days is only required if the local authority wants to stop or reset the shot clock. In practical terms, this means the local authority can identify deficiencies at any time and/or deny the application because of a deficiency at the very end.

. . . Will require that the wireless companies who will be leasing from the neutral host provider be named participants and provide the necessary information, whereas until now they have been able to avoid the

need to do so while also keeping important information away from cities and concerned citizens.

The district court approved Cambridge's substantive requirement for all relevant information. The Cambridge policy required that the "applications include evidence that the proposed installation is needed to prevent a material inhibition of wireless services." ExteNet did not (and claimed it could not) make this showing since AT&T was the customer and the one with the information necessary to prove the facilities were needed to fill a significant gap in coverage, would in fact be used to fill any gap that did exist, and there were no viable alternative locations. The court held, however, that ExteNet had a burden of proof and failed to meet it. "Where ExteNet's complaint and its original applications fail to show the existence of a coverage gap, it is impossible to infer that the denial of ExteNet's applications has the effect of prohibiting the provision of wireless services". The court ruled that ExteNet did not allege sufficient facts to show that Cambridge's *application information* requirements did or could materially inhibit the provision of service.

The court readily accepted Cambridge's argument that the information it required was relevant to and necessary for any intelligent and reasonable assessment of the application's merits. The court stated: "Because a wireless facility could not function without power and data, requiring information concerning that power and data is not an effective prohibition of the provision of wireless services. … Further, ExteNet has not alleged that forcing joint applications would, in all circumstances, "materially inhibit or limit the ability of any competitor . . . to compete in a fair and balanced legal and regulatory environment."

This decision has major implications for applications by neutral host providers. The now-affirmed information requirements will – as a practical matter – require that the wireless companies who will be leasing from the neutral host provider be named participants and provide the necessary information, whereas until now they have been able to avoid the

need to do so while also keeping important information away from cities and concerned citizens. It may also, in the long term, eliminate some of the business case justifications for the neutral host business. This is important since a very large portion of the small cell deployments are planned, permitted, and constructed by the neutral host providers. Cities can now justifiably demand to know who will be using the wireless infrastructure and in position to obtain more information and commitments from them. Finally, it will allow cities to better determine whether and where wireless facilities are actually needed, and the services they will support.

Documentation:

- MOTION TO DISMISS AND TO TAKE NOTICE OF MATERIALS CITED IN COMPLAINT, AND REQUEST FOR ORAL ARGUMENT
- DEFENDANTS' MEMORANDUM IN SUPPORT OF MOTION TO DISMISS AMENDED COMPLAINT
- CITY OF CAMBRIDGE POLE AND CONDUIT COMMISSION'S POLICY REGARDING SMALL CELL WIRELESS
- CITY OF CAMBRIDGE POLE AND CONDUIT SITING POLICY RELATING TO GRANTS OF LOCATION FOR TELECOMMUNICATIONS SERVICES NETWORKS.
- AMENDED COMPLAINT FOR DECLARATORY AND INJUNCTIVE RELIEF AND EXPEDITED REVIEW PURSUANT TO 47 U.S.C. § 332(c)(7)(B)(v)
- PLAINTIFF'S OPPOSITION TO DEFENDANTS' MOTION TO DISMISS PLAINTIFF'S AMENDED COMPLAINT
- MEMORANDUM AND ORDER ON DEFENDANTS' MOTION TO DISMISS
- ORDER OF DISMISSAL
- https://childrenshealthdefense.org/protecting-our-future/5g-small-cell-proliferation-takes-a-hit-in-cambridge-ma/

4G/5G Wireless & "Small" Antennas Fact Sheet

Cyber Security Vulnerabilities and National Security

- "The currently proposed 4G/5G dense deployment will result in **personal privacy impairments from ubiquitous surveillance as never previously experienced in United States**"[1]
- Massive data **hacking will become a much simpler thing** to pull off if this untested 5G system is set up as currently envisioned.[1]
- While current cell phone/tablet break-ins are not very common due to the substantial amount of equipment a hacker would need to be able to test a device "over the air", the flatter design of **5G networks will remove many barriers to cellular security hacking**.[2]
- "With 5G's decentralised [design] the technology will be opened up to scrutiny by a much wider range of threat actors. For example, an intelligent, low-budget and amateur hacker with the skill to crack software might lack the cash for cellular testing equipment but will be able to afford a budget 5G picocell." This will then give them a route to 5G devices for cellular security break in. [2]
- "As 5G technology is designed for dense Internet of Things (IoT) networks in the order of **one million devices per square kilometre**, the sheer number of projected and insecure devices using 5G means an exponential increase in attack surface and potential vulnerabilities" [2]
- As 5G is forecast to become the dominant method of wireless communications, not only will many eggs be placed in one basket, but they will be reachable from one another. When just one of these devices is compromised, dozens more are then reachable. Fixing this kind of scenario would be an enormous undertaking, which is exactly why the security of UE [User Equipment] devices and the cloud infrastructure will be critical.[2]
- The **erosion of anonymity** is another concern related to 5G's million-devices-per kilometer plan. 5G precision could reveal the specific floor within a building where a device is located, because the macro cells used in deployment are substantially smaller than in cellular networks.[2]

NATIONAL SECURITY IMPLICATIONS

- "Due to the ease of inevitable hacking the "every block" 4G/**5G deployment would allow foreign powers to track the day to day details of virtually all human life in the United States** including location and movement of military assets and personnel, thereby with indelible national security impairment."[1]
- The Department of Homeland Security and the State Department hold the position that the greatest risk of 5G to national security would be the potential for China to use Huawei –made products for espionage. China could easily compel its tech firms to act against the interests of citizens of any other country. They are already working with authoritarian regimes to suppress freedoms. All products made by Huawei pose great risk of espionage.[3]
- Tom Wheeler, former FCC chairman, states that "Effective progress toward achieving minimally satisfactory 5G cyber risk outcomes is compromised by a hyper focus on legitimate concerns regarding Huawei equipment in U.S. networks … it is only one of the many important 5G risk factors. **The hyperbolic rhetoric surrounding the Chinese equipment issues is drowning out what should be a strong national focus on the full breadth of cybersecurity risk factors facing 5G**."[4]
- The world's hackers (good and bad) are already turning to the 5G ecosystem, as the just concluded DEFCON 2019 (the annual ethical "hacker Olympics") illustrated. The targets of this year's hacker villages included key parts of the 5G ecosystem such as**: aviation, automobiles, infrastructure control systems, privacy, retail call centers and help desks, hardware in general, drones, IoT, and voting machines.**[4]
- Across the country, consumers, companies, and cities seeking to use 5G are ill-equipped to assess, let alone address, its threats. "**The 5G cybersecurity threat is a whole-of-the-nation peril. We should not be lulled into complacency because the newness of the network has masked the threat."** [4]

4G/5G Wireless & "Small" Antennas Fact Sheet

Cyber Security Vulnerabilities and National Security

References

[1] Harry V. Lehmann, An attorney and engineer who served President Reagan, urges the Senate to suspend its approval of a national close proximity microwave radiating system underlying 5G. In his letter to Senator Feinstein dated March 8, 2018 https://ehtrust.org/national-security-threat-from-5g-attorney-harry-v-lehmann-warns-senator-dianne-feinstein-in-march-22-2018-letter/

[2] "5G and the Security Challenge" by Alex Farrant. Published: Land Mobile, November 21, 2019 http://landmobile.co.uk/indepth/the-5g-security-challenge/

[3] Senate Judiciary Committee "Hearing on 5G Security Risks" May 14, 2019 Presenters: Christopher Krebs, Dir. Cyber Security , Infrastructure Security Agency, under Dept. of Homeland Security and Robert Strayer, Dep. Asst. Secretary Cyber & Int'l Communications, US State Department. https://www.c-span.org/video/?460706-1/state-department-official-raises-concerns-reliance-chinese-vendors-5g-networks#

[4] Brookings Institution REPORT : Why 5G requires new approaches to cybersecurity: Racing to protect the most important network of the 21st century https://www.brookings.edu/research/why-5g-requires-new-approaches-to-cybersecurity/?wpisrc=nl_cybersecurity202&wpmm=1

By Tom Wheeler and David Simpson Tuesday, September 3, 2019. Tom Wheeler was the 31st Chair of the FCC. He represented the industry for 12 years as president of the Cellular Telecommunications and Internet Association (CTIA) before being appointed chair of the FCC.

4G/5G Wireless & "Small" Antennas Fact Sheet

Health Effects

There already exists an extensive body of scientific studies showing that microwave radiation causes harm.[1] All wireless devices communicate via pulsations. Pulsed electro-magnetic fields (EMFs) are much more biologically active than non-pulsed. In order to transmit vast amounts of information, 5G will be extremely highly pulsed, far more than 2G, 3G and 4G, leading to harm to all living organisms.[2] **5G implementation will be in addition to the current use of 3G and 4G, creating an exponential increase in radiation exposure than we now have.** Like most medical studies done to test drugs or evaluate chemicals and pesticides, the studies below were performed using rodents or other mammals. Mammal cell physiology is directly applicable to humans.[3]

- 2008-2018 Landmark $30 Million 10-year study conducted by the US. National Toxicology Program (NTP) of the NIH finds "Clear Evidence of Cancer" and DNA damage in rats and mice exposed to 2 and 3G radiation. This was based on evidence of **malignant gliomas in the brain and malignant schwannomas of the heart.** The study also showed **benign adrenal gland tumors, degeneration of heart tissue, decreased birth weights of rats exposed prenatally, and DNA damage**. This study was designed to determine whether radio-frequency radiation from cell phones and other wireless devices could cause cancer. Published November, 2018.[4]
- The Italian Ramazzini Institute Study found that lab animals exposed to the radio-frequency radiation emitted by distant cell towers had a greater chance of developing **heart and brain tumors** than those which were not exposed,. This study funded in part by the U.S. Government was the first large –scale study to show **"clear evidence" of cancer risk** from far-field exposures. **Published in 2018**.[5]
- More than 240 scientists who have published peer-reviewed research on the biological and health effects of non-ionizing EMFs "have shown that EMF affects living organisms at levels well below most international and national guidelines. Effects include **increased cancer risk, cellular stress, increase in harmful free radicals, genetic damages, structural and functional changes of the reproductive system, learning and memory deficits, neurological disorders, and negative impacts on general well-being in humans**…there is (also) growing evidence of harmful effects to both plant and animal life."[6]
- According to Dr. Cindy Russell, creator of the website, "Physicians for Safe Technology," "Scientific literature documents evidence of non-thermal cellular damage from wireless radiation used in telecommunications to **DNA integrity, cellular membranes, gene expression, protein synthesis, neuronal function, the blood brain barrier, melatonin production, sperm damage and immune dysfunction**."[6]
- Joel M. Moskowitz, Ph.D., Director of the Center for Family and Community Health in the School of Public Health at the University of California, Berkeley writes that while the FCC adopted radiofrequency radiation (RFR) exposure limits based largely on research from the 1980's focused on short-term heating risks due to RFR exposure, the preponderance of peer-reviewed research, **more than 500 studies, have found harmful biologic or health effects from exposure to RFR at intensities too low to cause significant heating**."[7]
- In addition, "The **FCC's RFR exposure limits** regulate the intensity of exposure, taking into account the frequency of the carrier waves **but ignoring the signaling properties of the RFR**. Along with the patterning and duration of exposures, certain characteristics of the signal (e.g., pulsing, polarization) increase the biologic and health impacts of the exposure."[7]

4G/5G Wireless & "Small" Antennas Fact Sheet

Health Effects

- According to biochemist Dr. Martin Pall, the highly pulsed millimeter waves of 5G are much more dangerous than the less-pulsed electro-magnetic fields that we are used to. Many of the harmful effects are due to **increased intracellular calcium** throughout our bodies, and when combined with the effects of highly pulsed millimeter waves, the results are super-additive, potentially leading to very serious health problems.[8]
- Instances of sickness from 5G activation or close proximity to cell phone towers, 5G towers :

  1) **Firefighters experienced changes in brain structure and function resulting in delayed reaction time, lack of impulse control, difficulty maintaining mental focus, all validated by diagnostic studies.** Consequently, the International Association of Fire Fighters has taken a position opposing the use of fire station as base stations for telecommunications towers.[9]

  2) A new 2019 study shows that nearby cell tower radiation **harms children's brains, resulting in significant decline in cognitive scores.**[9]

  3) The first reported injury from 5G comes from Geneva, Switzerland , where 5G was launched in 102 locations. **Residents "experienced loud ringing in the ear, intense headaches, unbearable earaches, insomnia, chest pains."** July 2019[10] Even though the Swiss canton (state) to which Geneva belongs has banned 5G, the antennas had already been installed and the telecom company activated them anyway.[11]

References

[1] https://www.5gcrisis.com/scientific-studies

[2] Electromagnetic fields act via activation of voltage-gated calcium channels to produce beneficial or adverse effects" by Martin Pall J Cell Mol Med 8/2013
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780531/

[3.]"Science on 5G and Wireless Radiation" Interview with Dr. Devra Davis, 8/2019 president and founder of the Environmental Health Trust, award winning internationally renowned scientist and founding director of the board on environmental studies and toxicology of the National Academy of Sciences. She's also current Visiting Professor of Medicine in Israel and Turkey. Based on her book : *Disconnect*, Environmental Health Trust 2013
https://www.amazon.com/Disconnect-Truth-About-Phone-Radiation/dp/0991219902

[4]. https://ehtrust.org/wp-content/uploads/NTP-Factsheet.pdf, and at
https://www.ncbi.nlm.nih.gov/pubmen/316338/39

[5] https://www.ncbi.nlm.nih.gov/pubmed/29530389 and https://www.ewg.org/release/italian

[6] https://mdsafetech.files.wordpress.com/2016/11/a-5g-future-article-sccma-with-references-61617-pdf.pdf
Includes extensive references to scientific studies

[7] "We Have No Reason to Believe 5G is Safe", Joel M. Moskowitz, Ph.D., Scientific American, October 17, 2019.
https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/

[8] "Electromagnetic fields act via activation of voltage-gated calcium channels to produce beneficial or adverse effects" by Martin Pall J Cell Mol Med 8/2013 https://www.ncbi.nlm.nih.gov/pmc/articles/PMC3780531/

[9] https://mdsafetech.org/2019/09/28/firefighters-fighting-fires-and-now-cell-towers/

[10] https://mdsafetech.org/2019/07/20/the-first-report-of-5g-injury-from-switzerland/

[11] Regional Governments Standing Against 5G, Interview with Rapael Mahaim, Member of Parliament in Vaud, Switzerland. www.5g.org.nz/2019/08/31/free-online-5g-crisis-summit-august-26-september-1-2019

NOTE: All journal-published medical studies listed above are peer-reviewed and therefore Supreme Court admissible.

4G/5G Wireless & "Small" Antennas Fact Sheet

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4G/5G Wireless & "Small" Antennas Fact Sheet

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- Skin rashes, allergies, asthma
- Blurred vision, impaired vision
- Nose bleeds, impaired sense of smell
- Shortness of breath
- Concentration problems, memory loss
- Behavioral problems, learning problems, ADHD
- Hyperactivity, heart palpitation

Potential long term health effects from microwave radiation as indicated in scientific studies

- Brain cancers, acoustic neuromas and other tumors
- Leukemia
- Lymphoma
- Melanoma
- Reduced production of Melatonin
- Impaired fertility
- DNA damage
- Pre-natal damage, miscarriages, birth defects
- Immune dysfunction, chronic allergic responses and inflammatory responses
- Neurological and behavioral effects
- Dementia and Alzheimer's Disease
- Epilepsy

References

[1]Electromagnetics expert Dr. Om Ghandi published in IEEE Access, "Yes the Children Are More Exposed to Radiofrequency Energy From Mobile Telephones Than Adults": http://ieeexplore.ieee.org/document/7131429/?reload=true&arnumber=7131429&contentType=Journals%20%26%20Magazines IEEE is Institute of Electrical and Electronic Engineers

[2]Letter from American Academy of Pediatrics (President Dr. Thomas McInerny) to FCC (Acting Commissioner Clyburn) and U.S. FDA (Commissioner Hamburg), August 29, 2013. https://ecfsapi.fcc.gov/file/7520941318.pdf

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[4]Pall, M. L. (2016). Microwave frequency electromagnetic fields (EMFs) produce widespread neuropsychiatric effects including depression. Journal of Chemical Neuroanatomy, 75(Pt B), 43–51. https://doi.org/10.1016/j.jchemneu.2015.08.001

[5]https://www.ncbi.nlm.nih.gov/pubmed/22428084

[6]Why Children Absorb More Microwave Radiation than Adults: The Consequences. Morgan, Kesari, et al. Journal of Microscopy and Ultrastructure 2(4):196-204 (2014). http://www.jmau.org/article.asp?issn=2213-879X;year=2014;volume=2;issue=4;spage=197;epage=204;aulast=Morgan;type=0

[7]https://www.aaemonline.org/pdf/WiredSchools.pdf

[8]http://www.wifi-in-schools-australia.org/p/emr.html

4G/5G Wireless & "Small" Antennas Fact Sheet

Property Values Reduction

- **Montgomery County Government States Cell Towers Near Homes Decrease Property Values**
  In a filing in a lawsuit against the Federal Communications Commission, the County said through its experts that "…the placement of small cells – depending on their size and visibility – may affect neighboring property values….even as small reduction in value of homes in a neighborhood may have a multi-million dollar effect." Expert testimony states that "studies have concluded that a visible antenna up to 1,000 feet away results in property value reduction of 1.82% for a residential home or $3,342 in the market studied."[1]

- **94% of People Said a Nearby Cell Tower … Would Negatively Impact Interest In A Property Or The Price**
  "A survey conducted in June 2014 by the National Institute for Science, Law and Public Policy (NISLAPP) in Washington, D.C.…shows home buyers and renters are less interested in properties located near cell towers and antennas, as well as in properties where a cell tower or group of antennas are placed on top of or attached to a building. And **79% said under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antennas.** And almost 90% of respondents said they were concerned about the increasing number of cell towers and antennas in their residential neighborhood, generally." [2] [3]

- **Reduction in Tax Assessment by Montgomery Co. Appeals Board for Probable Cell Tower**
  The Property Tax Assessment Appeal Board for Montgomery County lowered a Rockville home's assessment: "Comparables warrant a reduction in value. Probability of neighboring cell tower also affects value negatively. April 2011, reversing determination by the Department of Assessments and Taxation. [4]

- **Wireless Towers in Visual Range**
  "values declining … up to 9.78% for homes within tower visibility range compared to homes outside tower visibility range" [5]

- **20-25% Devaluation Found in Peer-Reviewed Study for Homes Near Cell Towers**
  "The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods [6] by Sandy Bond, PhD, and Ko-Kang Wang. A peer-reviewed study found Homes near cell phone towers were devalued 20% to 25%.

- **5G Requires Cutting Down Trees in Yards – Reduces Value By Several Thousand Dollars** [7]
  5G requires direct "line of sight" from the cell antenna in front of the house, or from several houses away, to each house. So many thousands of trees in Montgomery County would need major branches removed or cutting down.

- **Two Reasons Buyers May Refuse to Buy Near "Small" Antennas–Health Risk and Aesthetics**
  This will translate into lower home values. This site lists articles, videos and studies showing declining property values around cell tower installations. [8]

4G/5G Wireless & "Small" Antennas Fact Sheet

Property Values Reduction

References

[1] "Comments of Smart Communities Siting Coalition" (of which Montgomery County is one) before the FCC. March 8, 2017. "Streamlining Deployment of Small Cell Infrastructure by Improving Wireless Facilities/WT Docket No. 16-421)" See Exhibit 3.

https://montgomerycountymd.gov/cable/resources/files/towers/documents/mobilitie%20comments%20-%20Smart%20communities%20siting%20coalition%20(2017).pdf

[2] https://www.businesswire.com/news/home/20140703005726/en/Survey-National-Institute-Science-Law-Public-Policy#.VNRBPp3F-So

[3] https://electromagnetichealth.org/electromagnetic-health-blog/survey-property-desirability/

[4] https://www.scribd.com/document/64222439/Probability-of-neighboring-cell-tower-also-affects-value-negatively (Parents' Coalition of Montgomery County, Maryland) See photocopy below.

[5] Wireless Towers and Home Values: An Alternative Valuation Approach Using a Spatial Econometric Analysis (*Journal of Real Estate Finance & Economics*, May 1, 2018)

[6] https://www.emfanalysis.com/wp-content/uploads/2016/04/Impact-of-Cell-Towers-on-House-Prices.pdf

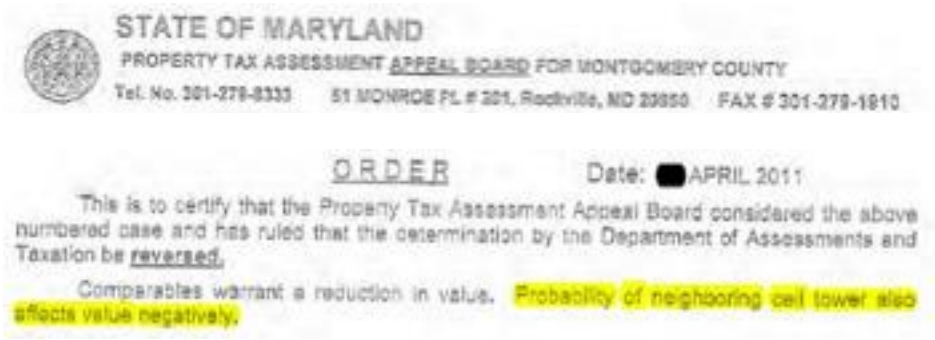
[7] https://www.greenblue.com/na/how-trees-increase-property-values/

[8] https://www.emfanalysis.com/property-values-declining-cell-towers/

Johnson, Jeromy/EMF Solutions, "Protect Your Family from EMF Pollution: Property Values Declining Near Cell Towers." (EMF Solutions) 2011-2019. https://www.emfanalysis.com/property-values-declining-cell-towers/

Scientists for Wired Technology, "Cell Tower Installation Plans Lower Property Values" (Scientists for Wired Technology) 2017-2019. https://scientists4wiredtech.com/what-are-4g-5g/cell-tower-installation-plans-lower-property-values/

Photocopy of reduction in tax assessment for a house in Montgomery County by the Appeals Board for Montgomery County:



STATE OF MARYLAND
PROPERTY TAX ASSESSMENT APPEAL BOARD FOR MONTGOMERY COUNTY
Tel. No. 301-279-8333 51 MONROE PL # 301, Rockville, MD 20850 FAX # 301-279-1910

ORDER Date: [redacted] APRIL 2011

This is to certify that the Property Tax Assessment Appeal Board considered the above numbered case and has ruled that the determination by the Department of Assessments and Taxation be reversed.

Comparables warrant a reduction in value. Probability of neighboring cell tower also effects value negatively.

4G/5G Wireless & "Small" Antennas Fact Sheet

Climate Change Impact

5G would facilitate a massive shift from wired and fiber-optic communication, to wireless communication. It is much more efficient to send data through copper wires or fibers than through air. An exhaustive study published in the professional journal of the Institute of Electronic and Electronics Engineers (IEEE) said: **"wireless technologies will continue to consume at least ten times more power than wired technologies, when providing comparable access rates and traffic volumes**."[1] Other estimates are even higher.[2]

Higher energy consumption inevitably means higher greenhouse gas emissions. We are still getting most of our energy from fossil fuels and other forms of combustion. Less than 4% of PEPCO's energy comes from wind and solar. Yet even wind and solar need major amounts of energy for their high-end manufacturing.

Historically, data transmission has been only a small part of overall energy consumption. But this is changing very fast. The Shift Project, an international team of scientists, engineers and telecommunications experts based in Paris, recently published a report saying that global digital energy demand is now increasing by 9% every year.[3] The Shift Project says that **digital technologies now emit 4% of greenhouse gases (GHG), more than civil aviation. Under the industry proposals, these emissions would double before 2025 to 8%, the amount that car emissions emitted worldwide in 2019**.

Swedish energy expert Anders Andrae estimated that **internet communications technologies could be responsible for 14% of global greenhouse gas emissions by 2040, undermining our efforts to combat climate change**.[4]

The Internet's main energy demand is for data centers of thousands of servers, that never stop and must have many backups. Natural Resources Defense Council (NRDC) said the 2 million servers in data centers annually use the same amount as "electricity to power all of New York City's households for 2 years."

The use of the devices is the second major increase energy demand by 5G. **The industry is proposing 3,000,000 devices per square mile**[5] Streaming 52 hours of video consumes more electricity than running two refrigerators for a year.[6] The tsunami of data produced as the industry proposes to digitalize all our machines, appliances and devices would also warp the economy to dependence on this inefficient, huge energy demand far into the future.

A rollout of 5g will also result in a **major loss of tree canopy**, due to "line of sight" requirements for the higher-spectrum millimeter wavelengths. Tree canopy is essential for local cooling and increased rainwater absorption, two important ecological mitigations for increased warming and drought. While the global climate movement is beginning massive tree planting projects, 5G would reverse this effort. The "line of sight" cutting would also **remove carbon sequestration by thousands of trees**. The 5G permitting process would also eliminate the forest conservation review and other standards currently required for cell towers.

5G is not part of any safe or sustainable solution to climate change.

4G/5G Wireless & "Small" Antennas Fact Sheet

Climate Change Impact

References

[1] "Energy consumption in wired and wireless access networks" Jayant Baliga ; Robert Ayre ; Kerry Hinton ; Rodney S. Tucker, IEEE Communications Magazine (Volume: 49, Issue: 6, June 2011), https://web.archive.org/web/20171114021923if_/http://ieeexplore.ieee.org/abstract/document/5783987/ (paid)

[2] "Energy Consumption from the Internet of Things and Wireless Technology" http://whatis5g.info/energy-consumption

[3] "Lean ICT: Towards Digital Sobriety" by Hugues Ferreboeuf for the Think Tank The Shift Project, March 2019, p.17, https://theshiftproject.org/wp-content/uploads/2019/03/Lean-ICT-Report_The-Shift-Project_2019.pdf

[4] "'Tsunami of data' could consume one fifth of global electricity by 2025" https://www.theguardian.com/environment/2017/dec/11/tsunami-of-data-could-consume-fifth-global-electricity-by-2025

[5] "5G and Massive IoT: legacy technologies will bridge the gap for now", Feb 13, 2019, by Christian Kim https://technology.ihs.com/611104/5g-and-massive-iot

[6] Singer, Kate. The Electronic Silent Spring (2014) and Limits to Electronic Growth (forthcoming). In "The Real Amount of Energy Used to Power the Internet", Singer wrote on the importance of reducing the Internet's footprint through her work for the EMR Policy Institute.

Understanding EMFs

Introduction

Thank you for seeking information on the issues surrounding electromagnetic fields (EMFs) of man-made radiation pulsed by wireless devices and

infrastructure. All of the following use this form of man-made two-way microwave radiation to send and receive data: cell phones, cordless phones, Bluetooth, laptops, iPads and other tablets, iPods, wi-fi routers, classroom access points, smartboards, wearable devices, baby monitors, smart speakers, security systems, gaming systems, hearing aids, vehicles, etc., as well as utility "smart" meters, cell towers, and 4G/5G small cells/distributed antenna systems. With the Internet of Things (IoT) the wireless industry plans to put radiation antennas in many more consumer products.

Note: Other terms often used in association with EMFs are radiofrequency radiation (RF), electromagnetic radiation (EMR) and millimeter waves (MMW). They are all in the microwave segment of the electromagnetic radiation spectrum, and there has never been a safe level of microwave radiation determined in the scientific literature.

Many of the health issues associated with wireless technologies can also occur with electrical systems and devices that operate in the ELF (extremely low frequency) range.

This site represents one concerned citizen's attempt to organize the information available on this issue. To help me get my head around an issue I couldn't see, smell, touch or taste, after doing much research I took a deep breath and purchased an Acoustimeter, a $400 scientific instrument to measure wireless radiation. With gratitude to my local cable station, WACA-TV, the following public service video provides a 23-minute demonstration of the EMFs in many homes today and solutions to lower radiation exposure:

https://vimeo.com/159873631

Please feel free to peruse this site as a launch point and begin your own investigation as new information comes out frequently. See the Science and Doubts pages for additional information.

Below is a summary of the issues, and the site navigation panel provides sources for more in-depth inquiry.

Global EMF Monitoring

EMF scientist, Dr. Magda Havas, professor emeritus of Trent University who taught electromagnetics for 25 years, has launched the Global EMF Monitoring

project. Governments have failed to do post-market surveillance so citizens around the world are taking real-time EMF measurements. Dr. Havas has built a database to map what the levels are. This will help public servants see the risks in their districts, and help those who cannot or choose not to live in a high EMF environment to find lower exposure areas in which to live.

Please see the Global EMF Monitoring website and let Dr. Havas know if you would like to take readings in your area. Safe Living Technologies, which makes the Safe & Sound Pro II meter used for the study, is generously offering a discount to those participating. Dr. Havas will share the code with you.

Quick Training

If you are short on time, the non-profit **Wireless Education** has distilled this information into an on-line course that can be completed in about a half hour for less than the cost of a movie ticket. This is appropriate for parents, educators, mature students and others who wish to come up to speed together quickly. There is a second low-cost 30-minute e-learning course for businesses to educate and safeguard their employees in the work environment. Please see:

- Schools & Families Course: https://www.wirelesseducation.org/store/l2/
- Corporate Induction Safety Awareness Course: https://www.wirelesseducation.org/store/c2/

The Issues

In short, we adopted wireless technology without taking into consideration its potential impact on health. The Federal Communication Commission (FCC) guidelines in place today were developed in 1996. These address only the thermal (heat) impact which boils down to how much radiation it would take to heat the skin of a six-foot 220-pound military man. The limits are very high and they do not address the much lower non-thermal impacts that come with use of today's devices. Science has since proven there are many harmful non-thermal effects.

Today's FCC standards also do not address the impact on children and fetuses who absorb significantly more radiation in their underdeveloped immune systems, DNA, bones, brains and other organs. Nor do our FCC standards address the cognitive impact on the elderly, or the immune system impact on those with existing health conditions. Our current standards were set in place by recommendations from electronics and electrical engineers, not by qualified doctors and scientists who understand the biological effects of exposing humans and other living organisms to microwave radiation.

The FCC, an agency captured by industry, is being sued for ignoring thousands of pages of scientific evidence entered into the public record. See the Legal Issues page for additional information.

The Impact

We have erected millions of cell towers and wi-fi hotspots that continually bathe our planet and its inhabitants in man-made radiation. We have installed wi-fi routers in our homes, offices, schools and elsewhere. These signals interfere with our own bodies' electrical circuitry and we are absorbing constant radiation into our organs. Our municipalities are now allowing wireless "smart utility meters" on our homes and 5G small cell antennas inside our neighborhoods that pulse constant radiation signals. The result is that we are now seeing both children and adults present with symptoms ranging from headaches, nausea, anxiety, depression, sleep disorders and behavior issues, to cancers, heart problems, chronic illnesses, DNA mutations and infertility.

Thousands of studies have been done. Many countries have already banned or restricted the use of wi-fi and cell phones for children, and put provisions in place to protect pregnant women. The United States, however, is wonderful with innovation but slow to own up to the detrimental health impact this technology is causing.

In June 2015, Harvard University published a *Captured Agency* report detailing how the FCC is run by the industry it presumably regulates. Click here to hear the history from **Dr. George Carlo** of how industry was able to get this technology to market before it was properly tested and how research findings have been suppressed since. You may also wish to read his book, "Cell Phones: Invisible Hazards in a Wireless Age (Avalon, 2001)". The Moscow Signal Experiment also indicates our military was knowledgeable of the harm caused by EMFs as early as

1962, long before this technology was deployed in the commercial sector. See the Military Experts page for more.

Solutions

There are two types of solutions. The first is to do what you can to remediate wireless radiation impact where you live, work, learn and play today and protect your loved ones.

The second is to speak to your towns and local legislators to ensure our government policies are changed. See the For Municipal Leaders page and Bills in Other States page for suggestions. Thank you.

Note: The information provided here is publicly available on the Internet.

It is intended to provide a starting point to inform you of EMF dangers.

Please do your own research, draw your own conclusions, and act accordingly to protect those you love.

http://tinyurl.com/Understanding-EMFs

Regulating

Small Cell Towers:

Five lawyers present legal rationale for controlling small cell towers

by

Robert C. Janku, MLS

with generous assistance of other
mocoSafeG.org members
includes one lawyer

online copy
https://rebrand.ly/mocoSafeG-Effective-Prohibition

Short Overview – By Janku; Kahn's Long Overview is definitive

When suing on telecommunications issues, a suit is decided under the rules of the Telecommunication Act of 1996 combined with subsequent legal rulings. Depending on the contents of the suit, the dispute will be decided based on what section of the law is in question. In the last twenty-five years, the courts have sorted out the "rules" for each of the sections and what legal issues apply to each section.

Section 253(a) of the Telecommunications Act of 1996 deals with fees, shot clocks, aesthetic issues, and nondiscrimination requirements – in other words, the Portland, et. al suit. The court uses a "material inhibition" standard.

Section 332 of the Act specifically deals with the "placement, construction, or modification," of personal wireless facilities -- in other words, the very subject matter that the proposed ZTA 19-07 deals with. The court uses the "effective prohibition" standard.

Congress writes the laws; FCC writes regulations based on the law and the courts decide whether or not the regulations match the law. The courts have already decided on the meaning of "effective prohibition" standard. The FCC doesn't have the right to overrule the courts.

This interpretation was affirmed by the Court of Appeals for the 2nd Circuit which is the only appeals court to rule on the FCC's attempt to redefined "effective probation" The 2nd Circuit it clear that the FCC has no authority to change the federal courts' interpretations of federal law.

Long Overview – By Kahn

The Telecommunications Act of 1996 created the test as to when wireless facilities must be provided. Under the statutory language, that test is the "effective prohibition" test: an applicant requesting the right to install a wireless facility cannot prevail unless it can demonstrate the presence of an "effective prohibition" of wireless service in that location. 47 U.S.C. Section 332(e)(7)(B)(i)(II). According to all eleven of the 13 Federal Circuit Courts of Appeals that have examined the question, there is no "effective prohibition" of service unless an applicant can demonstrate (1) there is an actual gap in coverage from any form of wireless service; and (2) that the proposed wireless facility is the least burdensome means of covering an existing actual gap in coverage.

That standard applies in the Fourth Circuit, of which Maryland is a part. For example, in Cellco Partnership versus Board of Supervisors of Fairfax County, 140 F Supp. 3rd 548 (2015), the District Court upheld the County Board of Supervisors' decision to reject an application to erect a wireless antenna facility. Though the applicant claimed that by doing so the Board created an "effective prohibition" of service under the Telecommunications Act, the court rejected that contention. The court noted that, under Fourth Circuit precedent, to prevail on a prohibition of service claim, a wireless carrier must show either 'that a local governing body has a general policy that essentially guarantees rejection of all wireless facility applications,' or that 'denial of an application for one particular site is "tantamount to a general prohibition of service."' Id. at 579. T-Mobile Ne., LLC v. Fairfax Cnty. Bd. Of Supervisors, 672 F3d 259, 266 (4th Cir. 2012) ; *see also* New Cingular Wireless PCS, LLC v. Fairfax Cnty. Bd. Of Supervisors, 674 f.3d 270 (4th Cir.2012). Under the latter theory, a plaintiff must demonstrate both "a legally cognizable deficit in coverage amounting to an effective absence of coverage" and a lack of "reasonable alternative sites to provide coverage," 672 F3d at 268. The court notes that a plaintiff's burden of proof on a prohibition of service claim "is substantial is particularly heavy when . . . the plaintiff already provides some level of wireless service to the area," because "the Act cannot guarantee 100 percent coverage." *Id.* Therefore, a plaintiff cannot demonstrate prohibition of service simply based on "a limitation of the level wireless services available" or merely by showing that alternative sites would not eliminate the entire coverage deficiency or provide the same level of coverage as the proposed facility. *Id.* at 268-69. The court also noted that the Fourth Circuit has found that a local jurisdiction cannot be found to have prohibited service where there are "genuine factual disputes"

about the absence of service in an area. 360 Commc'ns Co. of Charlottesville v. Bd. of Supervisors of Albemarle Cnty., 211 F.3d 79, 87-88 (4thCir. 2000).

In short, the Fourth Circuit's precedents clearly mandate an attention to the "prohibition of service" standard in the Telecommunications Act; holds plaintiffs claiming a prohibition of service under the Act to stringent evidentiary standards; and allows substantial scope and discretion to a local jurisdiction in exercising its regulatory authority under that test. Nothing in the FCC's Small Cell Order undermines the statutory text of the Telecommunications Act cited above, nor is there any reason to believe it undermines the standards under which the Federal Courts of Appeals (including both the 4th Circuit and the 9th Circuit) apply the relevant provisions of the Telecommunications Act. To be clear: a local jurisdiction may deny an application to create a wireless telecom facility, based on the presence of existing both the Fourth Circuit.

Furthermore, nothing that the Ninth Circuit decided in the recent case of City of Portland v. FCC, No. 18-72689 et. seq., contradicts this. In short, the Ninth Circuit did not address the question of effective prohibition. Rather, the case concerned the legitimacy of various regulatory requirements and whether the FCC acted within the scope of its discretion in adopting those regulations. The question of effective prohibition was not addressed by the Ninth Circuit. The Ninth Circuit did recognize limitations on the FCC's discretion relating to aesthetic issues, and thus made clear that the FCC was still bound by statutory requirements despite the Chevron standard. As others have pointed out later in this document, 'the "significant gap" / "least intrusive" test remains alive and well in the 9th Circuit." Furthermore, the Second Circuit made clear that, in its view, the FCC could not adopt an interpretation of the "effective prohibition" standard at variance with the standards already applied by the Federal Courts of Appeals. *See* Clear Wireless LLC versus Building Department of the Village of Lynbrook, Westlaw 826749. Thus, we have no reason to believe that the "effective prohibition" standard has changed in the 2nd, 4th, or 9th circuits, or anywhere else. Local jurisdictions retain the right to deny permits for wireless infrastructure unless the applicant can demonstrate satisfaction of the traditional "effective prohibition" standards, the FCC's Chevron discretion notwithstanding.

Using these tests, a small 5G cell tower could not be legally required in almost any location in Montgomery County. That is because essentially all locations in Montgomery County already have access to wireless coverage of some form, and the Telecommunication Act's "effective prohibition" standard does not mandate that that coverage be of any particular type or generation of service. The

coverage maps presented by Verizon, AT&T, and T-Mobile demonstrate that essentially every location in the County does have access to wireless signal – the telecom companies themselves have thus admitted that the "effective prohibition" standard would rule out any mandate for 5G coverage. Though the FCC has attempted to impose its own "material inhibition" standard that would mandate 5G coverage, the FCC does not have the right to supplant or replace the standard enunciated by the Congress in the Telecommunications Act of 1996. The Second Circuit Court of Appeals in New York has made it clear that the FCC does not have the power to alter the statutory language in the 1996 Telecommunications Act, and thus it is the Act's "effective prohibition" standard, and not the FCC's independently-created alternative, that is the prevailing standard. That standard has clearly already been met by our County, and for that reason there is no obligation on the County to allow 5G access at any location whatsoever.

This means:

- the existing "effective prohibition" standard is in effect which is defined by the "significant gap" / "least intrusive" test
- to prevent a 5G small tower, a local jurisdiction need show only that the street area already has voice and text service available. This can be done simply by drive-by testing.

Using the above guidelines, in Montgomery County a jurisdiction is entirely within its legal rights if it chooses to keep small cell towers out of the jurisdiction's rights-of-way.

We present here the arguments of four distinguished and highly experienced members of the telecommunications bar for their recitations of the legal support for this position – W. Scott McCollough, Andrew Campanelli, Joseph Van Eaten, and Sheldon Pine.

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Introduction

We present here the arguments of five distinguished lawyers. W. Scott McCollough, Andrew Campanelli and Joseph Van Eaten are highly experienced members of the telecommunications bar. Sheldon Pine is experienced in regulatory law. Peter L. Kahn, J.D., Ph.D. has academic law experience who lives in Montgomery County. All reaffirm the court defined rules for the siting of cell towers have not changed.

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a) Peter L. Kahn, J.D., Ph.D.

The following was extracted from *An Unsupported Rationale: The So-Called Legal Case for Montgomery County's ZTA 19-07 Falls Apart* which is in Appendix A. Peter focuses his legal analysis on Montgomery County.

> However, nothing could be further from the truth. The FCC does not have the authority to issue a new interpretation of federal law; that is the province of the federal courts, not a regulatory agency, and the Second Circuit has said so in no uncertain terms. Literally no federal court in the country has reinterpreted the relevant provisions of the Telecommunications Act. The Ninth Circuit did not adopt a new and more liberal standard governing wireless facilities installations in the City of Portland case; rather, it simply applied a standard that it has used since 1997, and which the court in that case very explicitly announced it was not changing.
>
> It is clear that, under longstanding and unchanged legal standards, local governments retain significant power to regulate the placement and installation of wireless facilities. Finally, the unique circumstances of Montgomery County, Maryland, make it clear that the power of local governments in this area is especially strong here, because according to the coverage maps published by all of the major telecom companies, it is clear that almost every spot in Montgomery County already has more-than-adequate cell service, and thus according to the telecoms' own coverage maps, there can be no effective prohibition of service nearly anywhere in the County, even if further 5G installations were to be entirely forbidden. There is simply no need on legal grounds for the County Council to adopt ZTA 19-07, because the County is already entirely in compliance with the relevant federal laws.

b) W. Scott McCollough, Esq.

Malibu, CA, is a beach front city. Carriers were installing unsightly cell towers in rights-of-way that blocked ocean views. Residents hired McCollough to convince the city council that this could be prevented, and that federal law did not require that the City of Malibu submit to the demands of the telecom carriers.[1] Mr. McCollough submitted the document quoted below as part of his initial meeting with the Malibu council:

> The 9th Circuit's August 12, 2020 decision vacated the FCC's "aesthetic" limits and imposed some useful limiting interpretations on other parts of the rules it sustained. One important aspect is that the Ninth Circuit refused to be cowed by the FCC's criticism of the Court's "significant gap"/ "least intrusive" test and the FCC's effort to substitute a lower bar through the "material inhibition" standard." Compare Small Cell Order, 33 FCC Rcd at 9101-9110, with City of Portland, 2020 U.S. App. LEXIS 25553 at *19-22, 34-43. The "significant gap" / "least intrusive" test remains alive and well in the 9th Circuit.[2]

biography: McCollough, lead attorney, in the DC Circuit Court of Appeals in IRREGULATORS V FCC showed FCC was using incorrect accounting rules to divide cost between regulated state telecommunication companies and the unregulated parent organizations.[3]

[1] the oral part of McCollough's presentation: https://mocoSafeG.org/malibu

[2] Starts with second sentence of last paragraph on Page 7 at: https://drive.google.com/file/d/10R9n6I-CWqZiNyq251n4ax6d3LMqMGHQ/view

[3] http://irregulators.org/irregulatorsvfccopinion/

c) Andrew Campanelli, Esq.

MocoSafG.org invited Andrew Campanelli, Esq. to answer our questions on Small Cell Tower zoning. Campanelli explained in his presentation of March 30, 2021, that the 2nd Circuit Court of Appeals which is the only court to make a determination rejected the FCC's "material inhibition" standard, and made clear that the FCC did not have the authority to override a judicial ruling.

> And so, a case came to a district court in New York in the 2nd Circuit, and a federal judge basically knocked down the FCC and said, listen, we applaud the FCC. We understand that it's not happy that Congress hasn't amended the Telecommunications Act to keep up with technology, but, in my favorite words, "it's not up to the FCC to put words into the Telecommunications Act.." And so, the federal court ruled against the FCC and said you can't just reinterpret it. In that case, I can give you the citation. That was Clear Wireless LLC versus Building Department of the Village of Lynbrook. The citation is 2012, Westlaw 826749. And the federal court actually said under such a circumstance, it is not up to the FCC to construe the TCA. to say something it does not say, nor up to the court to fight broadband communication encompassed by the law.[4]

To read the full transcript see appendix B.

To watch the video of Campanelli's presentation see:
https://rebrand.ly/mocoSafeG-Campanelli-effective-prohibition

[4] Campanelli's full March 30th talk: https:// mocoSafeG.org/andrew-s-presentation

d) Joseph “Joe” Van Eaten, Esq

Under the advice of Joe Van Eaten, Esq., of the firm Best, Best, and Krieger, the City of Gaithersburg, MD, banned cell towers in the rights-of-way in December, 2018.

Adoption of revised regulations for the installations in rights-of-way

In particular, Mr. Van Eaten made clear that the City of Gaithersburg was within its rights to override and reject the demands of telecom applicants with respect to the placement and number of wireless facilities.

biography: Van Eaten is advising Montgomery County. Lead lawyer in Portland vs. FCC.

e) Sheldon Pine, Esq.

In early 2019, Sheldon Pine, a Montgomery County resident with decades of experience in federal administrative law practice, gave a presentation to the City of Gaithersburg Mayor and council meeting. He submitted a supplemental document which explains the legal background behind zoning. With the rejection of "material inhibition", his comments should be relevant today.

This is from my transcript of Sheldon L. Pine's testimony on March 4th, 2019 to the City of Gaithersburg.

> Contrary to what they've said [cell tower companies] refusing to allow the placement of cell towers in a way that maximizes cell tower company returns and minimizes their costs which is what they want is not an "effective prohibition" of service a violation of what would only occur if there is an actual, actual prohibition of service and effective prohibition of all service where a community is already served.

For a full transcript of Pine's talk see Appendix C below.

Video of Pine's talk: https://www.youtube.com/watch?v=xCulOxxwirM&t=27m34s

As part of his testimony, Sheldon submitted a supplemental paper to explain the legality of Gaithersburg's use of "Effective Prohibition". See Appendix D.

biography: Pine 1981 graduate of Yale Law School and clerked for the 11th Circuit Court of Appeals.

Appendix A -- Kahn an Unsupported Rationale[5]

An Unsupported Rationale:
The So-Called Legal Case for Montgomery County's ZTA 19-07 Falls Apart
July 12, 2021
Peter L. Kahn, J.D., Ph.D. © Peter L. Kahn

Summary

The County Council [Montgomery County, Maryland] appears poised to adopt ZTA 19-07 in part because some members believe that doing so is legally required. That is simply not the case. [6]

One basis for believing this is the FCC's Small Cell Orders of 2018, which proposes a "material inhibition" standard for the courts to use in evaluating claims under Section 332 of the Telecommunications Act of 1996 -- in other words, does a denial of a permit for a cell antenna "materially inhibit" the placement or construction of wireless cell facilities. Most denials of permits will materially inhibit their placement, and thus this standard strongly favors the interests of telecom companies. However, literally no federal court has adopted this standard for cases under Section 332, and the Court of Appeals for the Second Circuit has made it clear that the FCC has no authority to change the federal courts' interpretations of federal law. The standard that has always been used, and continues to be used, by the Courts of Appeals across the country is the "effective prohibition" standard. It asks, does this denial of permit effectively prohibit the provision of cell service? This is a much tougher standard for telecoms to meet, especially when cell service is already abundantly available from multiple carriers. But the "effective prohibition" standard continues to be applied by all the Courts of Appeals for such cases, and no court anywhere has abandoned that standard in favor of the FCC's preferred "material inhibition" standard for cases under Section 332.

[5] also at: https://rebrand.ly/Correcting-Legal-Rationale
[6] Adopted a gift to industry zoning change on July 27, 2021

The other basis offered for believing that ZTA 19-07 is legally necessary is the recent case City of Portland v. FCC. In that case, the Ninth Circuit looked at proposed regulations arising under a completely different section of the Telecommunications Act, that is, Section 253. The court in that case applied a "material inhibition" standard, just as it always has in cases arising under Section 253. One might be forgiven for confusing the Section 253 "material inhibition" standard, with the FCC's proposed "material inhibition" standard for Section 332, but in fact they have different origins City of Portland did not deal with Section 332, and clearly did not adopt a "material inhibition" standard for Section 332 cases. The "effective prohibition" standard for cases under Section 332 remains in effect in every federal circuit, including the Ninth Circuit.

Section 332 of the Act specifically deals with the "placement, construction, or modification," of personal wireless facilities -- in other words, the very subject matter that the proposed ZTA 19-07 deals with. Any legal claims that might be prevented by the adoption of 19-07 would (in the absence of 19-07) be evaluated by the courts under the legal standard that has always been applied to Section 332 -- in other words, the "effective prohibition" standard -- because those claims would arise under Section 332, dealing with "placement, construction, or modification" of cell facilities. The FCC's Small Cell Orders did not change that. The City of Portland case did not change that. Under every federal Court of Appeals in the country, cases dealing with "placement, construction, or modification" of cell facilities will be examined under Section 332 under an unchanged "effective prohibition" standard.

In Montgomery County, a telecom asking for review under Section 332's "effective prohibition" standard is likely to lose. Our County already has excellent cell service. Just look at the coverage maps published on their websites by Verizon, AT&T, and T-Mobile. It will be challenging for any permit applicant to claim seriously that our County has "effectively prohibited" cell service. In truth, we are in full compliance with federal law, and any legal claims against Montgomery County's local governments will be very difficult for the telecom applicant to win.

Indeed, adopting ZTA 19-07 would itself be a massive change in the standards for cell placement -- it would take away virtually all local control, and grant to any telecom the right to use any piece of public property it wishes. This would

constitute a massive give-away of epic proportions to the telecom industry, and would be a policy and legal mistake of the first order.

Analysis

The Montgomery County Council appears poised to adopt ZTA 19-07, in part in response to the several Orders that the Federal Communications Commission announced in 2018 to promote the installation of 5G wireless facilities. County Council staff has told the Council that adopting ZTA 19-07 is necessary in part to bring Montgomery County "into compliance with federal orders." Memorandum, "Zoning Text Amendment 19-07, Telecommunications Towers – Limited Use," dated July 8, 2021. In those Orders, the FCC also announced that it now believed a new standard, the "material inhibition" standard, should be used for the evaluation of whether a local regulation acts as an "effective prohibition" under Section 332 of the Telecommunications Act of 1996. A recent federal court ruling (City of Portland et al. v. FCC (Ninth Circuit 2020)) applied that "material inhibition" standard to the evaluation of some proposed FCC regulatory requirements under Section 253 of the Telecommunications Act. On that basis, Council staff has stated that the "material inhibition" standard has now been blessed by the federal courts, and that standard would require that Montgomery County do nothing that would "materially inhibit" the adoption of 5G small cell technology throughout the County.

However, nothing could be further from the truth. The FCC does not have the authority to issue a new interpretation of federal law; that is the province of the federal courts, not a regulatory agency, and the Second Circuit has said so in no uncertain terms. Literally no federal court in the country has reinterpreted the relevant provisions of the Telecommunications Act. The Ninth Circuit did not adopt a new and more liberal standard governing wireless facilities installations in the City of Portland case; rather, it simply applied a standard that it has used since 1997, and which the court in that case very explicitly announced it was not changing. The standard the court applied, however, is of no relevance whatever to the question of whether new wireless facilities may be installed, and how they may be regulated by local jurisdictions, because that case dealt with a completely different provision of the 1996 Telecommunications Act than that which governs the placement or construction of so-called "personal wireless service facilities," and thus does not affect the standard applied in placement or installation cases in any way whatever. It is clear that, under longstanding and unchanged legal standards, local governments retain significant power to regulate the placement and installation of wireless facilities. Finally, the unique circumstances of Montgomery County, Maryland, make it clear that the power of local

governments in this area is especially strong here, because according to the coverage maps published by all of the major telecom companies, it is clear that almost every spot in Montgomery County already has more-than-adequate cell service, and thus according to the telecoms' own coverage maps, there can be no effective prohibition of service nearly anywhere in the County, even if further 5G installations were to be entirely forbidden. There is simply no need on legal grounds for the County Council to adopt ZTA 19-07, because the County is already entirely in compliance with the relevant federal laws.

The Portland Case and Section 253 of the 1996 Telecommunications Act

The City of Portland v FCC case dealt with a number of regulatory rules imposed by the FCC, which were challenged by local jurisdictions. The local jurisdictions claimed that the FCC regulations dealing with fees, shot clocks, aesthetic issues, and nondiscrimination requirements limited local authority unnecessarily. The Court upheld all but the aesthetics requirements on the basis of Section 253(a) of the Telecommunications Act of 1996 (henceforward "the Telecom Act"). That provision states:

> (a) In General – No State or local legal requirement may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications services.

In applying that provision, the court applied the very same standard for judging Section 253 cases that the FCC had first announced in 1997, and that the Ninth Circuit had first applied in 2008. In Sprint v City of San Diego, 543 F.3d 571 (2008), the court accepted the FCC's "material inhibition" standard with respect to Section 253. The Court in City of Portland applied that very same standard in 2020, again to a case involving Section 253 of the Telecom Act. There was no change in standards, no overruling of any existing cases or standards, no announcement of new law.

The "Effective Prohibition" standard in cases under Section 332

Thus, Section 253 has been applied in evaluating various local regulatory requirements unrelated to the placement or construction of wireless telecom facilities similar to 5G antennas. However, a completely different provision of the Telecom Act governs "the placement, construction, and modification of personal wireless service facilities," and the federal courts have uniformly applied a

different standard in evaluating local regulations in these matters. Section 332(7) of the Telecom Act states in part:

(7) Preservation of Local Zoning Authority

> (A) General Authority -- Except as provided in this paragraph, nothing in this chapter shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities
>
> (B) The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local instrumentality thereof (1) shall not unreasonably discriminate among providers of functionally equivalent services; and (2) shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

Thus, the "placement, construction, and modification of personal wireless service facilities" is governed by a different section of the Telecom Act than that which governs local regulations of telecommunications services, and essentially since the passage of the Telecom Act in 1996 a different judicial standard has been applied to the evaluation of local controls on "placement, construction, and modification."

The Fourth Circuit Court of Appeals, which deals with cases involving Maryland, ruled in the case of Cellco Partnership v. Board of Supervisors of Fairfax County, 140 F. Supp 3d 548 (2015) (the most recent case in the circuit to deal with the issue) that the traditional standard governing "effective prohibition" still applies:

> To prevail on a prohibition of service claim, a wireless carrier must show either "that a local government has a general policy that essentially guarantees rejection of all wireless facility applications," or that denial of an application for one particular site is 'tantamount' to a general prohibition of service. . . . Under the latter theory, a plaintiff must demonstrate both "a legally cognizable deficit in coverage amounting to an effective absence of coverage" and a lack of "reasonable alternative sites to provide coverage. . . . A plaintiff's burden of proof on a prohibition of service claim "is substantial and is particularly heavy when . . . the plaintiff already provides

> some level of wireless service to the area," because "the Act cannot guarantee 100 percent coverage."

Thus, in the most recent precedent, the 4th Circuit has retained the traditional "effective prohibition" standard that it shares with all of the federal circuits that have had the opportunity to examine Section 332. This standard was not abandoned by the Ninth Circuit in City of Portland – the court in that case was examining a different provision of the Telecom Act that has from the beginning been governed by the standard that was applied in that case. There has been no change of standards in any of the cases. The traditional "effective prohibition" standard for evaluating prohibition of service claims remains fully in effect, in the Fourth Circuit and throughout the country. The County Council's staff is incorrect in asserting that it has changed, and further incorrect in asserting that a change in existing Montgomery County law is necessitated by some change in legal standards.

Limitations on the FCC's Power to Change Interpretation of Federal Law

Indeed, at this time it seems clear that, though the FCC may advocate for a different standard for Section 332 cases, it has no power whatsoever to reinterpret the meaning of that standard, or to force an alternative interpretation on the federal courts.

Only one federal appellate court has ruled on the question of whether the FCC may reinterpret the meaning of the Telecom Act's "effective prohibition" standard. The Second Circuit, in the case of Crown Castle N.G. East LLC v. Town of Hempstead, 2019 Westlaw 5188923, made clear that, as far as that court was concerned, the FCC does not have the power to adopt a new interpretation of that statutory language. Rather, the Second Circuit followed the practice of the federal courts across the country in relying on what is now the traditional understanding of that language. It is the role of the federal courts to interpret federal law, and in the court's view, a regulatory agency may not by fiat force a new interpretation on the courts.

In fact, no other federal circuit court has addressed the issue. The court in City of Portland v. FCC did not attempt to choose between the traditional interpretation

of "effective prohibition" and the FCC's recently announced reinterpretation of that standard, and certainly did not overrule or reject the traditional understanding. Rather, it avoided that issue, and ruled simply that certain regulatory requirements, including the FCC's rules on fees, shot clocks, and discrimination among carriers and types of facilities, were valid uses of the FCC's discretion. Similarly, the Third Circuit, in the case of T-Mobile N.E. LLC v City of Wilmington, 2020 Westlaw 245306, avoided ruling on the FCC's proposed reinterpretation on the grounds that it had to apply the law as it existed at the time the conflict between the parties arose, i.e., it applied the traditional interpretation. Only the Second Circuit has addressed the issue, and it ruled unambiguously that the FCC does not have the power to force a reinterpretation of a federal law.

<u>Passage of ZTA 19-07 is unnecessary because Montgomery County is already in compliance with unchanged federal law.</u>

This error concerning the interpretation of the Portland case is of critical importance because the County Council seems poised to adopt 19-07 based on this incorrect interpretation. The Council's legislative attorney states in a staff memo,

> ZTA 19-07 updates current standards, bringing Montgomery County in compliance with federal orders. The County's current regulations for small cell antennas in the Agricultural, Rural Residential, and Residential zones likely do not comply with the FCC's Small Cell order. . . . The overarching effect [of the three FCC Orders] is that federal law bans states and local governments from "materially prohibiting" carriers from offering wireless
>
> service. . . . The Court [in the Portland case] allowed a lowered standard for determining when a local government has effectively prohibited the deployment of small cell facilities. The Court held that a local regulation that "materially inhibits" deployment was sufficient to be an effective prohibition.
>
> *Staff Memorandum to County Council, July 8, 2021, pp. 2, 5-6.*

This analysis is incorrect because it confuses the standards applied under Sections 253 and 332 of the Telecom Act. The Court did not at any point in the opinion hold that "a local regulation that 'materially inhibits' deployment was sufficient to

be an effective prohibition." Rather, the Court applied the traditional "material inhibition" standard to an analysis under Section 253, which deals with regulatory requirements, and never addressed the "effective prohibition" standard which has long been used to analyze cases arising under Section 332; that standard has not been challenged by any federal court in any federal circuit. The Ninth Circuit emphatically did not rule that FCC's proposed "material inhibition" standard for 332 cases is to replace the "effective prohibition" standard that has long been applied in Section 332 cases. Rather, this appears to be a confusion between the "material inhibition" standard traditionally applied in Section 253 cases, with the FCC's own proposed "material inhibition" standard that the FCC wants to see applied in Section 332 cases. However, the Court clearly did not make that substitution.

It is Section 332 that deals with the "placement, construction, and modification" of personal wireless service facilities. Because the proposed ZTA 19-07 would specifically deal with the "placement, construction, and modification" of such facilities, the need for 19-07 should be evaluated under that standard. Under that standard, which remains firmly in effect in every federal court of appeals in the country, it seems clear that Montgomery County is already in compliance with federal law because essentially all local efforts in the County to prohibit new placement, construction or modification would be perfectly legal under the "effective prohibition" standard. The coverage maps of the major telecom companies show that wireless service is nearly ubiquitous in the County, and thus no rejection of a permit application could be deemed to be an "effective prohibition" of wireless service.

At the recent PHED Committee meeting, the members were very concerned about the number of poles that would become available based on the distances to residences. If one understood the FCC's requirements to require almost any location to be available for a pole supporting small cells, then a setback requirement of 30 feet or less might seem legally necessary. This outcome would be tragic, because in fact the FCC's Orders, combined with traditional "effective prohibition" standards and the telecoms' own extensive coverage maps, cannot be understood as requiring this result. In fact, under a traditional interpretation, the existing setbacks are completely adequate to meet our legal requirements. There is simply no need for 19-07 on this -- or, for that matter, any other -- grounds.

In fact, the traditional treatment of "effective prohibition" is much more compatible with the intent of Congress at the time it enacted the Telecommunications Act in 1996. The Congress' goal at that time was to strike a balance between the needs of advancing technology and the reasonable concerns of the affected local communities -- indeed, it was that balancing that led to the traditional understanding of the law. The FCC's newly announced "material inhibition" standard badly skews this balance, leaving local communities almost no voice in how technology will affect their residents. We believe it would be a great mistake to abandon the sensible standards that Congress intended and that the federal courts have long implemented.

Appendix B -- Campanelli on “Effective Prohibition”

So, one of the issues they want me to discuss today is the issue of the effective prohibition under the Telecommunications Act and what local governments can and cannot do in light of the recent FCC interpretive orders and the City of Portland case. It's probably one of the hottest issues in Telecommunications Act cases right now.

To give you an accurate answer, I have to first talk a little bit about the Telecommunications Act and Congress's intent, because it's critical to any understanding of exactly what is at work here. So back in 1996, when Congress enacted the Telecommunications Act of 1996, Congress actually considered giving the FCC the power to control the placement of wireless facilities. At the end of the day, what Congress did was almost the opposite. The very first paragraph of C-7 of the act is entitled C-7-A. It's entitled General Authority. And in that provision, they preserved what they described as the general authority of state and local governments to control the siting placement, installation, construction and modification of wireless facilities.

So, the general rule is local governments have the power to control the placement of wireless facilities, which would include cell towers or macro cells, small cells and or Distributed Antenna Systems, DAS. So that's the general rule. That's never changed since 1996. Then they proceeded to adopt C-7-B, which imposes five, what I call procedural limitations upon the ability of governments to regulate the placement of wireless facilities. Now, one of those restrictions, if you will, is the prohibition language. And what it says basically is local governments cannot prohibit or effectively prohibit the provision of personal wireless services.

Not surprisingly, immediately when this was enacted, site developers and carriers started filing lawsuits every time an application to build a new cell-tower, wireless facility was denied by a local government. They'd say, aha, you're effectively prohibiting us from providing personal wireless service. And the Telecommunications Act was less than crystal clear as to what constitutes an “effective prohibition”. Theoretically, a one “effective prohibition” would occur if someone was to say, OK, you can't put a cell tower in a residential district and then classify every property in the entire county as residential. That's an effect of prohibition. Can't do that.

But it took only two years from 1996 the enactment for these lawsuits to get up to the United States Circuit Courts of Appeals. For those of you who aren't familiar with the federal court system, it essentially consists of three levels, the district court level or the trial court level where all federal lawsuits start. Then if you want to appeal from a district court, you [go] up to the United States Circuit Court of Appeals. There are 13 circuit courts that cover the entire country — and the only court above them is the United States Supreme Court.

It only took two years for this effective prohibition litigation to reach the Circuit Courts of Appeals and the Circuit Courts of Appeals. Each adopted their own tests, which are fairly consistent across the country. And what they said was this for an applicant to claim that a denial of their particular application for a particular installation is tantamount to an effective prohibition and thus would violate the Telecommunications Act, they have to prove two things. Number one, they have to prove that an identified wireless carrier suffers from a significant gap in their personal wireless services.

That means that there's a physical geographic area where they don't have personal wireless services. Then they must also number to prove that their proposed installation is the least intrusive means of remedying that gap or the only feasible means of remedying that gap, or that they've looked at other locations, possibly less intrusive locations, and they're not feasible. So, they're all kind of the same.

And federal courts across the country have been interpreting the “effective prohibition” language this way for more than twenty-four years. All the circuits including the Fourth Circuit, just so you're where you're located in the Fourth Circuit, that means that the Fourth Circuit Court of Appeals has jurisdiction over any trial courts, any district courts in your state.

That's very important because if someone was to file a lawsuit claiming now that an application was denied in a way that violated the effective prohibition, the district court in your state would not be bound necessarily by any recent FCC new interpretation.

They would be bound by the 4th Circuit because the Fourth Circuit sets precedent there above the district courts. That's one of the first things that's hard-to-get local governments to understand. The ultimate determination is going to be made

if someone files a lawsuit by a district court that is bound by the superior decisions of the circuit court.

Now, the Fourth Circuit. They're one of their lead cases with Cellco Partnership versus Board of Supervisors of Fairfax County, the citation, since you're quoting this, is 140 F Sub 1/3 548. The decision came down in 2015. And the Fourth Circuit said, quote, To, prevail on a prohibition of service claim, a wireless carrier must show either that a local governing body has a general policy that essentially guarantees rejection of all wireless facility applications, or that denial of an application for one particular site is tantamount to a general prohibition of service. Under the latter theory, a plaintiff must demonstrate both a legally cognizable deficit and coverage amounting to an effective absence of coverage and a lack of reasonable alternative sites to provide coverage.

Now. Significantly, the Federal Fourth Circuit also embraces the view of other circuits that once a carrier has some level of service in the area, the power of local governments to regulate these things becomes much broader. So, if, for example, a carrier has 4G service and 5G 4G service and has great coverage, the government has more power, the local government to regulate any additional facilities, irrespective of whether it's a 4G or 5G.

You see, I have to teach local governments on a regular basis and what the federal courts say and I've said since 1996, when Congress enacted the Telecommunications Act of 1996. It created a balancing, deliberately. It tried to balance the country's interest in the rollout of wireless infrastructure against the interests of local governments, enforcing the local zoning codes to prevent the irresponsible placement of wireless facilities and the unnecessary adverse impacts which invariably follow. If you put a cell tower 10 feet from someone's bedroom window, it's going to adversely impact their home. Forget about the radiation effects, but it's going to reduce property values, have an adverse aesthetic impact, probably won't have it, won't have a sufficiently safe fall zone, things like that. So federal courts have since 1996 recognized this balancing.

And so, when you're talking about an effective prohibition, federal courts keep that in mind. When does something constitute an effective prohibition? And we'll talk about what they have to prove and things like that. So, for twenty-four years, that's what the Fourth Circuit says. You've got to prove you have a gap in service and there's no alternative site that can fill the gap.

Now, with the within the context of 5G rollout, you're not really worried so much about the carriers as much as site developers. For those of you who don't know, site development companies are companies that don't provide any personal wireless service. You can't get a telephone contract with a site developer there in the gauge in the business of building wireless infrastructure for profit. They build facilities and then they lease space or capacity on these facilities to wireless carriers like your AT&T, Verizon, your T-Mobile. They don't look for the best place to put towers, meaning the least intrusive locations. They look for the cheapest locations.

When they come in right now -- under in the 5G rollout, they are looking to build wireless facilities where there is no 5G coverage. They're building it in advance so that if and when a carrier wants to go into an area for 5G coverage, then they already have the infrastructure. Now, as you might suspect, you can't have a gap in coverage if you don't have any coverage. They can't claim site developers that they have a gap in coverage because they don't provide any wireless service. And if they go in the area where there is no 5G coverage because nobody's offering it, again, they can't claim that it's an effective provision because you can't have a cap in coverage that doesn't exist.

So, the wireless industry went to the FCC for help because they knew they couldn't pass this test of all the circuit courts. And lo and behold, the FCC doing what they do best, cater to the wireless industry. And what they did is they said in September of 2018, we're going to come up, we're going to reinterpret the effective prohibition language of the Telecommunications Act, not because the federal law was changed. The Telecommunications Act has not been changed. They simply said we're going to come up with a new interpretation because Congress has not amended the Telecommunications Act to keep up with the changes in technology.

Now, it's critical to understand this is not the first time this has happened. The FCC tried to do this once before, and that was in the context of broadband. The FCC initially, when broadband came into existence, the FCC said, well, we read the Telecommunications Act is covering personal wireless services. It doesn't cover broadband. Then when the wireless industry uses their clout with the FCC, the FCC decided to reinterpret this effective prohibition or actually reinterpret the language of the Telecommunications Act to say no, we reinterpreted and it does cover broadband.

And so, a case came to a district court in New York in the 2nd Circuit, and a federal judge basically knocked down the FCC and said, listen, we applaud the FCC. We understand that it's not happy that Congress hasn't amended the Telecommunications Act to keep up with technology, but. Is my favorite words, “it's not up to the FCC to put words in the Telecommunications Act that are unfair.” And so, the federal court ruled against the FCC and said you can't just reinterpret it. In that case, I can give you the citation. That was Clear Wireless LLC versus Building Department of the Village of Lynbrook. The citation is 2012, Westlaw 826749. And the and the federal court actually said under such a circumstance, it is not up to the FCC to construe the TCA. to say something it does not say, nor up to the court to fight broadband communication encompassed by the law.

Well, the FCC is at it again. Now, they say we're going to reinterpret the Telecommunications Act and we are going to reject the US Circuit Court of Appeals decisions that rely solely and that's the word they use solely upon the “effective prohibition”, “least intrusive means” test. We, the FCC now interpret an effective prohibition to occur if they can show that denial of the application would materially inhibit the provision of personal wireless services. And by the way, I have no idea what that’s supposed to mean. And they can show that if they need a new facility, either to simply improve existing service or to add a new service. If this decision with this interpretation was actually upheld by the federal courts, it would all but destroy the balancing of interests that was created by Congress. So that interpretation is actually directly contrary to the intent of the Telecommunications Act and what Congress intended when it drafted it.

So, what has happened now since that FCC ruling has come down? Well, many local municipal attorneys who really know very little about the Telecommunications Act say, oh, this is the new law. We have to follow this. Other local attorneys. Drink the Kool-Aid that's fed to them by the wireless industry saying, no, now we've got to we're bound by the FCC, that's simply not the case.

So, let's talk about what has happened since then. You've got cases like City of Portland. You've got the T-Mobile case and the Third Circuit, but of greatest import, you have Crown Castle in the Second Circuit because Crown Castle is the only court that actually ruled directly on that issue.

So, let's talk about the most. The one that everybody talks about is Portland, city of Portland and city of Portland. The 9th Circuit Court of Appeals. Entertained a challenge to this new ruling, but significantly, it did not directly address the effective prohibition challenge or area of that FCC interpretive order. That case was focused on the fees and the timing, because in that ruling, two of the things the FCC did was it said an effective prohibition can occur if you if local government charges too much money for wireless carriers or site developers to put on public polls and rights of way or if they take too long to entertain applications for small cells and DAS nodes.

And that's really what the 9th Circuit addressed in City of Portland. It did not directly address, as none of the other courts did, except for the Second Circuit, this effective prohibition argument. So, in my view, the city of Portland has very little effect on the effect of prohibition, which, quite frankly, remains in full force and effect as far as I'm concerned, including in the 4th Circuit. So, someone asked me about the Third Circuit, one of the cases that was called to interpret. Now the effective prohibition since the City of Portland case and since the FCC ruling was T- Mobile NE LLC vs. City of Wilmington. And that case, the citation is. 2020 Westlaw 1245306 and in City of Wilmington excuse me and T-Mobile Northeast vs. City of Wilmington, the Third Circuit did the same thing that the City of Portland did, and it punted.

It avoided the issue. Here's how the court, the Third Circuit and T-Mobile said, OK, so the plaintiff is arguing now there's a new standard. This new you can't go with the least intrusive means, effective probation standard. The new standard under the FCC order would be would give the wireless providers more leeway. They only have to show material inhibition.

However, we don't have to get to that. And the reason is because we're bound by the law as it existed when this case came into existence, because the FCC ruling, whatever it may be, can't be applied retroactively.

So, the court in the 3rd Circuit applied the “effective prohibition”, “least intrusive means” standard and never decided whether or not the new ruling is actually binding upon them. So, it avoided the issue, as did the city of Portland, as did the 10th Circuit.

Nobody actually ruled directly on the FCC ruling, with one exception, and that is District Court in New York. That ruling came in the case of Crown Castle, NG E. LLC

versus Town of Hempstead. The citation is 2019 Westlaw 5188923. In that case, Crown Castle, which is probably one of the most aggressive, largest site developers in the country. They're probably the biggest. And I've gone up against them more times than I can count. They brought a lawsuit in a federal district court and they argued that here's the new rule. If we want to install small cells or nodes, local governments cannot apply the effective prohibition under the old test, the significant gap in service, least intrusive means and the town towns attorneys didn't know how to address it. We're not really sure what to do. So, we think we should get guidance from the Second Circuit.

So, both parties to the lawsuit ask the district court judge to send the case up for what's called an *Interlocutory Decision* from the 2nd Circuit Court of Appeals, saying we need the 2nd Circuit Court of Appeals to determine if the ruling is binding or if the district court is bound by the 2nd Circuit.

The federal judge said exactly what I expected he would, he said. In his words:

> The parties failed to meaningfully refute the controlling effect of this Second Circuit precedent, plaintiff's solitary reference to the controlling wealth decision suggests that the court should reject the analysis of the Court of Appeals because the commission further rejected the Second Circuit's view. However, this position misperceives the role of the FCC in interpreting the law.

Basically, the court said we don't have to ask the FCC, we are a district court, we are bound by the 2nd Circuit, not by the FCC. The Second Circuit has already interpreted what the “effective prohibition” language of the Telecommunications Act means. And we've been relying upon that in federal courts across the country have been relying upon that for twenty-four years. The FCC has no power to simply come up with its own new interpretation, not because the Telecommunications Act has changed, but because in the FCC's view, Congress has been lazy. They have an update of the act to keep up with modern technology. That's too bad the FCC can't, in one pen stroke, wipe out twenty-four years of judicial precedent. It's federal courts that get to interpret the law and they've interpreted that “effective prohibition” language for twenty-four years. And when I say they at least nine of the 13 circuit courts have interpreted what it means and that's what's binding on the district courts.

So, if, for argument's sake, someone filed an application to build a wireless facility and a local government in your state denied the application and the applicant said, we're going to sue you under the Telecommunications Act because the FCC says we're going to have to prove significant gap, least intrusive means. And that case went to a district court because that's the only place they can file it. Theoretically, they could file in a state court, but they would never do it. So, we'd file it in federal court. Well, theoretically, that district court would recognize they're bound by the judicial precedent of the circuit court above them, which in your state is the Fourth Circuit, which embraces the “effective prohibition” interpretation that's been in existence for twenty-four years.

So, I'm sorry for the long-winded explanation, but it's important to understand this would also be consistent. Upholding the Fourth Circuit's decision would be consistent with the balancing test which Congress intentionally created and which every federal circuit court always mentions. We have to view this against the backdrop that there's supposed to be a balancing.

And it's only logical because if you take the FCC's logical interpretation of what they're claiming is the new effective prohibition within the context of the 5G rollout, I've heard site developers say they want to build 5G facilities every one hundred feet in residential neighborhoods. Why? Because the 5G signal doesn't travel as far as 4G signals. So, who could argue that this would not upset the balancing if all the carriers have perfect 4G coverage and still they can interpret the Telecommunications Act in such a way? What if they came out with 12G and said we've got to put a cell tower in front of everybody's front door? Well, that's a new service. Theoretically, under the interpretation offered by the FCC, you'd have to allow it. And that's nonsense. It makes absolutely no sense.

So, my biggest fear is not that local governments will get sued in federal courts by site developers or carriers, citing the FCC rule. My biggest fear is, as I've seen in the past, when they do, local governments will hire attorneys who don't know any of this. They'll hire an attorney not because of the legal acumen, because they're friends with the town supervisor and they'll put up a half-hearted challenge. They won't know what they're talking about and they'll lose and set a bad precedent. That's the biggest danger to local governments right now.

So, that is my discussion of the effect of prohibition and the effect of Portland and the FCC ruling.

Appendix C – Transcript of Pine's talk

My name is Sheldon Pine. I resided … in our city [City of Gaithersburg]
I'll preface this by saying I'm a 1981 graduate of Yale Law School and clerked for the 11th Circuit Court of Appeals and a practiced regulatory law for 35 years since graduating from law school. That's a preface to say I want to talk about the cell tower regulations. I want to take a few valuable seconds to thank [City Attorney] Lynn [Board], [Deputy City Attorney] Frank [Johnson] and [Deputy City Manager] Dennis [Enslinger] because I think they've done an extraordinary job with a very complex subject and had produced very nuanced and very complex regulations. There's been a lot of contest about what the regulations should say and a whole variety of subject matters. I gave a written statement which is five single spaced pages this deal strictly with the law. I don't have enough time to talk about that but I want to make three quick legal points and I'm broadly supportive of the regulations as proposed. First, the zoning power really is the power to preserve the character of the community [with] concomitant obligation to heed the wishes of the community. That's what we're talking about when we talk about zoning. It's a quintessential power of local government as the Supreme Court said the power to zone and control land use is undoubtedly broad and it's proper exercise and this is an essential aspect of achieving a satisfactory quality of life in both urban and rural communities. That's a famous zoning case called Mount Schad.

Specifically, as the second point, I'd like to make relating to the cell tower zoning issue. It's definitely the law of the United States Court of Appeals for the 4th Circuit which governments Maryland and the contiguous state. Definitely, the law that preserving the character of the community and heeding the legitimate wishes of the community with respect to the location of zoning cell towers are legitimate aspects of the zoning process. In addition to being core zoning values nothing in any FCC regulation short of an action by the city that actually totally prohibits cell tower servers can override the power of the city to zone. And finally, and that's further to amplify this point. I mean we see this in the controversy over the regulations with two of the cell tower companies. Contrary to what they've said refusing to allow the placement of cell towers in a way that maximizes cell tower company returns and minimizes their costs which is what they want is not an effective prohibition of service a violation of what would only occur if there is an actual, actual prohibition of service and effective prohibition of all service

where a community is already served. There are three recent fourth circuit court of appeals cases that hold that and nothing has changed that piece of the law.

Appendix D – Pine's history "Effective Prohibition" through court cases

Comments of Sheldon L. Pine, Esq., Concerning Draft Regulations Establishing Application Processes, Requirements, Notices and Appeals for Installation of Facilities Within City Controlled Rights of Way

[redacted], Gaithersburg, MD 20878
[redacted]

My name is Sheldon L. Pine. I reside at 35 Treworthy Rd., Gaithersburg, Maryland 20878. I reside in the Westleigh community, and am one of the Petition Residents of Westleigh that previously registered strong and unanimous opposition to the Crown Castle ("CCI") proposal to locate three cell towers in portions of the municipal right-of-way (ROW) that happened to be in three of our neighbors' front lawns.

By way of background, I am a *summa cum laude* graduate of Yale College, and a graduate of Yale Law School. After law school, I clerked for then-Chief Judge Gerald Bard Tjoflat of the United States Court of Appeals for the Eleventh Circuit. I have been in private practice for 36 years, specializing in regulatory and administrative law. I believe I am well qualified to address legal aspects of our city's draft regulations, particularly the aspects focused on wireless facilities.

I have only two substantive legal points to make, both addressing incorrect arguments made by CCI regarding the current draft of the regulations. Before making those points, I think it is necessary to state that City staff – **City Attorney Lynn Board, Deputy City Attorney Frank Johnson and Deputy City Manager Dennis Enslinger** – have done superb work in producing the revised draft regulations. By any measure, the quantum of work involved is prodigious. What is more, the technical-engineering and legal-regulatory complexities involved in these regulations well exceed the usual requirements asked of city staff. While the petition residents of Westleigh do not necessarily endorse every detail in the draft,[1] there is no doubt that the work is (1) outstanding, and (2) generally responsive to the numerous concerns expressed by Gaithersburg citizens in the several hearings relating to the cell tower matter. We are particularly grateful to Ms. Board, Mr. Johnson and Mr. Enslinger for their "above and beyond" efforts here.

The PowerPoint summary of the draft regulations indicates that the "proposed modifications do not change the current regulations with regard to the placement, spacing or height of wireless facilities within the ROW." The Westleigh residents strongly endorse this position because it is our understanding that the regulations do not allow the installation of cell tower facilities in purely residential areas where there are no above ground utilities and the only light poles installed are of the ornamental variety that do not support cell towers and the ancillary equipment.

[1] There is particular concern about the increased size of certain of the wireless facility equipment authorized in the draft regulations. Another Westleigh resident, Radio Frequency Engineer Steven Raphael, has addressed some of these technical concerns in his written testimony and comments.

There are two important points of contention between the draft regulations and Crown Castle ("CCI") (and perhaps other cell tower service advocates such as AT&T and T-Mobile). On both points, CCI seeks to use FCC language interpreting the Telecommunications Act term "effective prohibition" of service as a stick to compel the City to override traditional municipal zoning concerns such as citizens' opinions, preservation of the traditional (residential) character of the community and aesthetics. CCI is wrong in this regard.

The authoritative interpretation of the Telecommunications Act language is that of the United States Court of Appeals for the Circuit that includes Maryland, that is, the Fourth Circuit Court of Appeals. The Fourth Circuit directly and strongly endorses the legitimacy of inclusion of citizen concerns and, specifically, traditional community aesthetic concerns in these important zoning decisions. What is more, the Fourth Circuit has declared that the cell tower advocates' burden of showing "effective prohibition" is an extremely heavy one.

CCI raises the specter of "effective prohibition" every time the City and the draft regulations do not accede to their demands, however unreasonable those demands may be and however accommodating City staff has tried to be. CCI's assertion of "effective prohibition" is without foundation and cannot stand. CCI and, sad to say, sometimes the FCC in its ardor to support the cell tower companies, overlook the Supreme Court's statement in Schad v. Mount Ephraim, 452 U.S. 61, 68 (1981):

> "The power of local governments to zone and control land use is undoubtedly broad and its proper exercise is an essential aspect of achieving a satisfactory quality of life in both urban and rural communities."

The City's power to preserve our quality of life must be preserved.

I. Regulation Section (I)(4)(D) Prohibiting Cell Towers Where They Would Be Inconsistent With, Inter Alia, the General Character of the Community and of the Neighborhood is Entirely Consistent with the Controlling Federal Statutes

CCI objects to just about every aspect of this section of the regulation. It objects to language about over-concentration of poles, excessive number of poles and inconsistency with the general character of the neighborhood. In its letter to the City, CCI even objects to a limitation that poles must be spaced at least 500 feet apart(!) (this would be a tremendous concentration of poles by any reasonable measure). CCI claims that these limitations work an effective prohibition of service violative of the Telecommunications Act of 1996. This is, quite simply, wrong.

In T-Mobile Ne. LLC v. Loudoun Cty. Bd. of Supervisors, 748 F.3d 185, 198 (4th Cir. 2014) , the United States Court of Appeals for the Fourth Circuit restated the standard for a claim of this kind:

> To show that a local government regulation or decision "prohibit[s]" service or has "the effect of prohibiting" service, the telecommunications provider may demonstrate that the regulation calls for the rejection of all wireless facilities -- i.e., that "a local governing body has a general policy that effectively guarantees rejection of all wireless facility applications." **T-Mobile**

> **Northeast LLC v. Fairfax Cnty. Bd. of Supervisors, 672 F.3d 259, 266 (4th Cir. 2012)**. Or, if the local government rejects a facility at a single site, the telecommunications provider may demonstrate that the rejection was "tantamount to a general prohibition of service." **Id**. (internal quotation marks omitted). To make that showing, the telecommunications provider must demonstrate (1) **that there is an "effective absence of coverage" in the area surrounding the proposed facility,** and (2) that there is a "lack of reasonable alternative sites to provide coverage" or that "further reasonable efforts to gain approval for alternative facilities would be 'fruitless.'" **Id. at 268** (citing Albemarle Cnty., 211 F.3d at 87-88). **This burden is "substantial and is particularly heavy when . . . the [telecommunications provider] already provides some level of wireless service to the area." Id**. (emphases added).

Our court of appeals has been quite clear that the standard for a showing of effective absence of coverage is quite stringent, and the burden of proof on the cell tower provider to satisfy that standard is very heavy. The city's refusal to allow a cell tower provider to maximize its revenue by saturation of coverage, erecting towers in a neighborhood with no aboveground utilities, placing poles every several hundred feet etc., is **not** an effective prohibition of coverage. Quite the contrary,

> we emphasize that a plaintiff's burden to prove a violation of subsection (B)(i)(II) [the effective prohibition section of the Telecommunications Act of 1996] is substantial and is particularly heavy when, as in this case, the plaintiff already provides some level of wireless service to the area. *Albemarle County*, 211 F.3d at 87-88. This substantial burden is consistent with the plain language of subsection (B)(i)(II), which is violated only when a local governing body's decision prohibits or has the effect of prohibiting personal wireless services. *See Albemarle County*, 211 F.3d at 88 n.1. **Importantly, the language of this subsection does not encompass the ordinary situation in which a local governing body's decision merely limits the level of wireless services available because, as we have explained, the Act cannot guarantee 100 percent coverage.** *Id*.

T-Mobile Ne. LLC v. Fairfax Cty. Bd. of Supervisors, 672 F.3d 259, 268 (4th Cir. 2012) (emphasis added).

The law is clear that the City need not acquiesce in the cell tower companies' demands that every other consideration – character of the community, aesthetics, community sentiment – be subordinated to the cell tower companies' demands that the area be saturated with coverage. Where there is already some coverage, the cell tower provider's burden to show an effective prohibition of coverage is all but insurmountable. See T-Mobile Ne. LLC v. Howard Cty. Bd. of Appeals, 524 F. App'x 9, 14-15 (4th Cir. 2013) ("T-Mobile does not dispute that there is some level of wireless coverage in the area. J.A. 450-56 (noting, in an expert report prepared for and relied upon by T-Mobile, that there is not "reliable" in-building and in-vehicle wireless coverage in the area served by the proposed site). Thus, T-Mobile's burden to show a lack of reasonable alternatives is "particularly heavy." **Fairfax Cnty.,** 672 F.3d at 268."). T-Mobile failed to show that it had exhausted every other avenue for showing that alternative siting was impossible, and thus its claim failed.

In short, notwithstanding the claims of cell tower companies and the potential interpretations of an FCC inclined to favor maximum cell tower placements, absent statutory amendments, the authoritative opinions of the United States Court of Appeals for the Fourth Circuit control the issue of "effective prohibition". The standard is extremely stringent, and the burden of proof rests entirely on the cell tower companies and cell service providers. Nothing in the new FCC regulations alters those realities. For a recent and comprehensive summary of the controlling legal standards, standards that unequivocally support the City's draft regulations, see New Cingular Wireless PCS, LLC v. Fairfax Cty. Bd. of Supervisors, 674 F.3d 270, 276 (4th Cir. 2012).

II. There is Ample Legal Support for the Council and Its Cell Tower Regulations to Heed Community Concerns Based on Aesthetic Considerations and the Character of the Community

Over the course of several public hearings concerning cell tower permit requests and these draft regulations, the Council has heard strong opposition from communities concerned that tower sitings would be inconsistent with the character of the community and with aesthetic considerations. These concerns have been particularly strong in communities where all utilities are located below ground, and the utility easements in these communities, from their very inception, indicate that all utilities are to be located below ground. It is likely for that reason that the street lights in these communities are entirely ornamental in character and not of the so-called "cobra"-like style.

An unbroken line of Fourth Circuit Court of Appeals precedent supports the Council's consideration of these concerns in deciding upon cell tower sitings, and also in designing regulations addressing these issues. These cases are anchored by the Fourth Circuit's important decision in AT&T Wireless Pcs v. City Council of Va. Beach, 155 F.3d 423 (4th Cir. 1998). The Virginia Beach situation mirrors our situation in Gaithersburg to a great degree. Thus, according to the court of appeals,

> Similar sentiments emerged at the City Council's March 25, 1997 meeting. *See* J.A. at 104 (Mr. Alcaraz expressing concern over towers "in a residential environment" and Mr. Shank stating that "the proper place for telecommunication towers is an industrial or commercial area" and referring to the towers as "unsightly"). A representative of a local community group covering 425 homes testified to his opposition on the grounds that the towers would be "visual pollution" and "unsightly," notwithstanding appellees' efforts to soften their impact. J.A. at 105 (Mr. Haven).
>
> The above evidence is more than enough to demonstrate the real, and surely reasonable, concerns animating the democratically elected City Council's 'discrimination.' None of those who testified suggested any ill will toward appellees, nor did any of them demonstrate dislike for digital service as opposed to analog. On the contrary, they hoped that towers might be located in a nearby commercial zone. *See* J.A. at 69, 75.

Id. at 427-28. The court of appeals upheld the Virginia Beach Council's decision to deny the permits in question.

Some 15 years later, the Fourth Circuit, in the Cingular Wireless and T-Mobile decisions discussed above, recapitulated the analysis of the Virginia Beach decision and sustained it in the later settings involved in each case. In T-Mobile, 672 F.2d at 270-71, the court explained "we cited a House of Representatives Conference Report, in which the conferees expressed their intent that [the statute] provide 'localities with the flexibility to treat facilities that create different visual, aesthetic, or safety concerns differently to the extent permitted under generally applicable zoning requirements even if those facilities provide functionally equivalent services.' *Virginia Beach*, 155 F.3d at 427 n.3 (quoting H.R. Rep. No. 104-458, at 208 (1996) (Conf. Rep.)). We also described the evidence in the record supporting the local governing body's decision, noting both the significant opposition voiced by community members based on aesthetic concerns, and the lack of evidence suggesting 'ill will' toward the applicants or their services. *Id*. at 427-28."

The analysis in Cingular Wireless is quite similar. According to the court,

> 'a reasonable mind' should be understood as 'the mind of a reasonable legislator.' *Nottoway County*, 205 F.3d at 694. Under this reasonable-legislator standard, '[i]t is not only proper but even expected that a legislature and its members will consider the views of their constituents to be particularly compelling forms of evidence.' *Virginia Beach*, 155 F.3d at 430. Hence, '[i]f a legislative body denies a permit based on the reasonably-founded concerns of the community, then undoubtedly there is substantial evidence to support the body's decision.' *Nottoway County*, 205 F.3d at 695 (internal quotation marks and emphasis omitted).

Cingular Wireless, 674 F. 3d at 275.

The law is thus clear that the City Council acts rationally and reasonably in heeding traditional community zoning concerns when drawing regulations or assessing permit requests in the cell tower context. The draft regulations are faithful to the law, and should be finalized in accordance with the existing draft.

Respectfully submitted,

Sheldon L. Pine