



Committee: PHED
Committee Review: Completed
Staff: Livhu Ndou, Legislative Attorney
Purpose: Receive briefing and have discussion – no vote expected
Keywords: #Antennas #UtilityPoles

AGENDA ITEM #9A
October 18, 2022
Worksession

SUBJECT

Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure – Use Standards

Lead Sponsor: Councilmember Riemer

EXPECTED ATTENDEES

- Jason Sartori, Chief, Countywide Planning & Policy, Planning Department
- Benjamin Berbert, Planner III, Countywide Planning & Policy, Planning Department
- Victor Salazar, Division Chief, Zoning, Well & Septic and Code Compliance, Department of Permitting Services (DPS)
- Debbie Spielberg, Special Assistant, County Executive
- Mitsuko Herrera, Program Director, Office of Broadband Programs
- Marjorie Williams, Broadband, Cable & Franchise Division Manager, Department of Technology & Enterprise Business Solutions (TEBS)
- Meredith Wellington, Land Use Planning Policy Analyst, Office of the County Executive

COUNCIL DECISION POINTS & COMMITTEE RECOMMENDATION

The PHED Committee (3-0) recommends approval with amendments.

DESCRIPTION/ISSUE

ZTA 22-01 will reduce the setback for Antenna on Existing Structure to 30 feet in Rural Residential, Residential, or Planned Unit Development zones.

SUMMARY OF KEY DISCUSSION POINTS

- The District Council adopted ZTA 19-07 on July 27, 2021, which made the setback for a limited use Telecommunications Tower in the Agricultural, Rural Residential, and Residential zones 30 feet.
- Under the current Zoning Ordinance, the setback for an Antenna on Existing Structure is 60 feet.
- ZTA 22-01 will reduce the setback for Antenna on Existing Structure to 30 feet so that those antennas are treated similarly to telecommunications towers.

This report contains:

Staff memo
ZTA 22-01, as introduced
PHED Committee amendments
Planning Board Recommendation

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MEMORANDUM

October 13, 2022

TO: County Council

FROM: Livhu Ndou, Legislative Attorney

SUBJECT: Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure – Use Standards

PURPOSE: Worksession

Committee recommendation (3-0): approval of the ZTA with amendments

Expected Attendees

- Jason Sartori, Chief, Countywide Planning & Policy, Planning Department
- Benjamin Berbert, Planner III, Countywide Planning & Policy, Planning Department
- Victor Salazar, Division Chief, Zoning, Well & Septic and Code Compliance, Department of Permitting Services (DPS)
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- Meredith Wellington, Land Use Planning Policy Analyst, Office of the County Executive

Introduction

Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure – Use Standards, lead sponsor Councilmember Riemer, was introduced on February 8, 2022. ZTA 22-01 will reduce the setback for Antenna on Existing Structure in the Rural Residential, Residential, or Planned Unit Development zones to 30 feet.

Action for this item is currently scheduled for October 25, 2022.¹

¹ Under state law, “(e) In a year in which a district council is elected, the district council may not amend a zoning law from November 1 and until the newly elected district council has taken office.” Md. Code, Land Use § 22-206. This means the Council may not make any zoning changes, such as adopting a ZTA, after October 31st. Further, under Section 7.2.4.D.5. of the Zoning Ordinance, “If the District Council does not act on a Zoning Text Amendment within the earlier of 2 years of the date of its public hearing or expiration of the term of office of the District Council that conducted the public hearing, it may not do so unless the

Public Hearing

A public hearing was held on September 13, 2022. Several speakers testified, both in opposition and support. Opposition testified that the approval process for Antenna on Existing Structure lacks public input, that the negative effects of radiation have not been sufficiently studied, and that the technology has become obsolete. Letters in opposition questioned the legal necessity for this ZTA, as well as asked questions about the impacts on the environment, such as pollinators and the tree canopy.

Speakers in support testified that this infrastructure is needed to support businesses and public services, increase connectivity, and encourage colocation. Testimony in support included letters from MD5G Partnership, which represents 35 organizations that support “building connected communities through enhanced wireless networks”, including Maryland State Lodge Fraternal Order of Police, Montgomery County Chamber of Commerce, Hispanic Chamber of Commerce, Wireless Infrastructure Association, Greater Washington Board of Trade, T-Mobile, Greater Bethesda Chamber of Commerce, and Montgomery County Medical Society. These letters noted the benefits of wireless connectivity in sectors such as education, public safety, healthcare, transportation, and technology. They noted that ZTA 22-01 would support small business owners, who “depend on timely communication at sufficient speeds to conduct civil engineering and construction trade work, as well as in other areas of industry requiring substantial mobility and access to information.” They also noted that the current zoning ordinance has the unintended consequence of incentivizing applying for a new telecommunications tower rather than using an existing structure.

The Town of Chevy Chase submitted written testimony asking for several amendments, including:

1. requiring deployment of 5G equipment to be limited use instead of accessory use, so that there is Transmission Facilities Coordination Group (TFCG, or “Tower Committee”) oversight and opportunity for public input;²
2. ensuring design standards for limited use be applied;³ and
3. clarifying that the 30-foot setback would be measured on a horizontal basis from the pole, and not at an angle.

Zoning Text Amendment is again introduced and set for public hearing.” This means that any introduced ZTA’s that have already had a public hearing will expire at the end of this Council’s term.

² Under Section 2-58E, the Tower Committee already reviews applications for Antennas on Existing Structures. The Tower Committee must “review the siting of each proposed transmission facility”, and a telecommunications transmission facility is defined as “any antenna, tower, monopole, or other structure used primarily to receive or transmit wireless voice, data, or image information (or any combination of them).”

³ Antenna on Existing Structure is already a limited use in the Zoning Ordinance. An Antenna on Existing Structure has several use standards, including limited dimensions for the antenna; a prohibition on signs or illumination on the antenna or support structure; limits on the size of the equipment building; and design and landscaping standards for the equipment building. A full copy of the existing use standards has been attached to this packet. The PHED Committee recommended additional standards, which will be addressed later in this memorandum.

Summary of Impact Statements

Planning Board Recommendation

The Planning Board reviewed ZTA 22-01 on July 14, 2022. The Board recommended approval of the ZTA, since it would make the setback for Antenna on Existing Structure the same as Telecommunications Towers, which is consistent with the County's "long-standing practice of encouraging co-location of such equipment on existing poles where possible."

RESJ Impact Statement

The Office of Legislative Oversight (OLO) submitted a racial equity and social justice (RESJ) impact statement on March 14, 2022. OLO found that it could not determine the impact of ZTA 22-01 on racial equity and social justice in the County. OLO noted that "expansion in 5G services could help bridge the digital divide by race and ethnicity", but that there is no consensus regarding the health and environmental impacts of 5G technology so the probable impact on health inequities remains unknown.

Discussion

Background

Under Section 3.5.14.C. of the Zoning Ordinance, an "Antenna on Existing Structure" is defined as "one or more antennas attached to an existing support structure, including a building, a transmission tower, a monopole, a light pole, a utility pole, a water tank, a silo, a barn, a sign, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment." Currently, the setback for an Antenna on Existing Structure is 60 feet. ZTA 22-01 will reduce that setback to 30 feet in certain residential zones.

As background, in July 2021 the County Council adopted ZTA 19-07, Telecommunications Towers – Limited Use.⁴ Under Section 3.5.2.C. of the Zoning Ordinance, a "Telecommunications Tower" is defined as "any structure, other than a building, used to provide wireless voice, data, or image transmission within a designated service area. Telecommunications Tower includes one or more antennas attached to a support structure, and related equipment, but does not include amateur radio antenna (see Section 3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or an antenna on an existing structure (See Section 3.5.14.C, Antenna on Existing Structure)." ZTA 19-07 revised the standards for telecommunications towers allowed as a limited or conditional use and generally amended the use requirements. The setback for a Telecommunications Tower in the Agricultural, Rural Residential, and Residential zones was reduced to 30 feet after Committee and Council worksessions. But ZTA

⁴ The PHED Committee held three worksessions on ZTA 19-07, followed by four full Council worksessions. The final staff report, along with prior memorandums, can be found here: https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2021/20210727/20210727_4_D.pdf.

The text of ZTA 19-07 can be found here:

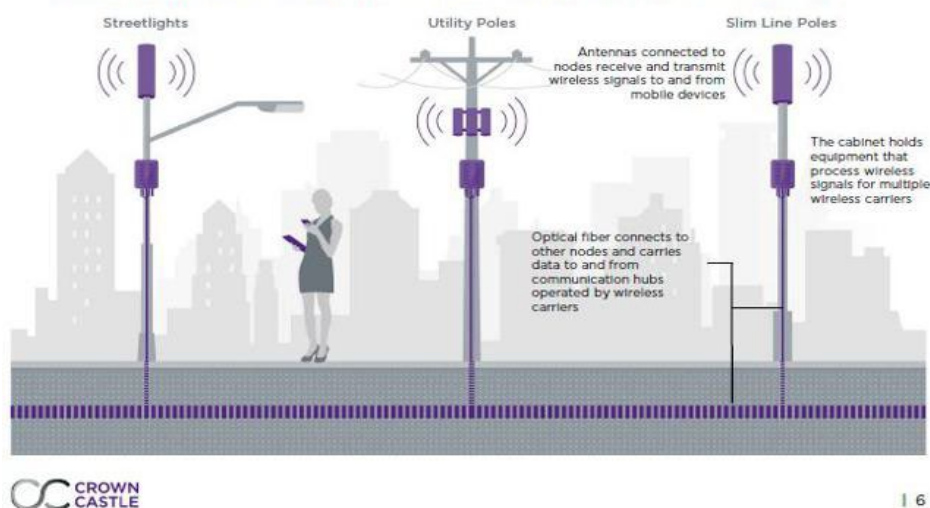
https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/zta/2019/20210727_19-17.pdf.

19-07 did not make any changes to Antenna on Existing Structure, a different use in the Zoning Ordinance with separate provisions.⁵

The purpose of ZTA 22-01 is to treat Antennas on Existing Structures similarly to Telecommunications Towers. Without this ZTA, an applicant would be incentivized to install a new or replacement tower rather than installing an Antenna on Existing Structure. Typically, the Antenna on Existing Structure use comes into play when placing a small cell antenna on a utility pole. As a refresher, 5G requires smaller equipment installed closer together and much closer to the ground. Unlike the macro towers, which were located on private property, small cell facilities tend to be located in public rights-of-way. For installation, an antenna is installed either on top of or flush with a pole, usually a pre-existing streetlight or utility pole. The antenna receives and transmits wireless signals from wireless devices. A cabinet holds the equipment necessary to process the wireless signals for multiple wireless carriers. The cabinet can also be a separate box on the ground.

What Are Small Cell Deployments?

Small cell deployments are complementary to towers, adding much needed coverage and capacity to urban and residential areas, venues, and anywhere large crowds gather



While the definition for Antenna on Existing Structure includes several types of existing structures, most applications received by the County for this use are for attachments to utility poles. Of note, the County's regulation over utility poles is limited. The County does not issue building permits for utility poles, which are regulated by the Maryland Public Service Commission. Any proposed amendments should not interfere with the public utilities' management of their poles.

⁵ Council was advised that it would not be recommended to add the Antenna on Existing Structures section to ZTA 19-07 last year without re-introducing the ZTA because there had already been a public hearing that did not include that use.

Federal Law: Health Effects and Recent Cases

Much of the opposition surrounding ZTA 19-07 concerns the health effects of radio frequency (RF) exposure. Under federal law, local jurisdictions are preempted from regulating telecommunications antennas because of health effects if those facilities are operating within FCC-determined power and RF ranges. In its appeal of the FCC order, the County challenged the FCC's failure to address RF emissions. In addition, the County and other jurisdictions asked the FCC to update and complete a 2013 evaluation of the existing RF safety standards. The Court dismissed the County's challenge as moot, finding that the FCC's additional order considered the RF exposure risks of 5G services. In addition, Congress has explicitly preempted the County from considering any regulations related to RF health issues:

No State or local government or instrumentality thereof may regulate the placement, construction, and modification of personal wireless service facilities on the basis of the environmental effects of radio frequency emissions to the extent that such facilities comply with the Commission's regulations concerning such emissions.

47 U.S. Code §332(c)(7)(B)(iv)

On August 13, 2021, the United States Court of Appeals for the District of Columbia Circuit issued a decision in *Environmental Health Trust, et al. v. FCC*.⁶ The D.C. Circuit held that the FCC's refusal to reconsider the noncancer health effects of 5G was arbitrary and capricious and remanded back to the FCC. The Court wrote:

...[W]e grant the petitions in part and remand to the Commission to provide a reasoned explanation for its determination that its guidelines adequately protect against harmful effects of exposure to radiofrequency radiation unrelated to cancer. It must, in particular,

- (i) provide a reasoned explanation for its decision to retain its testing procedures for determining whether cell phones and other portable electronic devices comply with its guidelines,
- (ii) address the impacts of RF radiation on children, the health implications of long-term exposure to RF radiation, the ubiquity of wireless devices, and other technological developments that have occurred since the Commission last updated its guidelines, and
- (iii) address the impacts of RF radiation on the environment. (p. 31)

The Court did not give the FCC a deadline for this review. Further, the Court specifically noted that:

To be clear, we take no position in the scientific debate regarding the health and environmental effects of RF radiation—we merely conclude that the Commission's cursory analysis of material record evidence was insufficient as a matter of law. (p. 31)

⁶ The decision can be found here:

[https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFDF7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFDF7/$file/20-1025-1910111.pdf).

In summary, the D.C. Circuit found that the FCC must provide a reasoned explanation for not updating the RF guidelines.⁷ But that case did not change the law banning “materially prohibiting” carriers from offering wireless service, and local jurisdictions are still preempted from regulating telecommunications antennas because of health effects if those facilities are operating within FCC-determined power and RF ranges.

Due to the passage of ZTA 19-07, Council Staff believes that it would be difficult for a telecommunications company to argue that service has been “materially prohibited”, since a new or replacement Telecommunications Tower can be installed 30 feet from the nearest building intended for human occupation.

However, the existing different standards for a Telecommunications Tower versus an Antenna on Existing Structure can lead to a situation where a provider constructs a new tower instead of placing an antenna on a nearby utility pole. For example, under the current Zoning Ordinance a provider would be encouraged to construct a telecommunications tower 30 feet from a home instead of placing an antenna on a utility pole 50 feet from a home. County policy has generally encouraged co-location, which is defined as the siting of multiple facilities on the same structure; for example, placing multiple antennas on the same pre-existing utility pole. As evidence of this policy, this Council voted for an amendment to ZTA 19-07 that would not allow a new pole if there was a usable pre-existing or potential replacement pole within 150 feet of the proposed site; the Hearing Examiner is tasked with making sure the tower minimizes visual impact as compared to any alternative location where the tower could be located; and the Tower Committee makes recommendations based on appropriate location and co-location.

PHED Committee

The PHED Committee held worksessions on ZTA 22-01 on October 3 and October 10, 2022. The PHED Committee recommended approval of ZTA 22-01 with amendments.

At the October 3, 2022, worksession, Councilmember Jawando requested an update on how many small cell applications have been received since the passage of ZTA 19-07. According to information provided by the Office of Broadband Programs, approximately 44 applications have been received. About half of that number are in agricultural or residential zones. The majority involve removal and replacement of existing antennas. About 40 of the applications are for Antenna on Existing Structure. The spreadsheet containing this data is included in this packet.

At the October 3, 2022, worksession, Councilmember Friedson proposed several amendments to make ZTA 22-01 similar to ZTA 19-07. The PHED Committee discussed these amendments at its October 10, 2022, worksession. These amendments were proposed to place the same restrictions on Antenna on Existing Structure that were placed on Telecommunications Towers in ZTA 19-07.

1. Measurement

Written testimony was received questioning how the setback would be measured. The concern was that the setback for an antenna, particularly one on a strand mount, could be measured at an angle

⁷ The text of the order can be found here: <https://docs.fcc.gov/public/attachments/FCC-18-111A1.pdf>.

or in a way that brings it closer to 30 feet from a habitable building. The Zoning Ordinance defines setbacks as “a distance measured from the ... lot line to a structure or surface parking lot.” DPS has confirmed that the setback is measured from the edge of the antenna, or the box housing the antenna, to the building, in a straight line. Put another way, setback measurement is a horizontal measurement from the closest point of the house wall to the closest point of the antenna on a horizontal plane. To use the Committee’s example from its October 3, 2022, worksession, if a person were to walk 30 feet from the edge of their house and then measure straight up from the ground, that is where the edge of the antenna would have to start.

Testimony was received questioning whether use of the word “antenna” includes related equipment such as any enclosure or equipment building. The definition of Antenna on Existing Structure in the Zoning Ordinance states that it “includes related equipment.” To clarify this issue, the PHED Committee recommends using the term “Antenna on Existing Structure” instead of “antenna” to ensure that both the antenna and its related equipment as noted in the definition are subject to these use standards:

the ~~antenna~~ **Antenna on Existing Structure** is at least 30 feet from a dwelling in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.

Additional Amendment Not Addressed by the PHED Committee

Council Staff received additional comment regarding where this setback applies. ZTA 22-01 changes the setback from 60 feet to 30 feet from a *dwelling*. This is the term used in Section 3.5.14.C. “Antenna on Existing Structure” currently. But ZTA 19-07 made the setback 30 feet from “a building intended for human occupation,” which is a broader term than a dwelling that could include a hotel or school. Council Staff notes this additional amendment for the Council’s consideration:

the ~~antenna~~ **Antenna on Existing Structure** is at least 30 feet from a ~~dwelling~~ **building intended for human occupation** in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.

2. Preferential Placement

ZTA 19-07 included the following language about the placement of telecommunications towers:

When choosing a replacement pole, it must replace pre-existing poles that are close to intersections, along non-front-facing sides of residential properties, abutting nonresidential properties, and not in front of residential front doors. If these standards cannot be met, then the applicant must provide an affidavit stating that either permission from the pole owner could not be obtained or service could not be provided at an alternate location.

The PHED Committee recommends applying this language to Antenna on Existing Structure. However, the PHED Committee addressed the issue of whether this should apply to all new Antenna on Existing Structure applications, regardless of the setback. While any existing Antenna on Existing Structure would be grandfathered in, a new applicant would be subject to this provision even if they are placing the antenna 60 feet or more from the building. Since the Council is limited to considering aesthetic requirements, the PHED Committee discussed whether there is an aesthetic need for this type of regulation on an Antenna on Existing Structure that is over 60 feet from a habitable building, given this would be a change in how those antennas further away have been deployed in the past. The PHED Committee recommends applying the preferential placement language to antennas at a setback up to 90 feet. The amendment would read:

whenever it is legally and technically feasible, ~~replacement poles~~ **an Antenna on Existing Structure located 90 feet from a dwelling* in a Rural Residential, Residential, or Planned Unit Development zone** should ~~replace pre-existing poles that are~~ **be** located closest to intersections, closest to property lines between dwellings, along the non-front-facing side of residential properties, or along abutting properties used for a non-residential purpose. In addition, the ~~replacement towers~~ **Antenna on Existing Structure** must be at least 5 feet from the area between two parallel lines extending from the sides of a residential front door. If the applicant cannot meet the foregoing standards, the applicant must include in their application an affidavit proving that either permission from the pole owner cannot be obtained or service cannot be provided using a pole at an alternate location.

*Per the above recommended amendment, “dwelling” could be changed to “building intended for human occupation” if the Council wishes.

This amendment would ensure that an antenna, even if on a strand mount, would not be placed directly in front of a residence unless permission from the pole owner to do so could not be obtained or service could not be provided at an alternate location. After the PHED Committee worksessions, industry representatives contacted Council Staff with concerns about this amendment. Specifically, because of the width of streets and how close some front doors may be to each other, the industry is concerned that it will be very difficult to meet this standard on *both* sides of the street. As noted by Councilmember Jawando during the PHED Committee worksession, it is possible for a provider to be exempt from this standard by providing an affidavit that permission from the pole owner could not be obtained or service cannot be provided using a pole at an alternate location. The industry notes that given the difficulty of meeting this standard, DPS should expect an influx of these affidavits.

3. Pole Proliferation

ZTA 19-07 included language that a replacement tower must be at least 150 feet from the nearest antenna occupied or controlled by the same carrier. Unlike the above amendment, the PHED Committee does not recommend limiting this provision to Antenna on Existing Structure that are closer than 90 feet. The PHED Committee therefore recommends the following amendment:

~~A replacement tower must be located~~ **An Antenna on Existing Structure must be located** at least 150 feet from the nearest antenna occupied or controlled by the same carrier.

Chair Riemer requested confirmation that this would only apply in the residential zones. This section of the Zoning Ordinance applies to the “Rural Residential, Residential, or Planned Unit Development” zones. A full draft of what this (and other) amendments would look like is included in this packet.

4. Removal

ZTA 19-07 included the following language regarding removal of towers:

A pre-existing streetlight or parking lot light pole must be removed within 10 business days after power is activated to the replacement tower, and a pre-existing utility pole must be removed within 180 days after the replacement utility pole is installed. If a tower does not have a streetlight, the tower must be removed at the expense of the owner if not in use for longer than 12 months, and the Tower Committee must be notified within 30 days of the removal.

An analogous amendment for Antenna on Existing Structure is removal of the antenna after deactivation. In deciding how much time should be allowed, consideration was given to the fact that even if it is just the antenna being removed, DPS will need to issue a right-of-way permit for that work. DPS confirmed that 30 days should be sufficient for removal. The PHED Committee therefore recommends the following amendment:

~~A pre-existing streetlight or parking lot light pole~~ **An Antenna on Existing Structure** must be removed within ~~10~~ **30** business days ~~after power is activated to the replacement tower, and a pre-existing utility pole must be removed within 180 days after a replacement utility pole is installed~~ **of deactivation.**

5. Height

ZTA 19-07 had detailed language regarding the height of a Telecommunications Tower, based on where it is located, the height of the pole being replaced, and the height of the tallest nearby streetlight. The Committee asked what restrictions can be placed on the height of an antenna on a utility pole. There are safety standards that determine the placement of an antenna on a utility pole, both for the safety of workers and the public. Utility poles have more types of equipment than just antennas, and there are spacing requirements under the relevant electrical codes. For example, how far electric circuits can be from each other and where the streetlight can go. Often the antenna is placed on top of the pole; but not always. Lastly, the height of utility poles has historically not been regulated because their height is based on need, particularly the need to provide electricity.

The practical effect of placing a height limit on Antenna on Existing Structure—regardless of the type of structure it is placed on—is limited because implicit in the definition the structure already

exists. The current minimum height is 15 feet. In considering the aesthetics of where an antenna is placed, issues such as visual clutter and lines of sight must be considered.

The PHED Committee agreed that one reason to limit the maximum height would be to protect tree canopies. But that maximum height would be limited to the height above the utility pole, not the entire pole. Because certain safety standards are in place regarding spacing of equipment, the PHED Committee instead recommended an amendment similar to the language proposed by Councilmember Navarro during the worksessions on ZTA 19-07. This nonbinding language encourages the County Executive to make efforts to reduce the loss of tree coverage in the County:

Sec. 3 2. Tree Loss Minimization. The County Executive must include tree loss minimization language in all franchise and license agreements signed after the effective date of ZTA ~~19-07~~ **22-01**. Critical damage to the root zones of trees as well as excessive pruning should be avoided in the installation of ~~telecommunications towers, regardless of whether they are installed on a new, pre-existing, or replacement pole~~ **an Antenna on Existing Structure**.

6. Maintenance

ZTA 19-07 required the owner of the telecommunications tower to maintain the tower and its equipment, including removal of graffiti and repair of any damage. This standard could be applied to antennas. This would create a scenario where the antenna owner is required to do maintenance that the owner of the existing structure may not be required to do. And, given the size of the antenna in relation to the rest of the existing structure, the effect of this amendment could be minimal. In addressing this concern, the PHED Committee asked if, while cleaning or maintaining the Antenna on Existing Structure, the companies would also clean the existing structure. Subsequent to the PHED Committee worksessions, industry representatives contacted Council Staff to clarify that they cannot clean what they do not own; meaning, the owner of the antenna would not clean the existing structure. This would mean to effectively clean the entire existing structure and the Antenna on Existing Structure two separate right-of-way permits may be required.⁸

Notwithstanding, the PHED Committee recommends the following amendment:

~~The owner of the tower must maintain the tower.~~ The owner of the ~~antenna~~ **Antenna on Existing Structure** must maintain the ~~antenna~~ **Antenna on Existing Structure** and ~~equipment~~ in a safe condition. ~~Both owners~~ **The owner** must remove graffiti and repair damage to the facility.

⁸ Of note, other jurisdictions such as Prince George's County and Virginia have "maintenance permits." These blanket permits can last anywhere from 1 to 5 years and allow the owner to maintain its property without repeated applications for right-of-way permits. While not appropriate for addition in ZTA 22-01, Council Staff raises this as an issue that future Councils and the County Executive could investigate.

7. Notice

Lastly, ZTA 19-07 had notice requirements for certain installations of telecommunications towers. However, those notice requirements were only triggered under the waiver and objection process or for conditional use. Antenna on Existing Structure remains a limited use. The most common type of notice for limited uses on residential property is signs, but there are some complications with requiring notice signs for Antenna on Existing Structure. First, unfortunately, there is an issue with posted signs being displaced by weather, such as strong winds, causing them to blow away or onto other property. For Antenna on Existing Structure, these signs would be placed in the right-of-way, creating potential danger from signs blowing into traffic and less oversight because there is no property owner living on the site to monitor the sign. In addition, DPS employs inspectors to check on posted signs, so there would be a cost effect to this requirement as well. The PHED Committee therefore did not recommend an amendment regarding notice. However, the PHED Committee emphasized the important of providing notice even if there is no forum for public input. To that end, the Tower Committee website lists all applications for this use, as well as agendas and minutes. Residents can provide comments through the website as well.⁹ In addition, residents can sign up to receive notifications from the Tower Committee.¹⁰

This packet contains:

ZTA 22-01, as introduced	© 1
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ZTA 19-07	© 28
Written Testimony	© 48

⁹ Comments can be submitted here:

<https://www.montgomerycountymd.gov/cable/Towers/wireless-telecom-application-comments.html>.

¹⁰ Sign up to receive notifications of new applications here:

<https://apps.montgomerycountymd.gov/TowerApp/Subscription>.

Ordinance No.:
Zoning Text Amendment No.: 22-01
Concerning: Antenna on Existing
Structure – Use Standards
Draft No. & Date: 1 – 1/20/2022
Introduced: February 15, 2022
Public Hearing: September 13, 2022
Adopted:
Effective:

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN
MONTGOMERY COUNTY, MARYLAND**

Lead Sponsor: Councilmember Riemer

AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- reduce the setback for antennas on existing structures; and
- generally amend the antenna on existing structures provisions.

By amending the following sections of the Montgomery County Zoning Ordinance,
Chapter 59 of the Montgomery County Code:

Division 3.5. “Commercial Uses”

Section 3.5.14. “Accessory Commercial Uses”

Section 3.5.14.C. “Antenna on Existing Structure”

EXPLANATION: ***Boldface** indicates a Heading or a defined term.*

Underlining indicates text that is added to existing law by the original text amendment.

[Single boldface brackets] indicate text that is deleted from existing law by original text amendment.

Double underlining indicates text that is added to the text amendment by amendment.

[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment.

** * * indicates existing law unaffected by the text amendment.*

OPINION

ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:

Sec. 1. DIVISION 59-3.5 is amended as follows:

Division 3.5 Commercial Uses

* * *

Section 3.5.14. Accessory Commercial Uses

* * *

C. Antenna on Existing Structure

* * *

2. Use Standards

* * *

- e. An antenna classified as Standard A under Section 3.5.2.C.1.b may be installed on any existing structure located in the right-of-way in any zone where an antenna on an existing structure is allowed, if:
 - i. the antenna is in an enclosure and the enclosure is the same color or pattern as the existing structure;
 - ii. the antenna and the antenna enclosure is installed at a minimum height of 15 feet; and
 - iii. the [structure]antenna is at least [60]30 feet from a dwelling in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.

* * *

Sec. 2. Effective date. This ordinance becomes effective 20 days after the date of Council adoption.

Division 3.5 Commercial Uses

* * *

Section 3.5.14. Accessory Commercial Uses

* * *

C. Antenna on Existing Structure

* * *

2. Use Standards

* * *

- e. An antenna classified as Standard A under Section 3.5.2.C.1.b may be installed on any existing structure located in the right-of-way in any zone where an antenna on an existing structure is allowed, if:
 - i. the antenna is in an enclosure and the enclosure is the same color or pattern as the existing structure;
 - ii. the antenna and the antenna enclosure is installed at a minimum height of 15 feet; and
 - iii. the [structure][[antenna]]Antenna on Existing Structure is at least [60]30 feet from a [[dwelling]]building intended for human occupation in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.
- f. Antennas installed under Section 3.5.14.C.2.e.iii. must meet the following use standards:
 - i. Whenever it is legally and technically feasible, an Antenna on Existing Structure located 90 feet from a building intended for human occupation in a Rural

Residential, Residential, or Planned Unit Development zone should be located closest to intersections, closest to property lines between dwellings, along the non-front-facing side of residential properties, or along abutting properties used for a non-residential purpose. In addition, the Antenna on Existing Structure must be at least 5 feet from the area between two parallel lines extending from the sides of a residential front door. If the applicant cannot meet the foregoing standards, the applicant must include in their application an affidavit proving that either permission from the pole owner cannot be obtained or service cannot be provided using a pole at an alternate location.

- ii. An Antenna on Existing Structure must be located at least 150 feet from the nearest antenna occupied or controlled by the same carrier.
- iii. An Antenna on Existing Structure must be removed within 30 days of deactivation.
- iv. The owner of the Antenna on Existing Structure must maintain the Antenna on Existing Structure in a safe condition. The owner must remove graffiti and repair damage to the facility.

* * *

Sec. 2. Tree Loss Minimization. The County Executive must include tree loss minimization language in all franchise and license agreements signed after the effective date of ZTA 22-01. Critical damage to the root zones of trees as well as

excessive pruning should be avoided in the installation of an Antenna on Existing Structure.

July 22, 2022

To: The Honorable Gabe Albornoz
President, Montgomery County Council
Stella B. Werner Council Office Building
100 Maryland Avenue, Room 501
Rockville, Maryland 20850

From: Montgomery County Planning Board

Subject: Zoning Text Amendment No. 22-01

BOARD RECOMMENDATION

The Montgomery County Planning Board of the Maryland-National Capital Park and Planning Commission met on July 14, 2022 and by a vote of 5:0 supported Zoning Text Amendment (ZTA) 22-01, as it was introduced. The ZTA amends the required setbacks for small cell antennas from residential structures when placed on existing poles. Updates to this setback was inadvertently omitted from ZTA 19-07, which generally amended the setback standards for small cell antennas.

The ZTA updates the setback for small cell antennas when located on existing poles in residential zones from 60 feet to 30 feet. This matches the setbacks allowed for antennas when placed on new poles. The county has a long-standing practice of encouraging co-location of such equipment on existing poles where possible and this proposed change is in keeping with that practice.

The Board appreciates the opportunity to review ZTA 21-01 and offers its full support in seeing this change adopted.

CERTIFICATION

This is to certify that the attached report is a true and correct copy of the technical staff report and the foregoing is the recommendation adopted by the Montgomery County Planning Board of The Maryland-National Capital Park and Planning Commission, at its regular meeting held in Wheaton, Maryland, on Thursday, July 14, 2022.



Casey Anderson
Chair

Attachment A: Board Staff Report Packet

CA:BB:aj

ZTA 22-01 – ANTENNA ON EXISTING STRUCTURE

Description

ZTA 22-01 reduces the setback required for an antenna mounted on existing structures from 60 feet to 30 feet, consistent with the standards allowed for new structures recently adopted by ZTA 19-07.

ZTA 22-01

COMPLETED: 7-7-2022

MCPB

Item No. 06

7-14-2022

2425 Reedie Drive

Floor 14

Wheaton, MD 20902



Benjamin Berbert, Planner III, Countywide Planning and Policy
Benjamin.Berbert@montgomeryplanning.org, 301-495-4644



Jason Sartori, Chief, Countywide Planning and Policy
Jason.Sartori@montgomeryplanning.org, 301-495-2172



Summary

- ZTA 19-07, Telecommunications Towers, for small cell antennas was adopted on July 27, 2021, creating new setback standards that antennas located on new structures be set back a minimum of 30 feet from residential dwellings in residential zones.
- The standards for antennas located on existing structures was not updated at that time, and still requires a 60-foot minimum setback from residential properties.
- The county has long prioritized co-location of cell antennas on existing structures and towers, therefore ZTA 22-01 would adjust the standards for antennas on existing structures to match that of new structures to not disadvantage co-location.
- Planning staff has no comments and recommends the Planning Board transmit a memo to the District Council in support of the ZTA.

LEAD SPONSORS

Councilmember Reimer

INTRODUCTION DATE:

February 15, 2022

REVIEW BASIS:

Chapter 59

SECTION ONE

BACKGROUND

Rationale for ZTA 22-01

ZTA 22-01 was introduced by Councilmember Reimer on February 15, 2022. The public hearing for this ZTA has been delayed several times and is currently scheduled for September 13, 2022. This ZTA would amend code in Section 3.5.14.C “Antenna on Existing Structure” which is a sub-section of the section titled “Accessory Commercial Uses.” This section of code regulates the mounting of antennas, including cellular, on existing structures such as street or parking lot lights, utility poles, or water towers. When ZTA 19-07 (Ordinance 19-17) for small cell antennas was adopted on July 27, 2021, the updated provisions permitted a minimum setback from residential structures of 30 feet for antennas on new structures. Section 3.5.14.C for antennas on existing structures, however, was not updated and still requires a minimum 60-foot setback, double what is allowed for new structures. The county has a longstanding interest in encouraging co-location of new infrastructure onto existing structures where possible, so ZTA 22-01 was introduced to allow the setback standards for antennas on existing structures to match the standards of antennas on new structures.

SECTION TWO

ANALYSIS

ZTA 22-01 as introduced

ZTA 22-01 makes minor text modifications to Section 3.5.14.C.2.e.iii of the Zoning Code, replacing the word structure with antenna, and the setback requirement of 60’ with 30’ (Attachment A). No other standards regulating the placement of antennas on existing structures is modified by this ZTA. This is the minimum modification that meets the ZTA’s intent of having the setback standard for antennas on existing structures match the standard for new structures. Planning staff has no comment on this ZTA and recommends the Planning Board transmit a memo in support of the ZTA.

Conclusion

Staff supports the changes as introduced for ZTA 22-01 and recommends the Planning Board transmit comments in support of the ZTA to the District Council. The code change brings parity to the placement of antennas on both new and existing structures, which was the intent of the original ZTA 19-07 for small cell antennas.

Attachment A – ZTA 22-01 introduction packet

Racial Equity and Social Justice (RESJ) Zoning Text Amendment Statement

Office of Legislative Oversight

ZTA 22-01: ANTENNA ON EXISTING STRUCTURE —USE STANDARDS

SUMMARY

The Office of Legislative Oversight cannot discern the net anticipated impact of Zoning Text Amendment 22-01 on racial equity and social justice (RESJ) in the County.

PURPOSE OF RESJ STATEMENTS

The purpose of RESJ impact statements for zoning text amendments (ZTAs) is to evaluate the anticipated impact of ZTAs on racial equity and social justice in the County. Racial equity and social justice refer to a **process** that focuses on centering the needs, power, and leadership of communities of color and low-income communities with a **goal** of eliminating racial and social inequities.¹ Achieving racial equity and social justice usually requires seeing, thinking, and working differently to address the racial and social harms that have caused racial and social inequities.²

PURPOSE OF ZTA 22-01

The purpose of Zoning Text Amendment (ZTA) 22-01 is to make a change to the Zoning Ordinance that will enable the telecommunications sector to increase the number of small cell towers in the County to expand fifth generation (5G) wireless coverage. Toward this end, ZTA 22-01 would amend the current setback requirements of placing antennas on existing structures in right of ways from 60 feet to 30 feet.

ZTA 22-01 was introduced on February 15, 2022.³ If enacted, ZTA 22-01 will align with two prior zoning text amendments that also support the expansion of wireless 5G technology services in the County.

- ZTA 18-02 adopted on May 15, 2018 allows the limited use installation of 5G towers in mixed use and non-residential zones and reduced the setback requirement for these towers from 60 feet to 30 feet; and
- ZTA 19-07 adopted on July 27, 2021 allows the limited use installation of 5G towers in residential zones that replace an existing utility pole, street light pole, or parking lot pole. The setback requirement for these was also reduced from 60 feet to 30 feet.

THE DIGITAL DIVIDE, HEALTH INEQUITIES, AND RACIAL EQUITY

To understand the impact of ZTA 22-01 on RESJ in the County requires understanding the potential impact of this ZTA on Black, Indigenous, and Other People of Color (BIPOC) and low-income communities. To describe these potential impacts, this section describes the digital divide and health inequities and how this ZTA could impact each in the County.

The Digital Divide. The Digital Divide refers to the gap among those who have access to new technology and those that do not. This divide includes a racial divide in internet access where those without, face economic and political costs that can include difficulty finding and applying for employment, accessing telehealth services, and learning online.

RESJ Impact Statement

Zoning Text Amendment 22-01

In Montgomery County, there is a digital divide in broadband access where 94 percent of White and 96 percent of Asian residents had broadband access in 2019 compared to 92 percent of Black and 89 percent of Latinx residents.⁴ Yet, the digital divide in smartphone ownership is likely narrower than the divide in broadband access since nationally, 85 percent of White, 83 percent of Black, and 85 percent of Latinx residents owned a smartphone in 2021.⁵

Research from the Brookings Institution contends that the ubiquity of smartphone use by race and ethnicity creates an opportunity to narrow the digital divide in broadband access by improving wireless services. This research states that:

“...5G will be a determining factor in whether or not mobile-dependent users fully partake in the global digital economy, especially as smartphones, cell phones, and other wireless-enabled devices become the *only* gateway to the internet for certain populations. For communities of color that often lack reliable broadband access, 5G represents increased economic opportunity through improved access to social services, such as health care, education, transportation, energy, and employment.”⁶

Brookings further notes that since Black and Latinx residents are more likely to depend on mobile services for online access, 5G networks must be widely available, affordable, and able to support emerging technologies that address public interest concerns.⁷ As such, expansion in 5G services could help bridge the digital divide by race and ethnicity.

Health Inequities. Health inequities refer to systematic differences in health outcomes that reflect differential access to the social determinants of health (e.g. access to food, housing, income, education, health care) often by race and ethnicity. Examples of health inequities include lower life expectancy, higher rates of mental illness, and difficulty in getting health care among BIPOC compared to White people. In Montgomery County, for example, between 2013-15:⁸

- The heart disease mortality rate was 127.8 per 100,000 Black residents compared to 110.0 White residents, 59.8 Asian residents, and 55.7 Latinx residents;
- The breast cancer mortality rate was 25.6 per 100,000 Black residents compared to 19.5 White residents, 10.9 Latinx residents, and 7.3 Asian residents; and
- The infant mortality rate was 8.8 per 1,000 live births among Black children compared to 4.9 for Latinx children, 3.8 for Asian children and 3.7 for White children.

The likely impact of ZTA 22-01 on current health inequities in the County is potentially two-fold. If ZTA 22-01 helps to narrow the digital divide in internet access as noted above, it could expand access to telehealth medicine that in turn could help narrow health disparities by race and ethnicity. But, if the reduced set back requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity. However, there is no consensus among researchers regarding the health and environmental impacts of expanding 5G technology by reducing setbacks. As such, the potential health effects of reducing setbacks to expand 5G technology and its probable impact on health inequities remains unknown.

Various research studies link radiation emitting from cell phone towers to a number of health concerns that include miscarriages, suppressed immune function, and childhood leukemia.⁹ Yet the consensus among federal agencies based on their review of the research is that cell phone towers do not pose an environmental or health risk to the public.¹⁰ A recent appeals court decision, however, finds that the Federal Communications Commission’s (FCC) claims about the health and environmental impacts of 5G technology are insufficient.¹¹ In turn, the Appeals Court has asked the FCC to provide additional information to justify its claim that its current guidelines adequately protect against the harmful effects of exposure to radiofrequency radiation.¹²

RESJ Impact Statement

Zoning Text Amendment 22-01

ANTICIPATED RESJ IMPACTS

Due to limited information and data on the potential health effects of reducing setbacks for small cell towers, OLO cannot distinguish the net RESJ impact of Zoning Text Amendment 22-01 in the County. Whereas OLO finds that ZTA 22-01 could favorably impact racial equity and social justice by narrowing the County's digital divide, OLO cannot ascertain whether reducing setbacks for small cell towers would diminish or exacerbate health disparities in the County. As such, OLO cannot discern the net impact of ZTA on 22-01 on racial equity and social justice in the County.

CAVEATS

Two caveats to this racial equity and social justice impact statement should be noted. First, predicting the impact of zoning text amendments on racial equity and social justice is a challenging, analytical endeavor due to data limitations, uncertainty, and other factors. Second, this RESJ impact statement on the proposed zoning text amendment is intended to inform the Council's decision-making process rather than determine it. Thus, any conclusion made in this statement does not represent OLO's endorsement of, or objection to, the ZTA under consideration.

CONTRIBUTIONS

OLO staffer Elsabett Tesfaye, Performance Management and Data Analyst, drafted this racial equity and social justice impact statement with assistance from Elaine Bonner-Tompkins, Senior Legislative Analyst.

¹ Definition of racial equity and social justice adopted from "Applying a Racial Equity Lens into Federal Nutrition Programs" by Marlysa Gamblin, et.al. Bread for the World, and from Racial Equity Tools <https://www.racialequitytools.org/glossary>

² Ibid

³ Ibid

⁴ American Community Survey, 1-year estimates, 2019

⁵ "Mobile Fact Sheet." 2021. Washington, DC: Pew Research Center, April 7, 2021. <http://www.pewinternet.org/fact-sheet/mobile/>.

⁶ Turner Lee, Nicol. 2022. Report: Enabling opportunities: 5G, the internet of things, and communities of color. Brookings. <https://www.brookings.edu/research/enabling-opportunities-5g-the-internet-of-things-and-communities-of-color/>

⁷ Ibid

⁸ Jupiter Independent Research Group, Racial Equity Profile Montgomery County, Office of Legislative Oversight Report 2019-7, July 15, 2019

⁹ See for example Johansson, Olle. Disturbance of the immune system by electromagnetic fields-A potentially underlying cause for cellular damage and tissue repair reduction which could lead to disease and impairment, NIH: National Library of Medicine, Pathophysiology. April.23, 2009; Anadolu Agency. 2021. Phones may cause spike in childhood cancer in new generations. Daily Sabah. February 15; and Belluz, Julia. A concerning new study links miscarriages to cellphone radiation. How worried should we be? Vox. February 15. <https://www.vox.com/science-and-health/2018/2/15/17008482/cellphones-cancer-miscarriage-health>, 2018.

¹⁰ FCC Consumer Guide. Wireless Devices and Health Concerns. October 29, 2020

¹¹ United States Court of Appeals for The District of Columbia Circuit: No. 20-1025. Environmental Health Trust, Et Al., Petitioners V. Federal Communications Commission and United States of America, Respondents. <https://www.fcc.gov/document/dc-circuit-decision-environmental-health-trust-v-fcc> Argued January 25, 2021 Decided August 13, 2021.

¹² Ibid




OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

M E M O R A N D U M

September 29, 2022

TO: Hans Riemer, Chair
Planning, Housing & Economic Development Committee

FROM: Marc Elrich, County Executive 

SUBJECT: Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure – Use Standards

I am writing to ask you to table ZTA 22-01 because there is currently no need for a change. The Council already passed ZTA 19-07, which allows telecom towers at 30 feet from residences through the streamlined limited use process (and they are allowed even closer than 30 feet through a modified, expedited conditional use process).

We have not seen a rationale suggesting that the change promoted by ZTA 22-01 is necessary. The County already has at least 33,000 poles available for attachments in residential areas. There is no need for more poles, and there is a downside to changing the setback. There is some risk in reducing the distance for existing structures from the current 60 feet because of aesthetic concerns. Previous federal court rulings have clarified that local jurisdictions have the authority to regulate aesthetic considerations. While ZTA 19-07 allowed new poles at 30 feet, new poles can be subject to aesthetic considerations; existing structures, like utility poles, are not subject to aesthetic requirements.

There also is no evidence that this ZTA would help address the digital divide, which became even more apparent during the COVID-19 pandemic. As you may know, my administration has been working to provide improved digital equity, especially expanding free and vastly reduced broadband access, which is central to allowing students and their families to access essential information and schoolwork.

Here is some of the work to address the digital divide and improve equity:

As of June 2022, 12,294 County households have enrolled in the Affordable Connectivity Program (ACP). Residents enrolled in other benefit programs are eligible to receive \$45 off their home or mobile broadband bill through ACP. In July 2022, Montgomery Connects, the County's digital equity program, launched an initiative to provide in-person ACP enrollment assistance and has helped over 428 families enroll in this program. In addition, 200 families are receiving free home broadband through the MoCoNet 100 Mbps residential broadband program. In FY22, Senior Planet Montgomery provided technology training for over 5,000 participants aged 50 and above. Montgomery Connects has provided over 26,000 loaner computers to low-income residents who do not have computers. The Office of Broadband programs is working with Comcast and Verizon to submit Maryland rural broadband grants to get broadband service to the remaining 75 occupied unserved rural properties in the County.

Furthermore, while the County cannot and does not regulate based on radiofrequency emissions, the County does need to ensure compliance with the Federal Communications Commission's (FCC) radio frequency (RF) guidelines, which have been put into question by a decision by the DC Circuit Court last August. The Court did not rule on RF effects, but they did rule that the FCC order was "arbitrary and capricious", and the FCC must provide a "reasoned explanation" for their guidelines. (<https://docs.fcc.gov/public/attachments/DOC-374936A1.pdf>) Given that there is no urgency to change the setback, it makes sense to wait to see how the FCC responds.

At this point, it makes sense to maintain the existing 60' setback.

- The County is not under any demonstrated federal obligation to enact this ZTA.
- There has been no local demonstrated need.
- There is an argument based on aesthetics that the distances can be different for new telecom towers, where the County can have input on the design and existing structures where the County does not.
- It is prudent to wait to see how the FCC responds to the Court decision.

Therefore, I respectfully request that the Council not approve this ZTA at this time, and I urge you to leave the 60-foot distance for existing structures intact. If you are concerned about consistent standards, then I suggest that you could put the new poles at 60 feet from residences as ZTA 19-07 stipulated when it was introduced. You would then have consistency without creating possible concerns about aesthetics.

I appreciate your attention to these concerns.




OFFICE OF THE COUNTY EXECUTIVE

Marc Elrich
County Executive

M E M O R A N D U M

October 7, 2022

TO: Hans Riemer, Chair
Planning, Housing and Economic Development Committee

FROM: Marc Elrich, County Executive 

SUBJECT: Follow – up, ZTA 22-01, Antenna on Existing Structure – Use Standards

As you know, I previously submitted a memo (attached) outlining why I believe ZTA 22-01 is not needed at this time. As a follow up to your discussion about ZTA 22-01 on October 3, I would like to suggest an alternative. I understand that you believe ZTA 22-01 is important to avoid a proliferation of new poles. If that is correct, I suggest that you provide an incentive for carriers to attach to existing poles at 60' (or further). If that does not work for them, then they would have the option to erect a new telecommunications tower at somewhere between 30-60' as was allowed under ZTA 19-07.

As I pointed out in my memo, while ZTA 19-07 allowed new poles at 30 feet, new poles can be subject to aesthetic considerations; existing structures, which are often utility poles, are not subject to aesthetic requirements. Therefore, preserving the 60' setback for antennas on existing structures as different from new telecommunications towers, and offering an incentive to carriers to attach to existing 60' poles is important. Together, these requirements discourage the proliferation of new poles while supporting aesthetic standards for poles located from 30' to 59' from dwellings in residential areas.

I appreciate your attention to these concerns.

Enclosure

Section 3.15.4.C

C. Antenna on Existing Structure

1. Defined

Antenna on Existing Structure means one or more antennas attached to an existing support structure, including a building, a transmission tower, a monopole, a light pole, a utility pole, a water tank, a silo, a barn, a sign, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment.

2. Use Standards

Where an Antenna on Existing Structure is allowed as a limited use, it must satisfy the following standards:

- a. Antennas are limited to the following types and dimensions:
 - i. an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b; and
 - ii. satellite, radar, or microwave dish antennas with a maximum diameter of 8 feet. If the building includes a media broadcast studio, a dish may have a maximum diameter of 22 feet.
- b. Signs or illumination on the antennas or support structure are prohibited unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.
- c. Associated equipment must be located in an unmanned building, equipment cabinet, or equipment room in an existing building. An equipment building must satisfy the following standards:
 - i. An equipment building must satisfy the following standards:
 - (a) It is a maximum of 560 square feet in area; however, a single equipment building in excess of 560 square feet, located at ground level, may be used if:
 - (1) the overall maximum square footage is 1,500 square feet and the maximum height is 12 feet;
 - (2) the building is used for more than one telecommunications provider operating from the same monopole or tower; and
 - (3) the building is reviewed by the Telecommunications Transmission Facility Coordinating Group under Chapter 2 (Section 2-58E).
 - (b) It is a maximum of 14 feet in height, including the support structure for the equipment building.
 - (c) If the equipment building is greater than 4 feet in height and is in a Residential zone, or the nearest abutting property is in a Residential zone, the building must be faced with brick or other material compatible with the surrounding neighborhood on all sides.
 - ii. If an equipment cabinet and any supporting platform are greater than 4 feet in height, and service an Antenna on Existing Structure that is not a utility pole, streetlight pole, or site plan approved parking lot light pole, and if the Existing Structure is in a Residential zone, or the nearest abutting property to the Existing Structure is in a Residential zone, then the equipment must be surrounded by landscaping of at least 3 feet in height.

- iii. If an equipment cabinet services an Antenna on Existing Structure and the Existing Structure is a utility pole, streetlight pole, or site plan approved parking lot light pole, the equipment cabinet:
 - (a) must not exceed a maximum volume of 12 cubic feet; and
 - (b) must be the same color or pattern as the existing structure, unless it is a stealth design approved by the Department of Transportation.
 - d. Except under Section 3.5.14.C.2.e, when mounted on a rooftop or structure located outside of a right-of-way, the antenna must meet the following standards:
 - i. An antenna is prohibited:
 - (a) on any detached house, duplex, or townhouse building type or an accessory structure associated with either building type; and
 - (b) in any scenic setback indicated in a master plan.
 - ii. An antenna and a related unmanned equipment building or cabinet may be installed on a rooftop, if a building is a minimum height of:
 - (a) 50 feet in any Residential Detached, Rural Residential, or Planned Unit Development zone, and must be mounted in an antenna enclosure the same color or design as the building; or
 - (b) 20 feet in any Residential Multi-Unit, Commercial/Residential, Employment, or Industrial zone, and must be mounted in an antenna enclosure the same color or design as the building.
 - iii. An antenna may be mounted on the facade of a building at a minimum height of:
 - (a) 50 feet in a Residential Detached zone; or
 - (b) 30 feet in any Residential Multi-Unit, Commercial/Residential, Employment, and Industrial zone.
 - iv. The antenna must not be attached to the support structure for:
 - (a) an antenna that is part of an Amateur Radio Facility licensed by the Federal Communications Commission; or
 - (b) an antenna to receive television imaging in the home.
 - e. An antenna classified as Standard A under Section 3.5.2.C.1.b may be installed on any existing structure located in the right-of-way in any zone where an antenna on an existing structure is allowed, if:
 - i. the antenna is in an enclosure and the enclosure is the same color or pattern as the existing structure;
 - ii. the antenna and the antenna enclosure is installed at a minimum height of 15 feet; and
 - iii. the structure is at least 60 feet from a dwelling in a Rural Residential, Residential, or Planned Unit Development zone, and at least 10 feet from any structure in any Commercial/Residential, Employment, or Industrial zone.



**DEPARTMENT OF PERMITTING SERVICES
Division of Zoning & Code Compliance**



October 4, 2022

VIA ELECTRONIC MAIL

TO: Councilmember Hans Riemer, Chair, PHED Committee
Councilmember Andrew Friedson, Member, PHED Committee
Councilmember Will Jawando, Member, PHED Committee

FROM: Victor Salazar, Division Chief
Division of Zoning and Code Compliance
Department of Permitting Services

IN RE: ZTA 22-01 Setback Measurements

Messrs: Riemer, Friedson, and Jawando

By and through this letter the Department of Permitting Services (DPS) replies to the PHED Committee's request for clarification on "setback measurements" as it relates to antennas.

Setback Measurements performed by a Field Inspector would be as follows:

- ***The Setback Measurement is a horizontal measurement from the closest point of the house wall to the closest point of the antenna on a horizontal plane.***
- In layman's terms, if you walked 30 feet from the edge of a house and then measured straight up, that's where the edge of the antenna would start.
- The setback would *not* be measured at an angle.

Should the PHED Committee require additional information don't hesitate to contact our office.

ApplNo	Carrier Name	SiteID	App_Description	Rcvd	Appvd	Action	Rooftop/ AES	Zoning	SWF_SmallWirelessYN
2021121650	T-Mobile	123	Swap (3) antennas and (3) RRUs. Install (1) hybrid trunk cable. remove (1) 2106 cabinet	30-Dec-21		Withdrawn	AES	AR	Yes
2022031708	T-Mobile	653	Proposed installation of strand node MNG-102 on existing PEPCO pole 793424-9936. Strand Node Equipment to be installed: -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 4402	22-Mar-22	04-May-22	Recommended	AES	CR-1.5 C-1.0 R-1.5 H-60T	Yes
2022051804	Verizon Wireless	148	REMOVE (12) EXISTING ANTENNAS and INSTALL (9) PROPOSED ANTENNAS. REMOVE (6) EXISTING RRHs and INSTALL (9) PROPOSED RRHs.	26-May-22	07-Sep-22	Recommended	AES	CR-2.0 C-1.75 R-0.5 H-125T	Yes
2021081535	Verizon Wireless	482	This is an existing rooftop site with a height of 28' and a parapet height of 30'. Verizon proposes to modify their existing installation at the 33' RAD center by removing and replacing (1) antenna. The proposed new antenna will be (1) Samsung AT1K0	24-Aug-21	06-Oct-21	Recommended	Rooftop/AES	CR-3.0 C-1.5 R-2.5 H-200	Yes
2022041721	Verizon Wireless	497	Remove (4) existing antennas, install (12) proposed antennas. Remove (12) existing RRH's, install (8) proposed RRH's	05-Apr-22		Withdrawn	Rooftop/AES	CR-3.0 C-2.0 R-2.75 H-90 T	Yes
2022081889	Verizon Wireless	332	REMOVING: · (9) EXISTING ANTENNAS · (12) EXISTING RRHS · (24) EXISTING DIPLEXERS · (3) EXISTING SECTOR OVP BOXES · (3) EXISTING EQUIPMENT OVP BOXES · (3) EXISTING 6x12 HYBRIFLEX CABLES PROPOSED: · (11) PROPOSED ANTENNAS · (9) PROPOSED RRH	03-Aug-22		Pending - Not Complete	Rooftop/AES	CR-3.0 C-3.0 R-2.75 H-90	Yes

2021101591	T-Mobile	738	<p>Proposed installation of strand node MNG-092m1 on existing PEPCO pole 799420-5674</p> <p>Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 44 	29-Oct-21	02-Feb-22	Recommended	AES	CRT-0.75, C-0.75 R-0.25 H-50	Yes
2022021673	T-Mobile	678	<p>Proposed installation of strand node MNG-552 on existing PEPCO pole 801416-6501. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 4402 	03-Feb-22	02-Mar-22	Recommended	AES	CRT-1.5 C-1.5 R-0.5 H-50	Yes
2022051772	AT&T Wireless	29	AT&T to add a back-up 35kw natural gas generator on steel platform.	11-May-22	01-Jun-22	Recommended	Rooftop/AES	CRT-2.25 C1-5 R-0.75 H-45	Yes
2022061840	T-Mobile	753	<p>Proposed installation of strand node MNG-166 on existing PEPCO pole 799413-820440. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 	21-Jun-22		Under Review	AES	CRT-2.25, C-1.5, R-0.75, H-50	Yes
2022031706	T-Mobile	749	<p>Crown Castle proposes to install a small wireless facility in the right of way consisting of a pole mounted Kathrein Antenna 84010601, two Ericsson 2203 Radios and one Ericsson 2205 Radio inside a LOSH50 equipment cabinet. All will be mounted to PEPCO Uti</p>	17-Mar-22		Tabled	AES	CRT-3.0 C-1.0 R-2.75 H-100	Yes

2021081542	Verizon Wireless	566	This is an existing rooftop site with a height of 21' and a parapet height of 24'. Verizon proposes to modify their existing installation at the 25' RAD center by removing and replacing (1) antenna. The proposed new antenna will be (1) Samsung AT1K0	24-Aug-21	06-Oct-21	Recommended	Rooftop/AES	CRT-3.0 C-1.0 R-2.75 H-100	Yes
2021111599	Verizon Wireless	692	Project consists of removing (1) existing antenna and (1) existing remote radio head and installing (1) new proposed antenna as well as (1) new proposed remote radio head	03-Nov-21	05-Jan-22	Recommended	Rooftop/AES	CRT-3.0 C-3.0 R-2.5 H-120	Yes
2022081926	Verizon Wireless	756	Crown Castle will be installing a new metal pole including (1) new omni antenna on pole top (shrouded) and (1) RRH, meter, load center, and disconnect switch inside a concealed equipment cabinet mounted at the base of a pole.	23-Aug-22		Pending - Not Complete	New	EOF-1.5 H-75	Yes
2022071866	Verizon Wireless	757	Crown Castle is adding (1) new omni antenna on pole top and (1) RRH, meter, load center, and disconnect switch inside an equipment cabinet mounted at the base of a replaced pole.	18-Jul-22		Under Review	AES	EOF-1.5, H-75	Yes
2022071865	Other	756	Install new Crown Castle owned metal pole. The new pole will have a top mounted antenna and will house the associated conduit and radios in a concealed pole base.	18-Jul-22	10-Aug-22	Withdrawn	New	EOF-1.5, H-75	Yes
2021071519	AT&T Wireless	731	AT&T is proposing to colocate its Small Wireless Facility including a pole top equipment enclosure and 1 Galtronics Omni antenna GQ2410-06621 inside a canister shroud. At 10' on the pole will be a Commscope enclosure SSC-760237600 containing 1 radio. A P	29-Jul-21	06-Oct-21	Recommended	AES	IL-1, H-50	Yes
2021111614	AT&T Wireless	742	Installation of a small cell antenna on a verizon replaced utility pole located in the Montgomery County ROW. (1) Antenna will be installed at the top of the pole. (1) RRH will be installed a cabinet installed mid pole. All equipment will be painted to ma	12-Nov-21	06-Apr-22	Recommended	AES	IL-1.0, H-50	Yes
2022071885	Verizon Wireless	279	Remove (6) RRH's, install (6) antennas and (9) RRH's.	29-Jul-22		Pending - Not Complete	Rooftop/AES	LSC-1.0 H-110 T	Yes

2021081538	AT&T Wireless	733	Installation of a small cell antenna on a PEPCO replaced wooden utility pole located in the ROW. 1 antenna will be installed at the top of the pole. An equipment shroud containing 1 RRH (remote radio head) installed mid pole. Install 1 Meter, 1 disconnect	19-Aug-21	06-Oct-21	Recommended	AES	Non-MNCPPC (City of Gaithersburg)	Yes
2022011670	AT&T Wireless	642	Crown Castle, on behalf of AT&T is removing (4) existing antennas and installing (1) new omni 4G antenna on an existing utility pole.	31-Jan-22	06-Apr-22	Recommended	AES	Non-MNCPPC (City of Gaithersburg)	Yes
2022041729	Verizon Wireless	217	REMOVE (12) EXISTING ANTENNAS · INSTALL (12) PROPOSED ANTENNAS · REMOVE (3) 1 1/4" HYBRID CABLES · REMOVE (12) 1 5/8" COAX CABLES · REMOVE (12) EXISTING RRHS · INSTALL (6) PROPOSED RRHS · INSTALL (3) 6x12 HYBRID CABLES · REMOVE (6) DIPLEXERS	11-Apr-22		Withdrawn	Rooftop/AES	Non-MNCPPC (City of Gaithersburg)	Yes
2021071518	AT&T Wireless	734	Installation of an AT&T Small Wireless Facility to include one Galtronics GQ2418-B6941 Omni Antenna (antenna volume of 2.8 cubic feet) and side mounted Charles Industries Radio Cabinet SH60-482420GNN8 with Squirrel Guard 96-SH60SQRGRDA (cabinet volume of	29-Jul-21	05-Jan-22	Recommended	AES	Non-MNCPPC (City of Rockville)	Yes
2022021683	T-Mobile	662	Proposed installation of strand node MNG-157 on existing PEPCO pole 795421-000310.Strand Node Equipment to be installed: -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Er	14-Feb-22	06-Apr-22	Recommended	AES	R-10	Yes
2022031699	T-Mobile	748	Crown Castle is proposing to install a small cell cannister antenna to an existing PEPCO pole #800424-002262. This installation will include (1) Kathrein Canister antenna, (2) Erricsson 2203 Radios, (1) Erricsson 2205 Radio, (1) Losh 50 Cabinet, and (1) 1	17-Mar-22		Tabled	AES	R-10	Yes

2022071877	Verizon Wireless	48	Remove (6) antennas and (9) RRH's. Install (9) antennas and (6) RRH's	22-Jul-22		Pending - Not Complete	Rooftop/AES	R-10	Yes
2022011659	T-Mobile	746	Proposed installation of strand node 400m1 on existing PEPCO pole 787431-450590. Strand Node Equipment to be installed: -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 4402	14-Jan-22	04-May-22	Recommended	AES	R-20	Yes
2022021672	AT&T Wireless	747	The existing lantern top pole is being replaced by a new 22'3" pole. On the top of the pole will be a concealment shroud containing 3 remote radio heads, above that at a RAD center of 26'6" will be 1 omni directional Galtronics antenna model GQ2418-B6941	21-Feb-22	04-May-22	Recommended	New/Replacement	R-20	Yes
2022061838	Verizon Wireless	51.01	REMOVE (6) EXISTING ANTENNAS · INSTALL (6) PROPOSED ANTENNAS · REMOVE (6) 1 5/8" COAX CABLES · REMOVE (1) 6x12 HYBRID CABLE · INSTALL (1) POWERSHIFT SHELF · INSTALL (5) BOOST MODULES · REMOVE (9) EXISTING RRHs · INSTALL (6) PROPOSED RRHs	30-Jun-22	03-Aug-22	Recommended	AES	R-200	Yes
2022071884	Verizon Wireless	20	REMOVE (9) EXISTING ANTENNAS · INSTALL (9) PROPOSED ANTENNAS · REMOVE (6) 1 5/8" COAX CABLES · INSTALL (1) UPCONVERTER · REMOVE (6) EXISTING RRHs · INSTALL (9) PROPOSED RRHs · INSTALL (1) 6x12 HYBRID CABLES	29-Jul-22		Under Review	AES	R-200	Yes
2021091559	AT&T Wireless	736	AT&T is proposing to colocate its Small Wireless Facility including a pole top equipment enclosure and 1 Galtronics OMNI antenna GQ2410-B6621 inside a canister shroud. At 10' on the pole will be a Charles Industries enclosure SH60-482420GNN8 containing 1	21-Sep-21		Tabled	AES	R-60	Yes

2021101566	T-Mobile	677	<p>Proposed installation of strand node MNG-510 on existing PEPCO pole 790425-010700. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 44 	06-Oct-21	05-Jan-22	Recommended	AES	R-60	Yes
2021101594	T-Mobile	739	<p>Proposed installation of strand node MNG-422m1 on existing PEPCO pole 799416-510810. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 	29-Oct-21	06-Apr-22	Not Recommended	AES	R-60	Yes
2021101593	T-Mobile	740	<p>Proposed installation of strand node MNG-383m1 on existing PEPCO pole 806429-990310. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 	29-Oct-21	01-Dec-21	Recommended	AES	R-60	Yes
2021111625	AT&T Wireless	744	<p>Installation of a small cell antenna on a PEPCO replaced wooden utility pole located in the Montgomery County right of way. Install (1) antenna at the top of the pole with (1) RRH installed inside a cabinet located mid pole. All equipment painted to match</p>	19-Nov-21	06-Apr-22	Recommended	AES	R-60	Yes
2022031709	T-Mobile	750	<p>Proposed installation of strand node MNG-423 on existing PEPCO pole 802417-3164. Strand Node Equipment to be installed:</p> <ul style="list-style-type: none"> -Strand Cable -Ericsson 6523 semi-integrated panel antenna (1) -Ericsson Diplex Filter B2+B66/B30 (4-2) Diplexer (2) -Ericsson 4402 	29-Mar-22	01-Jun-22	Not Recommended	AES	R-60	Yes

2022051806	Verizon Wireless	751	This project consists of Verizon Wireless installing (3) 5G 28GHZ antennas along an existing PEPCO owned wood utility pole located within the Maryland State Highway maintained ROW. PEPCO will replace the existing wood pole to accommodate the small cell w	27-May-22	06-Jul-22	Recommended	AES	R-60	Yes
2022061818	Verizon Wireless	397	REMOVE (3) EXISTING ANTENNAS · REMOVE (6) EXISTING REMOTE RADIO HEADS · INSTALL (9) PROPOSED ANTENNAS · INSTALL (6) PROPOSED REMOTE RADIO HEADS · INSTALL (3) PROPOSED 1x2 TOP-SIDE POWER AND FIBER JUMPERS, (1) PER SECTOR · INSTALL (3) PROPOSED 1	02-Jun-22		Pending - Not Complete	AES	R-60	Yes
2022071864	Verizon Wireless	755	Crown Castle is adding (1) new omni antenna on pole top and (1) RRH, meter, load center, and disconnect switch inside an equipment cabinet mounted at the base of a replaced pole.	18-Jul-22		Under Review	AES	R-60	Yes
2022071863	Other	754	Install new Crown Castle metal pole. The new pole will have a top mounted antenna and will house the associated conduit and radios in a concealed pole base.	18-Jul-22	10-Aug-22	Withdrawn	New	R-60	Yes
2022081927	Verizon Wireless	754	Crown Castle will be installing a new metal pole including (1) new omni antenna on pole top (shrouded) and (1) RRH, meter, load center, and disconnect switch inside a concealed equipment cabinet mounted at the base of a pole.	23-Aug-22		Pending - Not Complete	New	R-60	Yes
2021111613	AT&T Wireless	741	Installation of a small cell antenna on a PEPCO replaced utility pole located in Montgomery county ROW. (1) Antenna will be installed at the top with (2) RRH's installed inside a cabinet installed mid pole. All equipment painted to match.	11-Nov-21	04-May-22	Recommended	AES	R-90	Yes
2021111624	AT&T Wireless	743	Installation of a small cell antenna on a PEPCO replaced wooden utility pole located in Montgomery County right of way. (1) Antenna will be installed at the top with (2) RRH's installed in an equipment cabinet installed mid pole. All equipment painted to	19-Nov-21	06-Apr-22	Recommended	AES	RE-2	Yes

2021111628	AT&T Wireless	745	Installation of a small cell antenna on a PEPCO replaced wooden utility pole located in the Montgomery county right of way. (1) antenna will be installed at the top of the pole with (2) RRH's installed in a cabinet located mid pole.	24-Nov-21	06-Apr-22	Recommended	AES	RE-2	Yes
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Clerk's note: A typographical error on page 11, line 165 has been corrected by removing the underline formatting from the period; the period was in the existing text. Also, in a second correction the list of amended sections on page 1 has been amended to remove references to Division 7.3 and Section 7.3.1, which were not changed in the adopted ordinance.

SECOND CORRECTED

Ordinance No.: 19-17

Zoning Text Amendment No.: 19-07

Concerning: Telecommunications
Towers – Limited Use

Draft No. & Date: 7 – 7/15/2021

Introduced: October 1, 2019

Public Hearing: November 19, 2019

Adopted: July 27, 2021

Effective: August 16, 2021

**COUNTY COUNCIL FOR MONTGOMERY COUNTY, MARYLAND
SITTING AS THE DISTRICT COUNCIL FOR THAT PORTION OF
THE MARYLAND-WASHINGTON REGIONAL DISTRICT WITHIN
MONTGOMERY COUNTY, MARYLAND**

Lead Sponsor: Councilmember Riemer
Co-Sponsors: Councilmembers Albornoz and Rice

AN AMENDMENT to the Montgomery County Zoning Ordinance to:

- allow certain telecommunications towers as a limited or conditional use in certain residential zones;
- revise the standards for telecommunications towers allowed as a limited or conditional use;
- revise the conditional use findings required for the replacement of a pre-existing pole; and
- generally amend use requirements to address certain telecommunications towers.

By amending the following sections of the Montgomery County Zoning Ordinance, Chapter 59 of the Montgomery County Code:

DIVISION 3.1. “Use Table”
Section 3.1.6. “Use Table”
DIVISION 3.5. “Commercial Uses”
Section 3.5.2. “Communication Facility”

EXPLANATION: ***Boldface** indicates a Heading or a defined term.*

Underlining indicates text that is added to existing law by the original text amendment.

[Single boldface brackets] indicate text that is deleted from existing law by original text amendment.

Double underlining indicates text that is added to the text amendment by amendment.

[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment.

** * * indicates existing law unaffected by the text amendment.*

OPINION

Zoning Text Amendment (ZTA) 19-07, lead sponsor Councilmember Riemer, co-sponsors Councilmembers Alborno and Rice, was introduced on October 1, 2019.

ZTA 19-07 will allow certain telecommunications towers as a limited or conditional use in certain residential zones; revise the standards for telecommunications towers allowed as a limited or conditional use; revise the conditional use findings required for the replacement of a pre-existing pole; and amend the use requirements to address certain telecommunications towers.

In its report to the Council, the Planning Board recommended approval of ZTA 19-07 with amendments to increase Planning staff involvement, clarification of volume and height measurements, and the timing of applications for consolidated processing.

The Council's public hearing was on November 19, 2019. Most of the public testimony was in opposition and expressed concerns about RF emissions, Planning Staff involvement, lack of notice and public participation, post-construction inspection, the Tower Committee, an increase in energy use, a reduction in property values, and the effect on minority communities. Testimony in support refuted the claims about health effects and supported better broadband coverage in the County. Some testimony was generally in support but expressed concern that it was still too restrictive in light of the FCC Order. The Council also received significant written testimony in the years between introduction of ZTA 19-07 and its adoption.

The Council referred the text amendment to the Planning, Housing, and Economic Development (PHED) Committee for review and recommendation. The PHED Committee held worksessions on January 23, 2020; February 10, 2021; and March 10, 2021. The PHED Committee recommended approval of ZTA 19-07 with several amendments. Those amendments were:

- Reduce the setback for a limited use from 60 feet to 30 feet (3-0);
- Modified conditional use process for all poles under the 30-foot setback (3-0);
- A "waiver and objection" process for a height up to 50 feet where other limited use setback requirements are met (3-0);
- A "waiver and objection" process for all new poles (2-1);

- Under the “waiver and objection” process, for notice to be sent to all property owners and civic associations within 300 feet; and for standing for objections to be limited to those within 300 feet (3-0); and
- Pole proliferation language—that a small wireless facility should not be located within 150 feet of a facility occupied or controlled by the same carrier (3-0).

The full Council had worksessions on June 29, 2021; July 13, 2021; and July 20, 2021. During the worksessions, the Council discussed but did not approve amendments proposed by Councilmember Katz and Council President Hucker that used a tier approach to setbacks based on speed limit and the type of road, respectively. The Council approved various amendments proposed by Councilmembers Friedson, Navarro, Reimer, and Rice. These amendments addressed tree loss minimization, pole proliferation, preferential placement, and height.

For these reasons, and because to approve this amendment will assist in the coordinated, comprehensive, adjusted, and systematic development of the Maryland-Washington Regional District located in Montgomery County, Zoning Text Amendment No. 19-07 will be approved as amended.

ORDINANCE

The County Council for Montgomery County, Maryland, sitting as the District Council for that portion of the Maryland-Washington Regional District in Montgomery County, Maryland, approves the following ordinance:

1 **Sec. 1. DIVISION 59-3.1 is amended as follows:**

2 **DIVISION 3.1. Use Table**

3 * * *

4 **Section 3.1.6. Use Table**

5 The following Use Table identifies uses allowed in each zone. Uses may be modified in Overlay zones under

6 Division 4.9.

USE OR USE GROUP	Definitions and Standards	Ag	Rural Residential			Residential														Commercial/ Residential			Employment				Industrial		
						Residential Detached								Residential Townhouse			Residential Multi-Unit												
		AR	R	RC	RNC	RE-2	RE-2C	RE-1	R-200	R-90	R-60	R-40	TLD	TMD	THD	R-30	R-20	R-10	CRN	CRT	CR	GR	NR	LSC	EOF	IL	IM	IH	
* * *																													
COMMERCIAL																													
* * *																													
Communication Facility	3.5.2																												
Cable Communications System	3.5.2.A	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	C	P	C	C	C	C		
Media Broadcast Tower	3.5.2.B	C	C	C		C	C	C	C	C	C	C				C	C	C				C		L	C	C	C	P	
Telecommunications Tower	3.5.2.C	L/C	L/C	L/C	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	<u>L/C</u>	L	L	L	L/C	L/C	L	L/C	L	L	L	

7 **Key:** P = Permitted Use L = Limited Use C = Conditional Use Blank Cell = Use Not Allowed

Sec. 2. DIVISION 59-3.5 is amended as follows:

DIVISION 3.5. Commercial Uses

* * *

Section 3.5.2. Communication Facility

* * *

C. Telecommunications Tower

* * *

2. Use Standards

* * *

- b. [In the Commercial/Residential, Industrial, and Employment zones, where] Where a Telecommunications Tower is allowed as a limited use and the tower would replace a pre-existing utility pole, streetlight pole, or site plan approved parking lot light pole, the tower is allowed if it satisfies the following standards:
 - i. Any building permit application to the Department of Permitting Services [[concerning]] for the construction of a Telecommunications Tower must include a recommendation from the Transmission Facility Coordinating group issued within 90 days of the submission of the building permit application.
 - ii. In the Commercial/Residential, Industrial, and Employment zones, the pre-existing pole and the replacement tower must be at least 10 feet from an existing building, excluding any setback encroachments allowed under Section 4.1.7.B.5.

iii. In the Agricultural, Rural Residential, and Residential zones, the pre-existing pole and the replacement tower must be at least ~~[[60]]~~ 30 feet from any building intended for human occupation, excluding any setback encroachments allowed under Section 4.1.7.B.5.

[i]iv. Antennas must comply with the Antenna Classification Standard A under Section 59.3.5.2.C.1.b, be concealed within an enclosure the same color as the pole, be installed at a minimum height of 15 feet, and be installed parallel with the tower.

[ii]v. A replacement ~~[[The]]~~ tower must be located:

(a) within 2 feet of the base of a pre-existing pole and at the same distance from the curb line, or edge of travel lane in an open section, as the pre-existing pole in a public right-of-way;

[(b) at least 10 feet from an existing building;]

[(c)](b) outside of the roadway clear zone as determined by the Department of Permitting Services;

[(d)](c) in a manner that allows for adequate sight distances as determined by the Department of Permitting Services; ~~[[and]]~~

[(e)](d) in a manner that complies with streetlight maintenance requirements as determined by the Department of Transportation~~[[.]]~~;

(e) at least 150 feet from the nearest antenna occupied or controlled by the same carrier; and

(f) whenever it is legally and technically feasible, replacement poles should replace pre-existing poles that are located closest to intersections, closest to property lines between dwellings, along the non-front-facing side of residential properties, or along abutting properties used for a non-residential purpose. In addition, the replacement towers must be at least 5 feet from the area between two parallel lines extending from the sides of a residential front door. If the applicant cannot meet the foregoing standards, the applicant must include in their application an affidavit proving that either permission from the pole owner cannot be obtained or service cannot be provided using a pole at an alternate location.

[iii]vi. A pre-existing streetlight or parking lot light pole must be removed within 10 business days after power is activated to the replacement tower, and a pre-existing utility pole must be removed within 180 days after a replacement utility pole is installed.

[iv]vii. The height of the tower, including any attached antennas and equipment, must not exceed:

(a) in the Commercial/Residential, Industrial, and Employment zones, for streetlights, the height of the pole that is being replaced or the height of the tallest streetlight pole within 50 feet, whichever is greater:

- 88 (1) plus 6 feet when abutting a right-of-way
 89 with a paved section width of 65 feet or less;
 90 or
 91 (2) plus 15 feet when abutting a right-of-way
 92 with a paved section width greater than 65
 93 feet~~[[.]]~~;
- 94 (b) in the Agricultural, Rural Residential, and
 95 Residential zones, for streetlights, the height of the
 96 pole that is being replaced:
- 97 (1) plus 6 feet when abutting a right-of-way
 98 with a paved section width of 65 feet or less,
 99 or up to 25 feet where the height of the pole
 100 being replaced is less than 20 feet tall,
 101 whichever is greater; or
- 102 (2) plus 15 feet when abutting a right-of-way
 103 with a paved section width greater than 65
 104 feet; and
- 105 ~~[[(b)]]~~(c) for utility poles and parking lot lights, the
 106 height of the pre-existing utility or parking lot light
 107 pole plus 10 feet.
- 108 [v]viii. The tower must be the same color as the pre-
 109 existing pole.
- 110 [vi.]ix. The tower must have no exterior wiring, except
 111 that exterior wiring may be enclosed in shielded conduit
 112 on wooden or utility poles.
- 113 [vii]x. Any equipment cabinet:

- (a) must not exceed a maximum volume of 12 cubic feet;
- (b) if used to support antennas on a replacement streetlight pole, must be installed in the Telecommunications Tower base or at ground level, unless this requirement is waived by the Department of Transportation;
- (c) must be the same color or pattern as the pre-existing tower[, except as provided in Section 59.3.5.2.C.2.b.vii(d)] , except as provided in Section 3.5.2.C.b.x(d); and
- (d) may be a stealth design approved for safety by the Department of Transportation.
- [viii]xi. The tower must include a replacement streetlight, if a streetlight existed on the pre-existing pole.
- [ix]xii. The design of a replacement tower located in a public right-of-way, including the footer and the replacement streetlight, must be approved by the Department of Transportation.
- [x]xiii. The noise level of any [fans] equipment must comply with Chapter 31B.
- [xi]xiv. Signs or illumination [on the antennas or support structure], except a streetlight, on the antennas or support structure are prohibited unless required by the Federal Communications Commission or the County.
- [xii]xv. The owner of the tower [or the antenna attached to the tower] must maintain [[their]] the tower[,]. The

owner of the antenna must maintain the [antennas,]
antenna and equipment in a safe condition[.]. Both
owners must remove graffiti[,.] and repair damage [[from
their]] to the facility.

[xiii] xvi. If a tower does not have a streetlight, the tower
 must be removed at the [cost] expense of the owner of
 the tower when the tower is no longer in use for more
 than 12 months. Any antenna and equipment must be
 removed at the [cost] expense of the owner of the
 antenna and equipment when the [antennas] antenna and
 equipment are no longer in use for more than 12 months.
 The [Telecommunications] Transmission [Facilities]
Facility Coordinating Group must be notified within 30
 days of the removal.

- c. Where a Telecommunications Tower is allowed as a conditional
 use, it may be permitted by the Hearing Examiner under
 [Section 3.5.2.C.2.a, limited use standards, Section 7.3.1,
 Conditional Use,] either [[Subsection]] Section 3.5.2.C.2.d or
[[Subsection]] Section 3.5.2.C.2.a, limited use standards. In
addition, Section 7.3.1 and the following procedures and
standards must be satisfied:

- 162 i. Before the Hearing Examiner approves any conditional
163 use for a Telecommunications Tower, the proposed
164 facility must be reviewed by the [County] Transmission
165 Facility Coordinating Group. The applicant for a
166 conditional use must file a recommendation from the
167 Transmission Facility Coordinating Group with the
168 Hearing Examiner at least 5 days before the date set for
169 the public hearing. The recommendation must be no
170 more than 90 days old when the conditional use
171 application is accepted.

172 * * *

- 173 d. In the Agricultural, Rural Residential, and Residential zones,
174 where a Telecommunications Tower [[that is proposed to be
175 less than 50 feet in height does not meet the limited use
176 standards under Subsection 3.5.2.C.2.a]] is proposed to be less
177 than 30 feet from any building intended for human occupation,
178 excluding any setback encroachments allowed under Section
179 4.1.7.B.5, it may be permitted by the Hearing Examiner as a
180 conditional use without regard to Section 7.3.1 only if the
181 following procedures and standards are satisfied:

- 182 i. An application must include:
- 183 (a) the subject property's ownership and, if the
184 applicant is not the owner, authorization by the
185 owner to file the application;
 - 186 (b) fees as approved by the District Council;
 - 187 (c) a statement of how the proposed development
188 satisfies the criteria to grant the application;

- (d) a certified copy of the official zoning vicinity map showing the area within at least 1,000 feet surrounding the subject property;
- (e) a written description of operational features of the proposed use;
- (f) plans showing existing buildings, structures, rights-of-way, tree coverage, vegetation, historic resources, and the location and design of streetlights, utilities, or parking lot poles within 300 feet of the proposed location;
- (g) a list of all property owners, homeowners associations, civic associations, condominium associations, and renter associations within 300 feet of the proposed tower;
- (h) plans showing height and architectural design of the tower and cabinets, including color materials, and any proposed landscaping and lighting;
- (i) photograph simulations with a direct view of the tower and site from at least 3 directions;
- (j) at least one alternative site that maximizes the setback from any building intended for human occupation or reduces the height of the proposed tower.

ii. Before the Hearing Examiner reviews any conditional use for a Telecommunications Tower, the proposed facility must be reviewed by the Transmission Facility Coordinating Group. The Transmission Facility

Coordinating Group must ~~[[declare whether the~~
~~application is complete,]]~~ verify the information in the
draft application~~[[,]]~~ and must issue a recommendation
within 20 days of accepting a complete
Telecommunications Tower application. The applicant
for a conditional use must file a complete copy of the
recommendation from the Transmission Facility
Coordinating Group with the Hearing Examiner at least
~~[[30]]~~ 5 days before the date set for the public hearing.
The Transmission Facility Coordinating Group
recommendation must have been made within 90 days of
its submission to the Hearing Examiner.

iii. Upon receipt of the Transmission Facility Coordinating
Group recommendation, the applicant must submit an
initial application to the Planning Director for approval
of completeness, under Section 7.3.1.B.3. The Planning
Director must review the application for completeness
within 10 days after receipt.

~~[[iii]]~~iv. The Hearing Examiner must schedule a public
hearing to begin within 30 days after the date a complete
application is accepted by the Hearing Examiner.

(a) Within 10 days of when an application is accepted,
the Office of Zoning and Administrative Hearings
must notify the municipality where the proposed
tower will be located, as well as all property
owners, homeowners associations, civic
associations, condominium associations, and renter

associations within 300 feet of the [[application]]
proposed tower of:

- (1) the filed application;
- (2) the hearing date; and
- (3) information on changes to the hearing date
or the consolidation found on the Office of
Zoning and Administrative Hearing's
website.

A sign that satisfies Section 59.7.5 must also be
posted at the site of the application at the same
time.

- (b) The Hearing Examiner may postpone the public
hearing for up to 30 days at the request of the
applicant and must post notice on the website of
the Office of Zoning and Administrative Hearings
of any changes to the application, the application
schedule, or consolidation of multiple applications.
- (c) The Hearing Examiner may request information
from Planning Department Staff.

[[iv]]v. [[A]] The setback for a Telecommunications
Tower must be [[set back, as]] measured from the base of
the support structure.

[[v]]vi. [[(a) The Telecommunications Tower must be at
least 60 feet from any building intended for human
occupation, excluding encroachments that are
allowed under Section 4.1.7.B.5 and no taller than
30 feet; or]]

270 ~~[[(b) if]]~~ If the Hearing Examiner determines that
 271 additional height and reduced setback are needed
 272 to provide service or a reduced setback or
 273 increased height will allow the support structure to
 274 be located on the property in a less visually
 275 obtrusive location, the Hearing Examiner may
 276 reduce the setback requirement ~~[[to at least 30~~
 277 ~~feet]]~~ or increase the height up to 50 feet. In
 278 making this determination, the Hearing Examiner
 279 must consider the height of the structure,
 280 topography, existing tree coverage and vegetation,
 281 proximity to nearby residential properties, and
 282 visibility from the street.

283 ~~[[vi]]~~vii. The Hearing Examiner may not approve a
 284 conditional use if the use abuts or confronts an individual
 285 resource or is in a historic district in the Master Plan for
 286 Historic Preservation.

287 ~~[[vii]]~~viii. The tower must be located to minimize its visual
 288 impact as compared to any alternative location where the
 289 tower could be located to provide service. Neither
 290 screening under Division 6.5 nor the procedures and
 291 standards under Section 7.3.1 are required. The Hearing
 292 Examiner may require the tower to be less visually
 293 obtrusive by use of screen, coloring, or other visual
 294 mitigation options, ~~[[after the character of residential~~
 295 ~~properties within 400 feet,]]~~ based on existing tree

coverage and vegetation[[,]] and design and presence of
streetlight, utility, or parking lot poles.

- e. When multiple applications for Telecommunications Towers
raise common questions of law or fact, the Hearing Examiner
may order a joint hearing or consolidation of any or all of the
claims, issues, or actions. Any such order may be prompted by
a motion from any party or at the Examiner's own initiative.
The Hearing Examiner may enter an order regulating the
proceeding to avoid unnecessary costs or delay. The following
procedures for consolidated hearings govern:
- i. All applications must be filed within 30 days of [[each
other]] the initial application to be consolidated and be
accompanied by a motion for consolidation.
 - ii. The proposed sites, starting at a chosen site, must be
located such that no site is further than 3,000 feet from
the chosen site in the application.
 - iii. The proposed sites must be located in the same zone,
within the same Master Plan area, and in a neighborhood
with similar building heights and setbacks.
 - iv. Each tower must be of the same or similar proposed
height, structure, and characteristics.
 - v. A motion to consolidate must include a statement
specifying the common issues of law and fact.
 - vi. The Hearing Examiner may order a consolidated hearing
if the Examiner finds that a consolidated hearing will
more fairly and efficiently resolve the matters at issue.

vii. If the motion to consolidate is granted, the applicant and opposition must include all proposed hearing exhibits with their pre-hearing statements.

viii. The Hearing Examiner has the discretion to require the designation of specific persons to conduct cross-examination on behalf of other individuals and to limit the amount of time given for each party's case in chief. Each side must be allowed equal time.

f. Where a proposed Telecommunications Tower does not meet the limited use standards because it is taller than allowed under Section 3.5.2.C.2.b.vii or where there is no pre-existing or replacement pole so a new pole must be constructed, but otherwise meets the limited use standards under Section 3.5.2.C.2.b, the applicant may request a waiver from the Office of Zoning and Administrative Hearings. The application must meet the requirements of Sections 3.5.2.c.2.d.1 and 3.5.2.c.2.d.3.

i. A new pole may only be constructed if there is no utility pole or streetlight pole within 150 feet of the proposed location that could be used as a pre-existing pole or replacement tower.

ii. The applicant must notify by mail the municipality where the proposed tower will be located, as well as all property owners, homeowners associations, civic associations, condominium associations, and renter associations within 300 feet of the proposed tower. Proof of when notice was mailed must be submitted to the Office of Zoning and

Administrative Hearings. A sign that satisfies Section 59.7.5 must also be posted at the site of the application at the same time.

iii. Upon receipt of notice of a waiver, the municipality, a property owner, homeowners association, civic association, condominium association, or renter association within 300 feet of the proposed tower may file an objection and request a hearing with the Office of Zoning and Administrative Hearings. An objection must be filed within 20 days of when notice was mailed.

iv. If an objection is received, the Hearing Examiner must send notice of an adjudicatory hearing to the applicant and any aggrieved person who filed an objection within 10 days after the objection is received and conduct any such hearing within 30 days of the date the objection is received. Waivers and objections may be consolidated under Section 3.5.2.c.2.e.5.

v. The Hearing Examiner may only decide the issues raised by the waiver or objection. The Hearing Examiner will determine whether the proposed location minimizes visual impact as compared to any alternative location where the new tower could be located to provide service, and consistent with the Hearing Examiner's authority under Section 3.5.2.c.2.d. The maximum height allowed is 50 feet.

vi. The Hearing Examiner must issue a decision within 10 days of the hearing. If no objection is filed, the Hearing Examiner may issue a decision without a public hearing.

vii. The height of a new pole, including any attached antennas and equipment, must not be taller than the height of the nearest pre-existing streetlight or utility pole:

(a) plus 6 feet when abutting a right-of-way with a paved section width of 65 feet or less, or up to 25 feet where the height of the pole being replaced is less than 20 feet tall, whichever is greater; or

(b) plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet.

[[f]]g. Any party aggrieved by the Hearing Examiner's decision may file a petition for judicial review under the Maryland rules within 15 days of the publication of the decision.

* * *

Sec. 3. Tree Loss Minimization. The County Executive must include tree loss minimization language in all franchise and license agreements signed after the effective date of ZTA 19-07. Critical damage to the root zones of trees as well as excessive pruning should be avoided in the installation of telecommunications towers, regardless of whether they are installed on a new, pre-existing, or replacement pole.

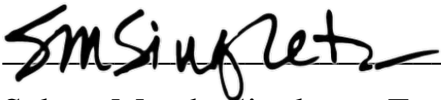
* * *

398 **Sec. ~~[[3]]4. Effective date.~~** This ordinance becomes effective 20 days after
399 the date of Council adoption.

400

401 This is a correct copy of Council action.

402

403 _____

404 Selena Mendy Singleton, Esq.

405 Clerk of the Council

To: Montgomery County Councilmembers, County Executive, County Clerk
From: Anna Olsson, Silver Spring, MD

Subject: ZTA 22-01, if passed, will increase inequality and harm residents in Montgomery County

September 8, 2022

Councilmembers et al.:

Please add this to the official testimony for opposition to ZTA 22-01.

There is overwhelming evidence, documented in hundreds of peer-reviewed articles, that radiofrequency / microwave (RF/MW) radiation is harmful to human health. As documented by countless testimonies by Montgomery County residents during previous public hearings on Zoning Text Amendments that relate to cell tower placement, you must be aware of this, and if you continue to ignore this overwhelming evidence, you are violating your Oath of Office in the most serious way, willfully harming your constituents.

It is beyond my ability to comprehend why you would pursue this Zoning Text Amendment at a time when our County is experiencing unprecedented health issues among its residents, and when we are entering what may be the most significant energy crisis most of us have experienced in our lifetime.

Why would you even consider a Zoning Text Amendment that would allow - probably even encourage - cell service providers to litter our county with what the WHO has classified as a Class 2 carcinogen - a known toxin - in allowing cell antennas to be placed on utility poles just 30 feet from homes, with no recourse, and no way of getting away from 24/7 radiation? You need to regulate to *protect* your residents from this toxin, not open the floodgates to the corporations to freely and unlimitedly expose us to it!

Furthermore, by passing ZTA 22-01, you will deliberately or inadvertently cause both energy use and energy costs to skyrocket across our County. According to the 2020 report "Operators facing power cost crunch" By Matt Walker for industry analyst firm MTN Consulting "A typical 5G base station consumes up to twice or more the power of a 4G base station. The disparity can grow at higher frequencies, due to a need for more antennas and a denser layer of small cells. Edge compute facilities needed to support local processing and new Internet of things (IoT) services add to overall network power usage. The bottom line is that, in an increasingly 5G world, telcos will face significant growth in their energy bills."

How will an ever-increasing power use of thousands of new antennas for more devices with higher frequencies affect the cell phone bills of Montgomery County residents? You bet it will lead to an increased digital divide!

In addition to the recklessness of the proposed Zoning Text Amendment, you have also been made aware numerous times prior by residents testifying in Public Hearings that there is actually a cheaper, safer, faster, more energy efficient solution to providing connectivity to all Montgomery County Residents: Finish building out the fiber-optic network that we have all been paying the telecom corporations for over the last several years through added taxes on our bills. The fact that you are ignoring this opportunity while stubbornly pushing more and more invasive ZTAs could not make it any clearer who you truly represent through your actions: Corporations. We see what you are doing, and we will hold you accountable. Abolish ZTA 22-01 and start regulating the Telecom Corporations to serve and protect your constituents!

Anna Olsson
Silver Spring, MD

Testimony Opposing ZTA 22-01- Cell Tower Antennas 30 Feet From homes

Dear Montgomery County Council,

Please vote no on ZTA 22-01.

I have lived in Silver Spring for nearly 60 years. I do not want a cell tower in front of my home, no matter how short it is. Do your best to keep these towers away from our children.

Please see information from Environmental Health Trust showing other officials voted to protect their residents. You each should do the same instead of voting to allow cell towers in our neighborhoods.

Thank you,

Bette Steckler

Many communities have passed strong ordinances restricting cell towers and small cell antennas near homes and schools. Montgomery County should follow suit to protect the families that live here.

Setbacks for Cell Towers from *Environmental Health Trust* ehtrust.org

[Shelburne, Massachusetts](#): 3,000 feet for schools and 1,500 feet for homes.

[Copake, New York](#): 1,500 feet from homes, schools, churches and public buildings.

[Sallisaw, Oklahoma](#): 1,500 from homes.

[Calabasas, California](#): No “Tier 2” telecommunications facilities within 1,000 feet of homes and schools.

[Stockbridge, Massachusetts](#): 1,000 feet for schools, playgrounds and athletic fields. 600 feet for residential.

[Walnut City, California](#): 1,500 feet setbacks for schools, parks and residential zones.

[Bar Harbor, Maine](#): 1500 feet setback for schools.

[Bedford, New Hampshire](#): 750 feet from nearest residentially-zoned property.

[Encinitas, California](#): Restricted site locations include residential zones, within Ecological zones, or very high fire hazard severity zones, 500 feet from residential dwelling unit, daycare facilities or schools.

[Scarsdale, New York](#) - 500 feet setback from homes, schools, parks, and houses of worship.

[Randolph, Massachusetts](#): 500 feet setbacks for homes.

[Petaluma, California](#): 500 feet setback for homes.

[Suisun City, California](#): 500 feet setback for homes.

[Ithaca New York](#): 250 feet or more setback from any residence, school, or day-care facility.

Several school districts prohibit cell towers such as:

- Los Angeles California
- Palo Alto California
- West Linn-Wilsonville, Oregon

Wireless infrastructure can impact tree canopy in numerous ways

- Companies have aggressively trimmed trees with no oversight by arborists.
- Trees are being felled/removed to build infrastructure and/or roads to the facility.
- Digging to install the poles and related equipment can disrupt the root zone.
- Research studies have found damage to trees from exposure to the radiofrequency radiation emitted from the wireless antennas.

What municipalities can do to protect trees:

- Require companies to present a master plan for their proposed networks (rather than piecemeal one at a time) to determine environmental impacts including impacts to tree canopy and pollinator habitat.
- Require environmental assessments for the network that includes impacts to trees.
- Zoning and ordinances should include tree protections such as setbacks for root zones.
- Prohibit tree removal and trimming for new infrastructure.
- Create a transparent process for oversight that includes independent arborists and experts.

Examples of Tree Protections

Washington DC

A standalone pole shall not be located within an existing street tree's protected zone and poles shall not be placed within 15 feet of any open tree planting space.

No street tree shall be removed, or have its protected root zone impacted and "no tree shall be pruned related to the installation or functioning of small cell infrastructure."

Denver Colorado

Minimum of 15-25 feet of separation to the tree trunk such that no proposed disturbance shall occur within 5 feet of the critical root zone (drip-line) of any tree.

Thornton Colorado

Poles shall not be located... "less than 15 feet or within the drip line of an existing tree, whichever is greater in order to protect the health of the tree."

Listen to Science Please

Expert Quotes from Environmental Health Trust

“Given the human, animal and experimental evidence, I assert that, to a reasonable degree of scientific certainty, the probability that RF exposure causes gliomas and neuromas is high.”

-Christopher Portier PhD [former Director of the United States National Center for Environmental Health at the Centers for Disease Control and Prevention](#) and former Director of the U.S. Agency for Toxic Substances and Disease Registry. Portier’s [176-page expert report](#) with 443 scientific references found scientific evidence of carcinogenicity.

“The scientific evidence is sufficiently robust showing that cellular devices pose significant health risks to children and pregnant women. The weight of the evidence supports stronger precautionary regulation by the federal government. The cellular industry should take immediate steps to reduce emission of electromagnetic radiation (EMR) from phones and avoid marketing their products to children.”

[John Wargo, Ph.D., Environmental Risk and Policy at Yale University](#)

“I am calling on my industry to bring safer technology to market. The current implementation of technology is not safe. Take a good look at the science. This is about our children’s future. Do not be lulled into believing that 25-year-old standards can protect the youngest and most vulnerable. They simply cannot.”

Frank Clegg, CEO of Canadians for Safe Technology and Former President of Microsoft Canada, [5G Appeal](#) [NIH Talk](#)

“Children’s brains develop through the teenage years and may be more affected by cell phone use. Parents should consider reducing the time their children use cell phones and encourage them to turn the devices off at night.”

- Dr. Karen Smith, Director of the [California Department of Public Health press release](#) for issuance of their [cell phone radiation advisory](#).

“We should not wait to protect children’s brains. The science is now clear and compelling, indicating that wireless technology is harmful to health, especially for children. Wireless radiation is repeating the history of lead, tobacco and DDT.”

-Devra Davis PhD, MPH, President of Environmental Health Trust, founding director of the Board on Environmental Studies and Toxicology of the U.S. National Research Council, National Academy of Sciences, and **a member of the team of the Intergovernmental Panel on Climate Change scientists who were awarded the Nobel Peace Prize with the Honorable Al Gore.** [Watch Dr. Davis’ TEDx talk](#)

“The exposure levels of the Federal Communications Commission are totally outdated and do not protect the health of the public, especially of children. I urge you to take strong and active steps to reduce exposure of children and staff to excessive levels of radiofrequency EMFS within your schools.

-David O. Carpenter, M.D. Director, **Institute for Health and the Environment University at Albany**



Crown Castle
10980 Grantchester Way,
4th Floor
Columbia, MD 21044

September 13, 2022

Gabe Albornoz, President
Montgomery County Council
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Re: Support – Zoning Text Amendment (ZTA) 22-01

Dear President Albornoz:

Crown Castle is the nation's largest provider of shared wireless infrastructure, we have a long track record of working with the public and municipalities to deploy wireless infrastructure. We deploy co-located small cell facilities, in addition to rooftop antennas, towers and fiber optic cables. Our customers include public and private businesses, governmental entities, healthcare facilities and educational institutions. Our infrastructure helps facilitate working from home, online learning, virtual healthcare and countless other online and virtual services that are needed now more than ever during the ongoing pandemic. We continue to work closely with County officials and other stakeholders to deploy small cells, fiber optic cables and other telecommunications infrastructure to support County residents, visitors, and businesses.

We support the proposed Zoning Text Amendment 22-01 (the ZTA) that paves the way to increased wireless connectivity in the County. Many residents and visitors rely solely on their wireless devices to connect to the Internet. Ubiquitous connectivity like any other utility is a requirement, not a luxury. We use our devices to stay connected from everywhere -- home, work, and in the community.

Crown Castle appreciates the steps taken by the County to support the more efficient deployment of wireless networks. The existing zoning ordinances contain inconsistencies that are addressed by the ZTA. Specifically, if an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole because under current guidelines the use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that is capable of hosting the wireless equipment at hand.

Crown Castle constructs wireless networks looking first to collocation opportunities – using existing infrastructure in the right-of-way that can host wireless equipment. The ZTA will allow Crown Castle the opportunity to construction 56 new small cells using existing infrastructure located 30 feet from a building that will not require replacement. This means that wireless broadband service will be improved in 56 areas of the County without putting a shovel in the ground or adding new vertical infrastructure to the right-of-way.

The demand for wireless services from our customers – your constituents – creates a shared responsibility of government and industry to ready the next-generation networks that will serve consumers today and into the future. The small cells enabled by the ZTA will add much-needed capacity to provide the uninterrupted connectivity we all demand today and to prepare for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; remote working opportunities; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and much more. As more County residents rely on these wireless services, the ZTA will allow the wireless industry to explore additional opportunities to deploy wireless infrastructure, resulting in greater investment, increased capacity, and advanced wireless connectivity supporting the needs of businesses and families.

We urge passage of this important ZTA. Thank you for your time and consideration. Please contact the undersigned with questions.

Respectfully submitted,



Carly T. Didden
Government Affairs

CROWN CASTLE

10980 Grantchester Way, 4th Floor, Columbia, MD 21044

CrownCastle.com

M:(703) 217-2873 | E: carly.didden@crowncastle.com

Testimony Opposing ZTA 22-01 from Colleen Cordes, Takoma Park Resident:

The County Council should resist a false rationale being offered for why ZTA 22-01 is no big deal and why it can be quietly rushed through, before residents even know what's happening: The false claim that it's "just" a "technical fix" of ZTA 19-07, the resident-unfriendly zoning change the Council passed in July, 2021.

That's wrong on two counts:

First, there's ample evidence that there was no accidental "technical" oversight made in the final language of ZTA 19-07, by either Council staff or by Councilmember Hans Riemer -- its main sponsor and the only sponsor of ZTA 22-01 -- that would be "fixed" by ZTA 22-01. In fact, as early as January, 2020, the Council's own senior legislative analyst, Jeffrey Zyontz, told the PHED Committee, which Mr. Riemer chairs, in [a written memo all residents can easily review on line](#), that ZTA 19-07 would NOT change the part of County zoning code that this new ZTA 22-01 deals with. (See pp. 11-12 of that memo.) *Council staff repeatedly included that information in memos they prepared for both Mr. Riemer's committee and for the full Council.* And County Executive Marc Elrich also, in written communication to the Council in June, 2021, noted this fact for the Council. So Mr. Riemer and the rest of the Council were several times informed of this fact. ZTA 22-01 cannot be honestly characterized as "correcting" an accidental oversight in a law passed earlier. This is an entirely new proposal.

Second, the changes embodied in ZTA 22-01 are not "just" a small matter. It's a big deal for the huge number of residents who don't want wireless facilities on utility or light poles 30 feet from their bedroom window, as ZTA 22-01 would allow. In fact, it would be a major change in the County's zoning law for the regulation of wireless facilities.

There's no way the outgoing Council should rush to pass such a significant zoning change just before current Council terms end. Instead, I urge you to cancel all action on the proposed ZTA immediately and instead encourage the new Council that will follow you to thoroughly review zoning law and administrative regulation of wireless facilities in Montgomery County.

Thank you.

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There's no way the outgoing Council should rush to pass such a significant zoning change just before current Council terms end. Instead, I urge you to cancel all action on the proposed ZTA immediately and instead encourage the new Council that will follow you to thoroughly review zoning law and administrative regulation of wireless facilities in Montgomery County.

Thank you.

**Testimony in Opposition to ZTA 22-01
On Behalf of Community Vision for Takoma, by Colleen Cordes**

Please resist a false rationale being offered for why ZTA 22-01 is no big deal, why it can be quietly rushed through: No. It's not "just" a "technical fix" of ZTA 19-07.

First, evidence shows there was no accidental "technical" mistake in the final language of ZTA 19-07. As early as January, 2020, the Council's own senior legislative analyst told the PHED Committee, which Councilmember Riemer chairs, in [a memo](#), that ZTA 19-07 would NOT change the part of County zoning code that governs existing utility poles – the part of code that ZTA 22-01 deals with. *Council staff repeatedly included that fact in memos to Mr. Riemer's committee and the full Council.* The County Executive, in written comments to you, a month before you passed ZTA 19-07, also noted it. So Mr. Riemer and the full Council were informed several times over the year and a half before you passed ZTA 19-07.

ZTA 22-01 cannot be honestly characterized as "correcting" an accidental oversight in that law. This is an entirely new proposal.

Second, what ZTA 22-01 proposes is not a minor change. It's a big deal for the huge number of residents who don't want cell towers on poles 30 feet from their bedroom windows.

In fact, it would be a major change in County zoning law – not something the outgoing Council should rush to pass just before your terms end.

We urge you to cancel all action on ZTA 22-01. Encourage the incoming Council to thoroughly review all zoning and regulation of wireless facilities. One priority: Correct the out-of-control situation with rooftop antennas on multi-family residential buildings.

Many, if not most, of these rental buildings are in residential zones affected by this proposed ZTA. If passed, residents in these buildings may find new pole antennas beaming into their windows, in addition to the ones over their heads. No one will monitor any of them. Why is no one making sure residents are not being illegally exposed to radiation levels that exceed federal safety limits? That's the kind of fix we need – not ZTA 22-01. Thank you.

ZTA 22-01 - DO NOT ACT ON THIS ZTA

Councilmembers,

ZTA 22-01 is another zoning change that is on a trajectory to be voted on without meaningful public input. Please do not move forward with ZTA 22-01.

Last year the Council adopted 19-07 - a zoning change largely pushed by the wireless industry and unpopular with residents. The Council's lead sponsor - Mr. Riemer - claims 19-07 is not "exactly as intended" and needs a correction so that he can allow wireless providers access to thousands of utility poles in residential areas as close as 30 feet from homes.

There is no FCC requirement or rational justification for this ZTA 22-01.

PLEASE CONSIDER THE FOLLOWING AND TABLE THIS ZTA 22-01

1. Council did NOT intend to cover utility poles 30 feet from homes when it passed ZTA 19-07.

ZTA 19-07 amended the provisions of the code contained in Section 3.5.2 and not those contained in Section 3.5.14. The Council's own briefing materials on the date of the passage (7.27.2021) contained this point noting that 19-07 did not cover "existing and replacement utility poles" as they are separately defined in the code.¹ This point was made repeatedly: in the January 2020 memo by the PHED committee senior legislative attorney² and in the June 29, 2021 briefing packet to the full Council, giving the lead sponsor, the committee and the Council ample time to change the text of 19-07, *if that had been their intent*. ZTA 22-01 is not an adjustment to ZTA 19-07 but a completely different and **material**³ zoning change.

¹ "5. Antenna attachments to existing and replacement ***utility poles are not covered*** by this ZTA. Although Section 59.3.5.2.C mentions replacement utility poles, it has been interpreted that utility poles – whether existing or replacement – are governed by Section 59.3.5.14.C “Antenna on Existing Structure”. The staff memo from Jan 21, 2020, explains, “A pole may be replaced because of general maintenance, increased electrical service needs, to accommodate cable service, or to accommodate an antenna. If the pole exists when an applicant applies for an electrical permit, the provision for an antenna attachment on an existing structure applies (Section 59.3.5.14.C of the zoning code). There is NO height limit for antennas on existing structures. There IS a required 60-foot antenna setback from any dwelling (Section 59.3.5.14.C.2.e.iii).” (pg. 11) The memo confirms that ZTA 19-07 does not amend this section and that therefore, it would “not affect the current law concerning the unlimited height of utility poles in their status as existing structures.” [included as part of briefing materials for ZTA 19-07 dated July 27, 2021: https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2021/20210727/20210727_4D.pdf]

² https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2020/20200123/20200123_PHED1.pdf

³ An estimate of the number of poles affected by ZTA 22-01 is approximately 32,435, based on a Memorandum prepared by Livhu Ndou to the PHED Committee. "Currently: 9,383 poles have less than a 30-foot setback from a building; 18,839 poles have a setback between 30 feet and 45 feet; 13,596 poles have a setback between 45 and 60 feet; and 33,368 poles have a setback of 60 feet or more."

Mr. Riemer has stated that ZTA 22-01 "is needed to correct the Council's intention to allow existing poles to erect antennas at 30 [foot setbacks]."⁴ *Is Mr. Riemer saying that neither he nor Councilmembers read the 19-07 briefing materials, so they did not know what they were passing?*

2. The Material Zoning Changes in ZTA 22-01 Need a Meaningful Public Hearing

The hearing for ZTA 22-01 is scheduled to be September 13th at 1:30 p.m. - mid-day on a workday - automatically excluding those residents that work during that time. The hearing has very limited speaking slots that filled within hours - also denying residents the ability to speak to ZTA 22-01.

Further, the County continues to pass zoning amendments without the input of the Office of the People's Counsel ("OPCS") as it seems to have determined to update its codified provisions on the OPC via defunding it rather than legislatively removing it.

County procedure stipulates that input on zoning text amendments is to be provided by the Office of the People's Counsel whose purpose is "promoting a full and fair presentation of relevant issues in administrative proceedings in order to achieve balanced records upon which land use decisions can be made" and it is tasked with providing "technical assistance to citizens and citizens associations [to] encourage effective participation in, and increased public understanding of and confidence in, the County land use process." Yet, the People's Counsel (established over 30 years ago) was defunded by the Council several years ago and the Council has dodged requests to reinstate it. The provision for People's Counsel is still on the books, the Council just pretends it is not there by not funding it.⁵

3. Wireless Zoning Needs Climate Impact Analysis

While it is a move in the right direction to pass Bill 3-22 on climate reviews of zoning text amendments it does not capture ZTA 22-01 if the Council passes it now. So conveniently all of the cell antennas and their related generators and those that could be deployed if the Council moves forward now with ZTA 22-01 will be completely (and conveniently) ignored for energy use and greenhouse gas emissions.

https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210310/20210310_PH_ED2.pdf

⁴ <https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/agenda/col/2022/20220215/minutes-20220215.pdf>

⁵ See https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-64694 (noting that required staff consultations for a zoning text amendment must include one staff representative "each from the Montgomery County Planning Board; the Office of the County Attorney; the Office of Zoning and Administrative Hearings; the Department of Permitting Services; the Board of Appeals; the *People's Counsel*; and the Office of the County Executive." [emphasis added])
See also https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-1896

4. Council has Failed to Correct Errors of Wireless Antenna Placements Under Current Zoning

Flaws in the current zoning process - the Tower Committee - have been raised to the Council many times including by the County Executive in 2019 noting that "administrative reforms are needed."⁶ The zoning process must be reviewed thoroughly to stop the mistakes that residents have raised continuously in hearings for ZTA 19-07 and its failed predecessors including cell poles put up in the incorrect location, next to schools for pre-grade school children, and those in violation of zoning height and setback requirements. Also, those cell towers that are in excess of current FCC RF emissions.

PLEASE TABLE ZTA 22-01

Thank you,
Cyndie Baughman
Resident - Montgomery County, MD

⁶ <https://montgomerycountymd.gov/cable/Resources/Files/Towers/ZTAFiles/Final%20testimony%20ZTA%2019-07.pdf>

COVID-19 outcomes span a wide spectrum, from asymptomatic, to mild, severe, hospitalization, ICU, and death. Much research has been devoted to understanding risk factors associated with case severity. For example, CDC recognizes obesity, diabetes, chronic lung disease, coronary artery disease, physical inactivity, and smoking, among others.

<https://www.cdc.gov/coronavirus/2019-ncov/hcp/clinical-care/underlyingconditions.html>

Environmental risk factors may also contribute to COVID-19 severity. The Harvard TH Chan School of Public Health has noted “Emerging research, including a study from Harvard T.H. Chan School of Public Health, finds that breathing more polluted air over many years may itself worsen the effects of COVID-19.”

<https://www.hsph.harvard.edu/c-change/subtopics/coronavirus-and-pollution/>

The attached peer-reviewed research examines associations between COVID-19 severity and radiofrequency exposure, suggesting that, like air pollution, radiofrequency exposure could be a risk factor contributing to COVID-19 severity and mortality.

<https://www.ncbi.nlm.nih.gov/pmc/articles/PMC8580522/>
<https://doi.org/10.18103/mra.v9i4.2371>

The Council should immediately halt all small cell deployments in residential zoning in the County until it has examined this research and can assure the public that these deployments are safe and are not increasing disease severity or mortality in the County.

Legal Reasons for Council to Stand Down on ZTA 22-01

>>>

Council needs to stop reciting pro-wireless bias narratives that rubber-stamp and cheerlead the interests of telecom and their so-called demonstrations. What is preempted is an actual moratorium that's specific to wireless — for which Montgomery County is NOT GUILTY!

What the County's attorneys continue to advise Councilmembers cannot be squared with what the FCC told the Supreme Court! The **FCC never concluded that every limitation on any covered service is effectively prohibitory** — and told that to the Supreme Court! In addition, the FCC stated that ***“[n]othing in the Small Cell Order suggests that wireless carriers may “construct any and all towers,” or small cells, that they “deem[] necessary” in their “business judgment.”*** In addition, the Commission did not conclude that every limitation on any covered service is effectively prohibitory. I've researched and presented the DETAILS of why it is **wrong to construe that the small cell order implies that localities may never constrain a carrier's preferences**. See https://drive.google.com/file/d/1_M410pm3umwW99oG7duUecbw8BvGOJsQ/view?usp=sharing

The County is recklessly and fecklessly devoted to giving maximum locations to wireless facilities AS IF doing so is law — all the while falsely alleging legal consequences when, in fact, ***“there is not a shred of evidence in the legislative history suggesting that . . . Congress intended plaintiffs to be able to recover damages and attorney's fees.”*** I've researched and presented the DETAILS of the history of City of Rancho Palos Verdes v. Abrams all the way up to the Supreme Court. Review my comprehensive look at why a **telecom company can NOT sue a local juris-diction for damages**. Enforcing violations of **§332(c)(7) would undermine the policies that the Telecommunications Act (TCA) reflects!** — See <https://drive.google.com/file/d/16ADxPEmDZAdQy6yAUUJbfZYXLuXts91Z/view?usp=sharing>

Additionally reflective of the TCA is that streaming videos, viewing online movies, sending/receiving emails, browsing the Internet, and engaging in tele-medicine are NOT part of “personal wireless service” or even a telecommunications service and the preemptive provisions in 47 U.S.C. 253 and 332(c)(7). The Telecommunications Act's **(TCA) 47 U.S.C. 253 and 332(c)(7) do not apply to these aforementioned services in isolation.**

A coverage gap analysis is all about voice service — NOT any perceived need to expand the aforementioned data services. Coverage required is for outdoor, wireless phone calls (which require up to “5 bars” of telecommunication service). As per the FCC itself, coverage is ***“outdoors and stationary. It is not meant to reflect where service is available when a user is indoors or in a moving vehicle.”*** — <https://www.fcc.gov/BroadbandData/MobileMaps/mobile-map>

WHY is it that the following has not dawned on Council — that it's **exceedingly unlikely** that the US Congress in 1996 intended for the US population to be sickened, injured, and die from profoundly deleterious RF/EMF effects 24/7/365 **to which we do not consent** — all in order to allow the wireless industry to maximize its profits???

>>>

Council needs to be acutely aware of ExteNet v Flower Hill's inevitable influence since the very recent 7/29/2022 decision whereby a local jurisdiction in NY successfully fought off 18 "small cell" 4G wireless antennas on public rights-of-way in the Village. In sum, the alive-and-well, coverage gap analysis is all about voice service versus any perceived need to expand data services — until the Second Circuit says it isn't! The same applies in our Fourth Circuit.

ExteNet v Flower Hill is a treasure trove of case cites (below) of ALL the case law to-date that Council has ignored. This District Court's decision will undoubtedly be influential to other circuit courts.

ExteNet Sys. v. Vill. of Flower Hill, No. 19-CV-5588-FB-VMS (E.D.N.Y. Jul. 29, 2022) — <https://casetext.com/case/extenet-sys-v-vill-of-flower-hill>

The District Court affirmed the following:

>>> that the lack of a gap in coverage is relevant here and can constitute substantial evidence justifying denial of a permit

>>> that the FCC's 2018 [small cell] ruling exceeds the scope of the TCA that only covers the provision of wireless telephone service access to a telephone network because the TCA requires an application for a wireless facility be the least intrusive means for closing a significant gap in a remote user's ability to reach a cell site that provides access to land-lines

>>> that because the TCA is not in question — that there's no small cell entitlement to which to legally give deference — as per one of the most-cited cases on the basic standards of review of agency statutory interpretation; by not substituting its own construction of the [plain statutory language of the TCA] and the phrase, "personal wireless services" — the Court affirmed that the [TCA] is not in question

>>> that even though ExteNet focused on the lack of need for improved 4G LTE coverage — and that **improved capacity and speed** are desirable (and, no doubt, profitable) goals in the age of smartphones — they **are not protected by the Act**

In asserting the above, the District Court's decision reveals a volume of former decisions and precedents with case law that is quite clear — IF IT'S READ:

>>>> " ... **the FCC's [small cell] ruling is [NOT] entitled to deference** under *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984) [because] Chevron deference applies only when the [TCA] statute in question is silent or ambiguous [or in question]. Although the Second Circuit found the phrase "**personal wireless services**" "opaque," it ultimately relied on "[t]he plain statutory language" [of the TCA] to define it. Therefore, the **phrase was not ambiguous.**" — citing *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984) — as per <https://casetext.com/case/chevron-inc-v-natural-resources-defense-council-inc-american-iron-and-steel-institute-v-natural-resources-defense-council-inc-ruckelshaus-v-natural-resources-defense-council-inc>

>>>> ***“A gap in 4G coverage does not establish that the target area is underserved by voice cellular telephone service.”*** — as per Crown Castle NG East LLC v. Town of Hempstead, 2018 WL 6605857, at *9 (E.D.N.Y. Dec. 17, 2018) — <https://casetext.com/case/crown-castle-ng-e-llc-v-town-of-hempstead-1>

>>>> ***“We hold only that the Act’s ban on prohibiting personal wireless services precludes denying an application for a facility that is the least intrusive means for closing a significant gap in a remote user’s ability to reach a cell site that provides access to land-lines.”*** — as per Willoth, 176 F.3d at 643 — <https://casetext.com/case/sprint-spectrum-v-willoth#p643>

which means

>>>> ***“... local governments must allow service providers to fill gaps in the ability of wireless telephones to have access to land-lines”*** — as per Sprint Spectrum L.P. v. Willoth, 176 F.3d 630 (2d Cir. 1999) — <https://casetext.com/case/sprint-spectrum-v-willoth>

>>>> ***“It is not up to the FCC to construe the [Act] to say something it does not say, nor up to the Court to find broadband communication encompassed by the law.”*** — as per Clear Wireless LLC v. Bldg. Dep’t of Vill. of Lynbrook, 2012 WL 826749, at *9 (E.D.N.Y. Mar. 8, 2012) — <https://casetext.com/case/clear-wireless-llc-v-bldg-dept-of-the-village-of-lynbrook#p9>

>>>> ***“If the Court finds that even one reason given for the denial is supported by substantial evidence, the decision of the local zoning body cannot be disturbed.”*** — as per T-Mobile Ne. LLC v. Town of Islip, 893 F.Supp.2d 338, 355 (E.D.N.Y. 2012 — <https://casetext.com/case/tmobile-ne-llc-v-town-of-islip#p355>

>>>> ***[The TCA] “strikes a balance between two competing aims — to facilitate nationally the growth of wireless telephone service and to maintain substantial local control over siting of towers.”*** — as per Omnipoint Communications v. White Plains, 430 F.3d 529 (2d Cir. 2005) — <https://casetext.com/case/omnipoint-communications-v-white-plains#p531>

>>>> ***“The [1996 Telecommunications] Act provides ... that “[n]othing in this section affects the authority of a State or local government to manage the public rights-of-way . . . , on a competitively neutral and nondiscriminatory basis[.]”*** — as per the preemptive effect of the TCA’s 47 U.S.C. § 253(a) — <https://casetext.com/statute/united-states-code/title-47-telecommunications/chapter-5-wire-or-radio-communication/subchapter-ii-common-carriers/part-ii-development-of-competitive-markets/section-253-removal-of-barriers-to-entry>

Of note are the other reasons provided by the local jurisdiction for denying the application that if supported by substantial evidence would also support denial of the applications under the case law:

- aesthetics
- property devaluation
- applicant’s refusal to provide actual fixed plans and photo simulations for each of the proposed nodes
- applicant’s refusal to comply with the local jurisdiction’s provisions

>>>

Council needs to be practical in the fact that wireless requires wireline backhaul facilities -- not more wireless. Montgomery County is not “out of bandwidth.” Rather, it is short on paid-and-promised fiber not completed or installed in Maryland since 2010. **Even former FCC Chairman, Ajit Pai, knows the importance of the physical networks** — and said so in a Mobile World Congress!

NTCA — The Rural Broadband Association states the following:

*"to a significant degree, 5G wireless services will rest upon a foundation of **wireline backhaul facilities**. Even where licensed spectrum may be available to function as backhaul in some instances, the densification of small cells that will power this **new technology will certainly require a densification of fiber not seen before in this nation's history**.[In addition, Pai stated that "all the spectrum we devote to 5G won't be put to good use if the physical networks to carry 5G traffic are never built."]* This is particularly true in rural areas where densities are low. In rural areas where potential service locations and users are often much further apart, **fiber is [] the linchpin to effective connectivity — and barriers to the deployment of fiber will undermine, if not defeat, access by rural Americans to next-generation broadband services and speeds of the kind contemplated by the FCC.**"*

— *as per remarks from FCC Commissioner, Ajit Pai, at the Mobile World Congress, Barcelona, Spain, February 28, 2017 at <https://www.fcc.gov/document/chairman-pai-remarks-mobile-world-congress> quoted in <https://www.ntca.org/sites/default/files/federal-filing/2018-09/9.10%20and%2011%202018%20Carowitz%20Adams%20ex%20partes.pdf>

>>>

Council needs to be practical in the fact that advertising isn't reality. In fact, as per a Vantage Point report on 5G, **"5G ... "will be a mediocre if not very poor solution for tomorrow's fixed broadband, with very poor median-to-advertised speed performance."**

Here are further details from p21:

*"If 1 Gbps is a reasonable household broadband service expectation within the 5G equipment's service life, then tomorrow's maximum **5G small cell throughput cell capacity expectation** on the order of 1.5 Gbps for that timeframe — to be shared among all users, and which may seem plentiful today — **will be a mediocre if not very poor solution for tomorrow's fixed broadband, with very poor median-to-advertised speed performance.** . . the small cell is in danger of **serious congestion**, and/or will require throughput limiting — either of which will render it indeed a mediocre if not **very poor solution.**"*

— as per https://www.vantagepnt.com/wp-content/uploads/dlm_uploads/2017/07/vps-5g-white-paper-march-2017.pdf

>>>

Council needs to initiate Investigations into the BILLIONS of cross-subsidies carried out by Verizon and other carriers to avoid paying Maryland State taxes so that their corporate profits could be boosted. We had a bait 'n' switch; we **paid** for fiber; we got wireless instead. For decades, telecom has transferred billions from its REGULATED, wired state public telecommunications utility companies to its UNREGULATED, wireless subsidiary companies. See <https://drive.google.com/file/d/1ujaFKj7sWPYBKRJGDaO3scyv8uqnWzyQ/view>

These financial sleights-of-hand have been — and continue to be — in **direct violation of the 1996 Telecommunications Act: Title 47, §254(k), which states that “[a] telecommunications carrier may not use services that are not competitive to subsidize services that are subject to competition.”**

What Montgomery County needs is more **fiber to the home on an open, interoperable, Net Neutrality network -- preferably one that’s community owned.** Recovery of the billions due/owing would allow Maryland to pay for this safe, secure, reliable, and high speed, fiber network that was promised to be installed by 2010 so that fiber to the premises (FTTP) would **finally** bridge the digital divide.

*Submitted by irene of eyemind concepts —
40+ year resident of Silver Spring*

September 13, 2022 - Montgomery County Council Public Hearing Testimony

RE: ZTA 22-01, Antenna on Existing Structure – Use Standards

FROM: John Parrish

Dear Councilmember,

Please keep the existing sixty foot antenna setback requirements in place or increase the minimum distance further away from residences. Basic internet services and some of the enhanced services can be satisfied, and are being satisfied, without placing antennas closer to homes. My basic service in Silver Spring is adequate under current conditions with fiber optics and was adequate with copper until my neighborhood was forced to transition away from copper.

Electric Energy Use and Climate Impact Assessment Needed

The rollout of 5G is expected to sharply increase electricity demand and further exacerbate our global and local climate crisis. **Nearly fifty percent of the PEPCO fuel mix to generate electricity in the D.C. region comes from natural gas and coal.** Montgomery County has an obligation to lessen, not increase, our use of fossil fuels to reduce CO2 emissions. Placing antennas closer to homes will facilitate the connection of many more internet dependant devices that do not serve basic needs and would sharply increase the electricity demand. This seriously undermines County efforts to reduce harmful greenhouse gas emissions. **This increased dirty energy demand should be analyzed and quantified so that the public knows whether or not Montgomery County is complying with climate goals.**

Democratic Process Safeguards Severely Weakened by the Council if ZTA 22-01 is Enacted

Democratic processes are increasingly under threat in our country. It is alarming to know the FCC prohibits local governments from making antenna placement decisions based on public health considering that outdated FCC safety guidelines do not reflect current scientific knowledge of the harmful effects of RF radiation exposure. This is all the more reason for the County to keep all of the current conditional-use procedures in place regarding the placement of antennas in residential areas. Our current conditional-use process requires review by M-NCPPC staff and the Planning Board and gives citizens the opportunity to go before the Hearing Examiner and the Board of Appeals if needed. The conditions promoted by ZTA's 19-07 and 22-01 subvert public participation and democratic procedures. We can do better than this!

To Obtain Desired 5G Radio Frequency (RF) Signal Strength, Negative Impacts to Trees Will Occur

The foliage and limbs of trees interfere with RF signals. To achieve adequate reception, trees would require severe pruning and disfigurement. This is not a result that I find desirable nor is it necessary. Basic internet services can be provided via cable, copper and fiber optics. **Will the Council please analyze and quantify how this loss of tree canopy would contribute to climate related problems such as the urban heat island effect? Will the Council also analyze the expected loss of tree biomass and how that impact reduces carbon sequestration in our county?**

Please, at the very least, maintain existing distance standards for antenna placement and keep the existing conditional-use reviews in place. **Please also seriously consider how the rollout of 5G will increase addictions to electronic devices at the expense of societal mental health.** I urge the Council to stop and consider whether the rollout of 5G is really necessary for the quality of life of county residents. I argue it is not.

John Parrish

Katherine Katzin

Opposition to ZTA 22-01

Please vote no on ZTA 22-01 and cancel all action on it this fall. Instead, please allow the incoming Council to consider changes to the zoning code.

ZTA 22-01 threatens our health, homes, neighborhoods, trees, pedestrians, and due process.

No Legal Requirement for ZTA 22-01

There is no FCC or federal requirement, no plausible legal justification, for ZTA 22-01. It appears to be another gratuitous handout to the wireless industry at the expense of County residents. The Council has yet to respond substantively to the FCC's court loss in EHT et al. v. FCC (2021) and other recent case law such as Extenet v. Flower Hill (2022). (See <https://ehtrust.org/wp-content/uploads/Analysis-of-ExteNet-Sys.-v.-Village-of-Flower-Hill-by-Attorney-Robert-Berg-Legal-Advisor-the-Environmental-Health-Trust-2.pdf>) In the EHT case, a federal appeals court ruled that it was illegal for the FCC to rely upon FDA webpages in its decision-making, because FDA has not provided "factual bases" for its webpage. Why then does the Council believe that it can rely on these same webpages?

Assault on Equity and Social Justice

The Council's own staff, in its Racial Equity and Social Justice (RESJ) impact statement on ZTA 22-01, did not find that 22-01 would have a positive net impact on racial equity or social justice in the County. And that was after relying on a "report" that was "generously" supported by T-Mobile. At the same time, they noted that "if the reduced set back requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity." The statement did not even consider the social justice impacts of close proximity towers on vulnerable populations like pregnant people, young children whose brains are still developing, people with heart conditions, electro-sensitivity, and other conditions.

ZTA 22-01 will not close the Digital Divide. The RESJ impact statement makes false assertions based on wishful assumptions that low-income residents will receive funding for expensive 5G devices and services. But the financial support has not been allotted at levels that would make the devices and services accessible for all residents. (See [lifeline-breakdown-fact-sheet.pdf \(nclc.org\)](#))

Reducing setbacks from 60 to 30 feet is more harmful to people of lower income, who live on smaller lots, and whose children's bedrooms will be closer to the antennas.

Bad for the Climate and Trees

At a time when we should be working toward climate rescue, ZTA 22-01 will further increase tree loss, increase energy consumption, and harm vegetation, birds, and insects. The County cannot restrict PEPCO's removal of tree foliage in the rights-of-way and on private properties that are in close proximity to the taller replacement pole and re-attached electrical wires, for safety. Tree foliage in rights-of-way that presents line-of-sight obstructions for providers' antenna networks is also removed so that

antennas can communicate effectively with each other. Removing more than 25% of a tree is known to cause its death.

Foliage removal can result in loss of winter windbreaks, loss of summer shade, and increased energy consumption and bills, which are more impactful for residents with lower incomes. Tree loss contributes to heat island effects, which are associated with adverse health effects that are even more dire for people living without health insurance. Heat islands are also associated with increased levels of violence. Loss of tree foliage can also decrease residential property aesthetics and values and diminish the character of neighborhoods. (See [Volunteers Map Heat Islands In Montgomery County | DCist](#))

Dangerous for Pedestrians

Furthermore, as a result of proliferation of pole mounted wireless facilities residents can get stuck with multiple large ground mounted equipment boxes. These boxes block drivers' view of pedestrians and children playing or waiting at bus stops and obstruct stroller and wheelchair access to sidewalks. These effects are at complete odds with the County's focus on Vision Zero and pedestrian safety.

Hazardous Poles

Pole mounted wireless facilities near homes reduce their property value, which is bad for the financial well-being of residents and of the County as a whole.

Residents have no opportunity to comment or object to the right-of-way permits for antennas.

The County cannot restrict the height of the replacement utility poles for antenna attachments. Some replacement poles have already been approximately 70 feet tall! Residents get no notice of the installation of new, thicker and taller replacement poles for antennas. And the County cannot set time limits for the removal of old poles. So residents get stuck with double utility poles, which are hazardous and eyesores.

Vote NO

There's no legal requirement for the County to adopt ZTA 22-01. It poses harms to neighborhoods, homes, pedestrians, the tree canopy, and finances. Please vote no on ZTA 22-01 and allow the incoming Council to consider zoning changes.

Testimony Opposing ZTA 22-01

My name is Katherine Katzin. Thank you for giving me the opportunity to speak today. I am opposed to ZTA 22-01.

There is no FCC or federal requirement, no plausible legal justification, for ZTA 22-01.

Nowhere in federal law is it written that 30 foot setbacks are required over 60 foot setbacks.

- Montgomery County **is not and was not vulnerable to liability for “a lot of money”** if it failed to adopt these ZTAs, as some have claimed. The Supreme Court ruled in 2005 that localities cannot be fined or liable for money damages for failing to deploy a cell tower.¹
- During the deliberations for ZTA 19-07, the Council inaccurately characterized City of Portland v. FCC² with respect to the effective prohibition standard of wireless services.

o Re: Section 332, City of Portland did not address or alter municipalities' rights to determine location of towers. For this section, the Fourth Circuit (whose rulings govern in Maryland) has **defined effective prohibition as a total lack of coverage**, which is not our situation in Montgomery County, where **we already have extensive 4G and 5G coverage** (see Cellco v. Board of Supervisors of Fairfax County³).

- A recent case in the Second Circuit, **Extenet v. Flower Hill** found that **effective prohibition under sections 253 and 332 applied only to the ability of a wireless telephone to make phone calls to a landline**. Nothing more. The federal judge wrote: “it is **not** up to the FCC to construe the Act to say something it does **not** say.”⁴

Finally, ZTA 22-01 won't prevent proliferation of new poles. Pepco could install a new pole and then a few weeks later, wireless carriers claim it's an existing structure under 22-01.

Please vote no on ZTA 22-01 and allow the incoming Council to consider zoning changes.

References

1 <https://www.supremecourt.gov/opinions/04pdf/03-1601.pdf>

2 <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>

3 <https://cite.case.law/f-supp-3d/140/548/>

4 <https://ehtrust.org/wp-content/uploads/Analysis-of-ExteNet-Sys.-v.-Village-of-Flower-Hill-by-Attorney-Robert-Berg-Legal-Advisor-the-Environmental-Health-Trust-2.pdf>

September 6, 2022

Dear Councilmembers,

I am opposed to ZTA 22-01.

It is autocratic. It is discriminatory. It is irresponsible.

ZTA 22-01 is another embarrassing piece of industry-serving legislation imposed upon residents by the bill's lead sponsor.

More specifically, ZTA 22-01:

- requires residents to purchase new cell phones and cell plans to take advantage of the technology facilitated by ZTA 22-01. (The low-end iphone is \$450 + the new adaptor, headphones, case, and screen protector; the [least expensive 5g cell plan](#) is \$48 + taxes + fees.)
- continues the Council's trend of denying notice and hearings to taxpayers.
- ignores that health studies have never been done to proof its safety.
- disproportionately impacts lower-income taxpayers, thus discriminating de facto.

Respectfully,

Lisa Cline

Testimony regarding Zoning Text Amendment 22-01

Please include this written testimony in the public record for this ZTA

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This package contains no matters of mere “concern” or any other non-substantive matter.

¹ <https://www.regulations.gov/comment/FDA-2021-P-1347-0732>

² <https://www.fcc.gov/ecfs/search/search-filings/filing/1051759759289>

³ https://mdsafetech.org/wp-content/uploads/2022/07/Pittsfield-Civil-Action-Complaint-72822-w_-Cover-Sheet-7-28-22.pdf

⁴ <https://ehtrust.org/wp-content/uploads/5G-and-Cell-Tower-Radiation-Briefing-1.pdf>

⁵ <http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>

⁶ Full report available for download at:

[https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690012/EPRS_STU\(2021\)690012_EN.pdf](https://www.europarl.europa.eu/RegData/etudes/STUD/2021/690012/EPRS_STU(2021)690012_EN.pdf)

September 8, 2022

**Re: Racial Equity and Social Justice (RESJ) Zoning Text Amendment Statement on ZTA 22-01:
Antenna on existing structure – use standards**

Dear Ms Tesfaye and Dr. Bonner-Tompkins,

cc: Chris Cihlar, Director, Office of Legislative Oversight (OLO)
Tiffany Ward, Director, Office of Racial Equity and Social Justice

Thank you for preparing the recent RESJ impact statement for the proposed Zoning Text Amendment 22-01, published March 14, 2022¹ (the “Statement”). As you note, predicting the impact of zoning text amendments on RESJ can be a challenging endeavor.

Appreciating just how challenging and yet how critical a task you have undertaken, I ask you to consider the additional information and related analysis provided below and, based on your evaluation of this content, to revise the Statement accordingly. Your openness to such revision would be a model for both the Council and the general public as to how the consideration of RESJ impacts is an ongoing process, responsive to new evidence and community engagement. It would also underscore the importance of the mission entrusted to you.

The information below indicates that 22-01 would have a negative net impact on RESJ in our County, will not improve the digital divide (and potentially worsen it), and will cause significant adverse social justice impacts. In light of OLO’s position as legislative staff charged with assessing a proposal by a Council Committee chair, my hope is that this letter will prove a helpful source of information.

A public hearing is scheduled on this ZTA for September 13, 2022, so there is time to withdraw and reissue this statement with a negative net impact prior to any Council worksession on this ZTA.

In its current form, the Statement considers two dimensions of impact: (a) the digital divide, which it says may be improved and (b) health inequities, which may be worsened. But, it says, because the magnitude of the effect on each dimension cannot be quantified, it is difficult to “distinguish” the net impact. If after reading the contents of this letter you determine that 22-01’s ability to improve the digital divide in the County is either neutral or negative, then the net impact of 22-01 would be negative. (A neutral impact on one dimension and a negative impact on the second dimension is net negative, regardless of magnitude).

This letter is organized in 4 sections:

- 1) Conclusions on the digital divide relied almost entirely on industry-funded information
- 2) Evidence indicates 22-01 will not improve the digital divide, and if anything is likely to worsen it
- 3) The Statement does not consider social justice impacts on protected classes that would be disproportionately affected by reduced setbacks and resulting proliferation of antenna

- 4) Fact checking certain statements in the health inequities section that were either factually inaccurate or misleading

- 1) **Conclusions on the digital divide rely almost entirely on industry-funded information**

The Statement's conclusions regarding the digital divide are based almost exclusively on what the Statement calls "Research from the Brookings Institution". However this publication by Brookings is industry-funded, not independent analysis.

- a. **Brookings report was funded by T-Mobile.**

The report itself reads "Support for this publication was **generously** provided by T-Mobile."² [Emphasis added]

- b. **Brookings author was chair of an industry-funded organization**

The Brookings article was published by author Dr. Nicol Turner-Lee in 2019 (not 2022 as published in the Statement). According to her CV³, she was a board member beginning in 2014 of TPRC. According to the TPRC website, Dr. Turner-Lee was chair of its board from 2019 to 2021.⁴ TPRC also lists on its website its top-tier funders during her time as chair, which included AT&T, T-Mobile, Verizon, and CTIA (Communications Technology Industry Association). According to its own website, CTIA is "the voice of America's wireless industry". It is often considered the most influential lobbyist on behalf of the wireless industry. In Montgomery County's lawsuit against the FCC and its Small Cell Order, CTIA filed a brief as an intervenor against the County⁵.

- c. **Brookings Institution has received significant industry funding**

Brookings donors include AT&T⁶, T-Mobile, Verizon, Google⁷ (which runs a 5G wireless service called Google Fi that serves approximately 500,000 subscribers⁸). Between July 1 and December 31, 2019, the government of Germany, which is the largest beneficial owner of T-Mobile USA⁹, donated over \$2 million to Brookings.

- d. **T-Mobile stands to benefit financially from the passage of ZTA 22-01, and similar ordinances across the country for which it is advocating**

By expanding the number of poles available for antenna attachment, ZTA 22-01 would save T-Mobile and other wireless carriers a significant amount on site fees. Historically, wireless carriers would contact a landowner and negotiate payment to rent space for an antenna on the landowner's property. This was the case with larger "macro towers", as well as rooftop antenna (in which case the carrier pays the building owner a rental fee for space on the rooftop). While carriers have claimed that they need access to public rights-of-way in order to allow for densification, in practice we have not seen that to be the case in Montgomery County. Instead, many of the applications to attach wireless facilities to utility poles are directly in front of or adjacent to locations where carriers would have previously had to pay rental fees. Take for example 8000 Flower Ave in Takoma Park.¹⁰ This location is surrounded by R-40, R-30 and R-10 residential zoning¹¹. However in the 8000 block, there is a small shopping center, with a dry cleaners and a barber shop. In the past, T-Mobile would have had to pay rent rental fees to the shopping center's landlord to put an antenna on the rooftop. However, after the passage of prior small cell ZTAs 18-02 and 19-07, T-Mobile's contractor applied to attach

an antenna to a utility pole in front of the shopping center, just 62 feet from a home. FCC has preempted and prohibited local government from charging fees for this real estate; instead the County can only charge up to its actual out-of-pocket administrative costs for processing permits (although the County approved a fee schedule earlier this year with fees significantly below its costs, meaning taxpayers are now subsidizing these deployments¹²). These cost-based fees are below the fair market rates that T-Mobile and other carriers would pay to property owners.

OLO should not rely upon industry-funded materials for this or any other assessment. If OLO cannot find any independent, unbiased information, then its assessment could report that to the Council. In circumstances where OLO believes it is necessary and unavoidable to cite industry-funded information, OLO should clearly disclose the funding source behind the analysis and consider the influence of such conflicts of interest in its assessment.

2) Evidence indicates 22-01 will not improve the digital divide, and if anything is likely to worsen it

The digital divide can be looked at on two dimensions: a) access to connectivity, and b) the affordability of that connectivity. First consider (a), access.

Connectivity at home is quite different than mobile wireless access outside the home. 22-01 deals only with residential neighborhoods, and therefore only affects access in the home. As the Statement points out, the percentage of homes with wired broadband in Montgomery County across all cited ethnicities is quite high. To measure access, the important but missing data point is the percentage of homes passed with wired broadband, broken down by ethnicity (“passed” means that the service is available to that home). Homes that are not passed by wired broadband is an urgent problem that the County should be and is focused on to ensure broadband providers provide wired access to all locations, much as the rural telephone program did decades ago. Assuming that the number of homes subscribing to broadband (which is what the Statement cited) is less than the number passed, then the real problem for the digital divide in Montgomery County is affordability, not access.

If it were the case that there is a disparity by race or ethnicity among homes in the County not passed by wired broadband, what is the basis for concluding that carriers would prioritize these areas for small cell wireless deployments? Council staff acknowledged this issue in 2021 with respect to ZTA 19-07; 22-01 is no different.¹³ Telecom carriers would be expected to act rationally and prioritize installing antennas in locations likely to generate the highest return on capital, where customers can afford the most expensive new services.

Angela Siefer, executive director of the National Digital Inclusion Alliance (which represents over 850 affiliates in 48 states)¹⁴, testified to the U.S. Congress in 2020 on this topic. She noted that in previous telecom deployments, low-income areas are usually where the coverage gaps are and “there is no reason to think 5G will be any different.” She was incredibly clear in her

assessment: “The excitement around 5G has led to claims 5G will solve the digital divide. It will not.”¹⁵

Now consider (b), affordability. Wireless Internet is and has always been far more expensive than wired Internet. Wireless data in the US costs between \$3 and \$8 per gigabyte, depending on the information source¹⁶. Wired data costs less than \$0.09 per gigabyte, assuming an average wired data plan of \$50 per month¹⁷ and the average family of four using 536 GB per month¹⁸. Therefore mobile wireless is between 33 and 89 times more expensive than wired broadband.

In addition, wired connections typically do not have data caps or throttling, a practice by which wireless carriers advertise unlimited data but “throttle”, or reduce, users to a lower speed after reaching a data cap. (In 2019, AT&T paid a \$60 million FTC fine for not disclosing its throttling policy¹⁹.) As data usage over a wired connection increases, the average cost per gigabyte continues to decrease. This has been especially important since covid-19 began. Nationally, as users rely increasingly on connectivity at home for all of the uses pointed out by OLO – such as social services, healthcare, education and employment – household data usage since the pre-pandemic level has increased by 56%, and by 264% in the previous four years.²⁰

In other words, a telecom strategy for the County that forces lower-income users to rely on mobile wireless at home would actually worsen the digital divide. Whereas a household with wired broadband can continue to increase its daily usage without any incremental cost out of pocket (zero marginal cost), a user reliant on a smartphone or mobile wireless hotspot for Internet access will face constant marginal cost, and therefore linearly increasing total cost.

OLO has staff who perform economic impact statements who could include an analysis of the negative economic impact on low income populations of the foregoing pricing dynamics. The higher cost of wireless data may be even further exacerbated by the fact that lower-income smartphone users are more likely to have “prepaid” plans, which often have a higher cost per gigabyte than “postpaid” or contract plans. Higher-income users who may have higher credit scores can obtain lower, postpaid pricing.²¹ Consider the financial analogy of bank lending: those with the best credit scores can borrow at lower rates, and those with no credit may have no choice but payday lending at high interest rates.

In summary, expecting expensive new small cell deployments to solve the digital divide is a bit like saying that “Lexus lanes” for only \$90 round-trip daily²² will provide a quick way of commuting to work for low-income commuters. Expensive new telecom services may be welcomed by those who can afford them, but the Statement does not provide data to support the idea that 22-01 would improve the digital divide.

3) The Statement does not consider social justice impacts on protected classes that would be disproportionately affected by reduced setbacks and resulting proliferation of antenna

Footnote 1 of the Statement cites a definition of “racial equity and social justice”. However the glossary cited does not contain a definition of social justice; the term “social justice” does not appear on this webpage.²³

The Council adopted a definition of social justice when it passed bill 27-19²⁴, which established the requirement for RESJ impact statements. The definition in the County code section 2-81C includes other areas of RESJ not yet addressed by the Statement²⁵:

Social justice means that everyone deserves to benefit from the same economic, political and social rights and opportunities, **free from health disparities**, regardless of **race, socioeconomic status, age, sex** – including on the basis of gender identity or orientation, religion, **disability, or other characteristics**. [Emphasis added]

Several protected classes would be severely and disproportionately impacted by ZTA 22-01, as described below. Note that 22-01 not only reduces proximity, but is intended to increase proliferation of antennae, and in turn dramatically increase radiofrequency density in residential neighborhoods. The PHED Committee legislative attorney estimated approximately 32,435 poles are located 30 to 60 feet from homes, which would almost double the 33,368 poles located 60 feet or more from homes²⁶

- a. **Socioeconomic status and other characteristics.** Those living on smaller plots of land or in homes in closer proximity to public rights-of-way would be more adversely affected than those living on larger plots of land with greater setbacks from the public rights-of-way. “Other characteristics” can be construed in this context to include environmental justice. Should residents living on smaller plots of land or in multi-family dwellings with shorter setbacks from public rights-of-way be subjected to different environmental or health disparities? In a study by Santini, those living 10 meters or less (approximately 33 feet, which is similar to the setback proposed under 22-01) suffered higher rates of fatigue, headache, depression, difficulties concentrating, skin problems, and dizziness, compared to those living more than 10 meters away.²⁷
- b. **Age.** Children suffer particular effects of radiofrequency emissions²⁸. The American Academy of Pediatrics acknowledges that children are “disproportionately” vulnerable to cell phone radiation, the same kind of radiofrequency emissions emitted by cell towers.²⁹ Researchers at the Environmental Working Group, a respected nonprofit, have called for child exposure levels 200-400 times lower than the current FCC limits.³⁰ The bones of children's skulls are not as fully developed as adults, leaving their developing brains more vulnerable.³¹ The US Court of Appeals for the DC Circuit, in its *EHT et al. v. FCC* remand last year, ordered FCC to consider the effects of radiofrequency emissions on children³² – something the FCC has not yet done and no federal agency has ever done.
- c. **Sex.** Women have been reported to suffer disproportionate effects of cell tower emissions. In the Santini study, women living near cell towers were much more likely to report adverse health outcomes than men. Women living closer to cell towers were 3 times more likely than men to suffer headaches, 2.7 times more likely to experience depression, and 83% more likely to suffer visual disturbances. In addition, women living 10 meters or less (approximately 33 feet, which is similar to the setback proposed under 22-01) from a cell tower experienced statistically significant higher rates of adverse

effects than those 300 meters or more.³³ In addition, research has examined adverse effects of electromagnetic fields on pregnant women and their unborn children.³⁴

- d. **Disability.** EMS disabled persons would be disproportionately adversely affected, which would constitute a violation of the ADA.

22-01 creates two violations:

- (i) 22-01 would cause medical harm to tens of thousands of residents; and
- (ii) 22-01 does not contain any provision for advance notice of a deployment so that affected residents can arrange for reasonable accommodation under the ADA. Note that in a similar situation of deploying smart meters on residential properties, Maryland law requires utilities to provide a means for ratepayers to opt out of smart meters as a mechanism for reasonable accommodation for the EMS disabled.

Electromagnetic sensitivity (EMS) has long been recognized as a medical condition and afforded ADA protections.³⁵ The Access Board, a US federal agency that promotes equality for persons with disabilities³⁶, expressly recognized EMS as a disability in a 2002 report. They wrote:

*“The Board recognizes that multiple chemical sensitivities **and electromagnetic sensitivities** may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual’s major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals.”*

For more information, see a filing by advocates for the EMS disabled in response to an FCC notice of inquiry *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*.³⁷ It documents, among other aspects, recognition for EMS disability in the United States, Canada, the European Parliament, Australia, France, Spain, and the United Kingdom.

A peer-reviewed study estimated the prevalence of EMS among the general population to be as high as 30% for mild symptoms, with 0.65% of the population suffering symptoms severe enough to restrict their access to work locations due to electromagnetic radiation.³⁸ These data suggest cell towers closer to homes, enabled by 22-01, could result in adverse health outcomes in up to 30% of the population, and cause a constructive eviction in 0.65% of the population – this is approximately 7,000 people in Montgomery County alone being forced to flee their homes. The reality of constructive eviction is not hypothetical – a group of Pittsfield, Massachusetts residents are currently litigating their constructive evictions after a cell tower was erected in their neighborhood.³⁹ The vulnerable population of the EMS disabled is typically already restricted from work environments, public spaces, and in some cases access to medical care, due to high radiofrequency emissions levels. Placing a cell tower 30 feet from the home of an EMS disabled person, which is often their only remaining refuge from public spaces increasingly flooded with high density radiofrequency, is inhumane and a violation of the ADA. I encourage OLO to read the recent administrative filings with FCC on behalf of the EMS disabled.⁴⁰

- e. **Race.** Negative health effects from radiofrequency radiation could worsen health disparities by race and ethnicity in our County. In addition to some of the reasons mentioned in the Statement, here are a few additional to note. Communities of color may have a higher proportion of residents who: (i) are more likely to live in closer proximity to public rights-of-way (see section 3a above), and in turn could experience disproportionate health impacts resulting from radiofrequency radiation; (ii) have less readily available housing alternatives or financial resources than other groups to move to a home in a less urban environment (for example for an EMS disabled person to move to a different home, or parents to move to protect their child); and (iii) experience a worsening of existing health disparities (for example, the Statement cites existing disparities by race in the County in heart disease and breast cancer mortality rates; research continues to emerge studying the effects of radiofrequency radiation as a factor in these conditions⁴¹).

4) **Fact checking certain statements in the health inequities that were either factually inaccurate or misleading**

Note: excerpts below from the Statement shown in italics with comments in plain text.

- a) *“But, **if** the reduced setback requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity.”* [Emphasis added]

The word “if” is inaccurate and misleading in this context, and should be replaced with the word “because”. A more accurate sentence would be:

But because the reduced setback requirements for small cell towers authorized under ZTA 22-01 will result in negative health outcomes for a significant proportion of those living in close proximity to towers, this in turn could widen health disparities by race, ethnicity, age, sex, socioeconomic status, and other characteristics.

See social justice section above and further explanation in section 4b below.

- b) *“There is no consensus among researchers regarding the health and environmental impacts of expanding 5G technology by reducing setbacks.”*

The Statement is asserting a threshold test: in order to estimate impact, there must be a “consensus among researchers”. While this might seem reasonable at first, it’s actually quite a high bar to achieve, particularly in the context of a massive information campaign funded by an industry seeking to avoid regulation. No US government agency has ever determined that cell towers are safe, much less near homes.⁴² An FDA attorney wrote earlier this year that “the Food and Drug Administration (FDA) does not regulate cell towers or cell tower radiation. Therefore, FDA has no studies or information on cell towers.”⁴³ Groups of Montgomery County residents have pointed out issues with the Council’s reliance on inaccurate characterizations of FDA positions.⁴⁴

Industry executives often become political appointees who run agencies such as FCC, HHS, and FDA.⁴⁵ At the same time, these agencies have never conducted the kind of systematic review of

the evidence that could lead to a government consensus statement at the federal level. A systematic review 15 years ago found that 82% of radiofrequency studies that were independently funded or funded by governments found health effects from mobile phones. However only 33% of studies funded by industry found such effects.⁴⁶ Funding poor quality studies to muddy the waters is a well-worn playbook from the tobacco industry – OLO can read further about it in the 2010 book *Merchants of Doubt*.⁴⁷

While the US federal bureaucracy has remained paralyzed and mired in conflicts of interest, the World Health Organization's International Agency for Research on Cancer (IARC) classified radiofrequency emissions as a group 2B carcinogen⁴⁸ (along with DDT and lead⁴⁹), in 2011, over 10 years ago. As was argued in *EHT et al. v. FCC*, if IARC were to conduct its review today, taking into account the evidence of the past 10 years, the currently available evidence meets the criteria to be upgraded to a group 2A carcinogen. In fact, scientists who participated in the IARC 2011 review have since published in the peer-reviewed literature that radiofrequency emissions should be upgraded to a class 1 carcinogen⁵⁰ (the highest possible rating⁵¹). In this context, a number of medical associations, state governments, other countries, and transnational authorities have issued consensus statements recognizing health effects.⁵²

- c) *"The potential health effects of reducing setbacks to expand 5G technology and its probable impact on health inequities remains unknown."*

See Santini study, endnote 27, finding that health effects increase with proximity, as well as a number of additional references below.⁵³ A more accurate sentence would be:

"The magnitude of impact on health inequities resulting from health effects of reduced setbacks, which would increase the number of small cells and radiofrequency emissions density in residential neighborhoods, remains hard to quantify."

- d) *"Various research studies link radiation emitting from cell phone towers to a number of health **concerns** that include miscarriages, suppressed immune function, and childhood leukemia."*[Emphasis added]

The word "concerns" in this context is misleading, potentially discriminatory, and often used by industry to gaslight persons who are suffering these health effects (as documented by licensed doctors), in an attempt to avoid liability and regulation. "Concerns" should be deleted and replaced with the word "effects".

- e) *"A recent appeals court decision, however finds that the Federal Communications Commission's (FCC) claims about the health and environmental impacts of 5G technology are **insufficient**."* [Emphasis added]

The word "insufficient" in this context is inaccurate and misleading. This word should be replaced with the word "illegal". The court wrote "we merely conclude that the [FCC]'s cursory analysis of material record evidence was insufficient as a matter of law." In other words, the analysis that the FCC undertook was insufficient to meet the standard required, under the Administrative Procedures Act, in order to draw a conclusion, or a claim. As a result, it is inaccurate to say the "claim" was insufficient; rather, the court ruled that the claim was illegal

because it was based on insufficient analysis, and there was no “reasoned explanation” for FCC's conclusions.

- f) *“If ZTA 22-01 helps to narrow the digital divide in Internet access as noted above, it could expand access to telehealth medicine that in turn could help narrow health disparities by race and ethnicity”.*

I urge you to delete this sentence from the report because, as documented in section 1 above, it is based on industry marketing assertions, and as noted in section 2 above, there is no evidence to suggest the 22-01 will help narrow the digital divide. While the sentence may technically be true, it’s akin to saying “if bags of gold were to rain down upon low-income residents, it would expand their access to telehealth medicine.” The premise of the sentence is so unlikely as to make the suggestion of positive impact that follows out of place in an assessment of legislative impact. Hypothetically, even if the predicate were true in certain, limited circumstances, there is no assessment of the relative effect sizes: on the one hand, increased access to telehealth and on the other hand, negative effects from radiofrequency emissions. It’s also worth noting that telehealth is readily available over wired broadband connections, which are faster, more stable, more secure, have a lower carbon footprint, and are far more resilient during inclement weather, than wireless.

According to HHS, even during heightened covid restrictions, only about one quarter of medical visits were done via telehealth.⁵⁴ It seems unreasonable to conclude that the benefits of perhaps several telehealth visits per year outweigh the negative impacts of 24/7, involuntary irradiation. By analogy, in considering net impact, no one would argue that in the case of residents living immediately adjacent to the Beltway who inhale higher levels of air pollution 24/7, the net impact of air pollution on these residents is positive because when they develop asthma, COPD, or lung cancer at higher rates, they are able to access the Beltway and drive to the hospital more easily. Instead we require pollution mitigation measures, such as setbacks from the interstate and vehicle emissions limits. That kind of common sense is sorely needed when it comes to the regulation of wireless facilities.

As the scope and impact of OLO’s work continues to expand, so too does the scrutiny of such work. No doubt this scrutiny will continue to increase with the coming introduction of climate impact statements. I hope that, in the face of outside pressure, OLO will strive to maintain its independence, as congressional agencies at the federal level, such as CBO and GAO, have done in maintaining their reputations for reliable, nonpartisan, unbiased analysis.

Thank you for your consideration of revisions to the Statement. If you would like additional information or to talk with people with expertise on the topics raised in this letter, please contact me.

Sincerely,

Robert Janku
Montgomery County resident

References

- ¹ <https://www.montgomerycountymd.gov/OLO/Resources/Files/resjis/ZTA/2022/ZTA22-01.pdf>
- ² <https://www.brookings.edu/research/enabling-opportunities-5g-the-internet-of-things-and-communities-of-color/>
- ³ https://www.brookings.edu/wp-content/uploads/2016/11/turner_lee_cv_december-2016.pdf
- ⁴ <http://www.tprcweb.com/past-board-members>
- ⁵ <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>
- ⁶ https://www.brookings.edu/wp-content/uploads/2022/02/brookings_contributorslist_fy2022.pdf
- ⁷ <https://www.brookings.edu/wp-content/uploads/2020/04/The-Brookings-Institutions-Contributors-List-Fiscal-Year-2020.pdf>
- ⁸ <https://www.fiercewireless.com/operators/google-fi-runs-tv-ads-6-local-markets>
- ⁹ The government of Germany owns approximately 32% of Deutsche Telekom, which in turn owns approximately 65% of T-Mobile USA, which translates to Germany having a beneficial ownership of approximately 21%.
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<https://finance.yahoo.com/quote/TMUS/holders?p=TMUS>
- ¹⁰ <https://montgomerycountytfcg.s3.amazonaws.com/Applications/MC2021101591+Application+and+Report.pdf>
- ¹¹ <https://mcatlas.org/zoning/>
- ¹² <https://montgomerycountymd.gov/COUNCIL/Resources/Files/agenda/col/2022/20220118/testimony/item5-SuePresent.pdf>
- ¹³ The Council legislative Attorney wrote: "ZTA 19-07 does not, however, guarantee equitable access. As with all zoning provisions, ZTA 19-07 does not mandate where small cell antennas must be provided."
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2021/20210727/20210727_4D.pdf
- ¹⁴ <https://www.digitalinclusion.org/affiliates/>
- ¹⁵ <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf>
- ¹⁶ <https://thetechtician.com/cost-of-1gb-of-data-around-the-world/>
<https://www.statista.com/statistics/994913/average-cellular-data-price-per-gigabyte-in-the-us/>
- ¹⁷ <https://www.reviews.org/internet-service/how-much-do-internet-and-wi-fi-cost/>
- ¹⁸ https://openvault.com/wp-content/uploads/2022/03/OVBI_4Q21_Report_FINAL-1.pdf
- ¹⁹ <https://www.fiercewireless.com/regulatory/at-t-settles-ftc-unlimited-data-throttling-lawsuit-for-60m>
- ²⁰ See figure 9
https://openvault.com/wp-content/uploads/2022/03/OVBI_4Q21_Report_FINAL-1.pdf
- ²¹ This article notes " If the recession continues to affect more people, there could be some migration from postpaid to prepaid, out of financial necessity."
<https://www.fiercewireless.com/wireless/lowenstein-what-s-roadmap-for-prepaid-united-states>
- ²² <https://www.washingtonpost.com/transportation/2021/11/18/maryland-beltway-270-toll-rates/>
- ²³ <https://www.racialequitytools.org/glossary>
- ²⁴ <https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/RacialEquity/Bill27-19.pdf>
- ²⁵ https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-118171
- ²⁶ See page 3, "setback"
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210310/20210310_PHED2.pdf
- ²⁷ See Table 1
<https://www.tandfonline.com/doi/abs/10.1081/jbc-120020353>
- ²⁸ <https://ehtrust.org/research-on-childrens-vulnerability-to-cell-phone-radio-frequency-radiation/>
- ²⁹ <https://ehtrust.org/wp-content/uploads/American-Academy-of-Pediatrics-Letters-to-FCC-and-Congress-.pdf>
- ³⁰ <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-021-00768-1>
- ³¹ <https://www.marylandmatters.org/2021/07/23/opinion-children-deserve-safety-assurances-when-it-comes-to-cellphone-radiation/>

³² [https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/$file/20-1025-1910111.pdf)

³³ See Table 2
<https://www.tandfonline.com/doi/abs/10.1081/jbc-120020353>

³⁴ Impacts of smartphone radiation on pregnancy: A systematic review
[https://www.cell.com/heliyon/fulltext/S2405-8440\(22\)00203-1#secsectitle0050](https://www.cell.com/heliyon/fulltext/S2405-8440(22)00203-1#secsectitle0050)

³⁵ The ADA definition of a disability is an "impairment that substantially limits one or more major life activities of such individual".
<https://www.law.cornell.edu/uscode/text/42/12102>

³⁶ <https://www.access-board.gov/about/>

³⁷ See PDF page 19 <https://www.fcc.gov/ecfs/search/search-filings/filing/1051759759289>

³⁸ <https://www.omegaonline.org/article-details/The-Prevalence-of-People-With-Restricted-Access-to-Work-in-Man-Made-Electromagnetic-Environments/2402>

³⁹ <https://mdsafetech.org/wp-content/uploads/2022/07/Pittsfield-Civil-Action-Complaint-72822-w-Cover-Sheet-7-28-22.pdf>

⁴⁰ See entire filing for a description of this issue. Beginning on page 26, written testimony of individuals harmed by cell towers being constructed in close proximity to their homes:
<https://www.fcc.gov/ecfs/search/search-filings/filing/1051759759289>
 Additional comments of the EMS disabled:
<https://www.fcc.gov/ecfs/search/search-filings/filing/10701619226145>

⁴¹ Cardiovascular disease: Time to identify emerging environmental risk factors
<https://journals.sagepub.com/doi/full/10.1177/2047487317734898>
 The Association Between Smartphone Use and Breast Cancer Risk Among Taiwanese Women: A Case-Control Study
<https://pubmed.ncbi.nlm.nih.gov/33149685/>
 US National Toxicology Program (NTP, an interagency research program by FDA, CDC, and NIH, located in Montgomery County) found "clear evidence", the highest rating on their 4-point scale, for malignant cancer of the heart in male rats:
<https://ntp.niehs.nih.gov/whatwestudy/topics/cellphones/index.html#studies>

⁴² See summary on page 3:
<https://ehtrust.org/wp-content/uploads/5G-and-Cell-Tower-Radiation-Briefing-1.pdf>

⁴³ https://ehtrust.org/wp-content/uploads/FCC_FDA-Communications-FCC-Lawyer-and-Mother-on-Cell-Tower-Radiation-.pdf

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⁴⁶ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1797826/>

⁴⁷ https://en.wikipedia.org/wiki/Merchants_of_Doubt

⁴⁸ https://www.iarc.who.int/wp-content/uploads/2018/07/pr208_E.pdf

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⁵⁰ <https://ehtrust.org/world-health-organization-scientists-recommend-wireless-be-upgraded-for-cancer-causing-effects/>

⁵¹ https://wiki.cancer.org.au/policy/IARC_classifications

⁵² <https://ehtrust.org/science/medical-doctors-consensus-statements-recommendations-cell-phoneswireless/>

⁵³ European Parliament:
<https://ehtrust.org/the-european-parliament-panel-health-impact-of-5g/>
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<http://www.gencourt.state.nh.us/statstudcomm/committees/1474/reports/5G%20final%20report.pdf>
 US National Toxicology Program, an interagency research program by FDA, CDC, and NIH, located in Montgomery County:
<https://ehtrust.org/science/the-niehs-national-toxicology-program-study-on-cell-phone-radiation-and-cancer-2018-update-resources/>

Selected other research:

https://ehtrust.org/wp-content/uploads/EHT-5G-Health-and-Environment-Open-Letter-3_2021-3.pdf

⁵⁴ <https://aspe.hhs.gov/sites/default/files/documents/4e1853c0b4885112b2994680a58af9ed/telehealth-hps-ib.pdf>

Legal analysis of wireless zoning and ZTA 22-01 under the Telecommunications Act

Montgomery County was not and is not required to adopt ZTA 19-07 or 22-01 in order to comply with federal law

- During the deliberations for ZTA 19-07, the Council inaccurately characterized *City of Portland v. FCC*¹ with respect to the effective prohibition standard of wireless services.
 - Re: Section 253 of the Telecommunications Act, the Ninth Circuit upheld FCC orders regarding shot clocks and fees with respect to processing applications
 - Re: Section 332, *City of Portland* did not address or alter municipalities' rights to determine location of towers. For this section, the Fourth Circuit (whose rulings govern in Maryland) has defined effective prohibition as a total lack of coverage, which is not our situation in Montgomery County, where we already have extensive 4G and 5G coverage (see *Cellco v. Board of Supervisors of Fairfax County*²).
 - The Fourth Circuit's *Cellco* definition of effective prohibition is a much more difficult standard to demonstrate. The Fourth Circuit ruled "a plaintiff's burden of proof on the prohibition of service claim is substantial and is particularly heavy" and requires meeting a two-part test: a) an "effective absence of coverage" and b) a lack of "reasonable alternative sites". The court wrote: "even if [the carrier's] maps demonstrate some gap in 4G LTE wireless and data coverage, they do not meet Verizon's heavy burden of demonstrating an effective absence of all forms of coverage."
- A recent case in the Second Circuit, *Extenet v. Flower Hill*, upheld a local government's decision to block deployment of a network of small cells.
 - *Flower Hill* took an even stricter textual interpretation of the Telecommunications Act's effective prohibition standard, which was a much higher hurdle than the "material inhibition" standard proposed by FCC.
 - *Flower Hill* goes a step further and rejects the idea that all telecommunications services are protected from effective prohibition by section 253. It cites *Sprint v. Willoth* (Second Circuit 1999), which found that effective prohibition applied only to the ability of a wireless telephone to make a phone calls to a landline. In other words, sections 253 and 332 protect voice service only, but not data or data speeds. The federal judge in *Flower Hill* cited *Clear Wireless* 2012: "it is not up to the FCC to construe the Act to say something it does not say, nor up to the Court to find broadband communication encompassed by the law."
- Montgomery County is not and was not vulnerable to liability for "a lot of money" if it failed to adopt these ZTAs, as some of Councilmembers have claimed. The Supreme Court ruled in 2005 that localities cannot be fined or liable for money damages for failing to deploy a cell tower.³

The Council likely has more latitude to consider health effects than Councilmembers claim

- Wireless carriers have asserted that "environmental effects" includes "health effects", however this has not been tested in court.⁴ Courts have issued decisions based on "potential" health effects or "concerns" about health effects, but not on imminent or actual effects.⁵
- The Pittsfield, Massachusetts Board of Health recently ordered Verizon to take down a tower after it sickened local residents. Verizon responded by suing the Board of Health. After the Mayor refused to provide legal counsel, the Board of Health rescinded the order due to lack of

legal representation. A group of residents is now suing the mayor for this decision. The lawsuit lays out the legal basis for state law protecting the Board of Health's ability to protect residents' safety, notwithstanding the Telecom Act.⁶ the Montgomery County Council, separate from its powers as the District Council deciding zoning matters, sits as Montgomery County's Board of Health and has fiduciary duties to its residents in its capacity as the Board of Health.

- The implications of *Environmental Health Trust et al. v. FCC* (DC Circuit 2021) may afford localities significant, additional latitude in limiting small cell deployments. Montgomery County in its original lawsuit against the FCC made the case against FCC attempting to force small cell deployments prior to FCC determining that these deployments are safe⁷. *City of Portland* dismissed this lawsuit because the FCC had closed its notice of inquiry regarding radiofrequency exposure limits. Given that the DC circuit subsequently ruled that closing the notice of inquiry was an illegal violation of the Administrative Procedures Act, Montgomery County's original petition against the FCC is more relevant than ever. Councilmembers have significant latitude to protect public safety, and at the moment, have no federal assessment of safety data to rely upon.

The Council likely has more latitude to consider environmental effects than Councilmembers claim

- Title 47 Section 332 of the US Code⁸ says local governments may not "regulate the placement" of cell towers based on environmental effects of radiofrequency emissions, which is based on the premise that the FCC complies with environmental protection law before it seeks to preempt local zoning authority.
 - However, in 2019 the U.S. Court of Appeals for the D.C. Circuit in the *Keetoowah* case found that FCC violated federal law (the APA) by failing to justify its assertion that "small cell" wireless facilities "pose little to no environmental risk".⁹ The court held that the FCC acted in an arbitrary and capricious manner and that FCC's "public interest analysis did not meet the standard of reasoned decisionmaking." Although almost three years have passed since that decision, FCC has not provided any analysis of the environmental effects of small cell networks or of their cumulative effects.
 - Given that the DC circuit ruling in *Environmental Health Trust et al. v. FCC*, ruled that closing the notice of inquiry was an illegal violation of the Administrative Procedures Act, Councilmembers may have significant latitude to protect the environment.

References

¹ <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>

² <https://cite.case.law/f-supp-3d/140/548/>

³ <https://www.supremecourt.gov/opinions/04pdf/03-1601.pdf>

⁴ See petition for certiorari arguing the legal case that environmental effects do not include health effects:

[https://www.supremecourt.gov/DocketPDF/21/21-](https://www.supremecourt.gov/DocketPDF/21/21-629/196710/20211025140205639_Santa%20Fe%20Alliance%20Petition.pdf)

[629/196710/20211025140205639_Santa%20Fe%20Alliance%20Petition.pdf](https://www.supremecourt.gov/DocketPDF/21/21-629/196710/20211025140205639_Santa%20Fe%20Alliance%20Petition.pdf)

⁵ Maryland is located in the Fourth Circuit of the federal appeals courts. This court has ruled against using "potential" health effects, or "concerns" about health effects as a basis for rejecting a permit; however that does not preclude placement decisions based upon actual health effects, known harms, or imminent harms.

<https://www.courtlistener.com/opinion/626095/t-mobile-northeast-llc-v-city-of-newport-news/>

⁶ https://mdsafetech.org/wp-content/uploads/2022/07/Pittsfield-Civil-Action-Complaint-72822-w_-Cover-Sheet-7-28-22.pdf

⁷ <https://ehtrust.org/wp-content/uploads/Montgomery-County-Brief-on-Merits-filed-6-10-2019.pdf>

⁸ <https://www.law.cornell.edu/uscode/text/47/332>

⁹ <https://docs.fcc.gov/public/attachments/DOC-359025A1.pdf>

2022 Election: Montgomery County, MD

County Council Candidate Pledge Regarding Wireless Facilities

CONTEXT

- Montgomery County's public rights-of-way are uniquely valuable public resources, closely linked with the character, civic identity, and natural beauty of all County neighborhoods, including those with single-family and multifamily homes.
- The County authorizes wireless carriers to make additions and modifications to infrastructure and to construct and operate wireless facilities in these public rights-of-way, on school campuses, and on top of residential and other buildings.
- Transparency and active engagement with residents are integral to ensuring the safety of these activities, the preservation of residential neighborhoods, and compliance with applicable requirements.
- The passage of zoning text amendments (ZTA) 18-02¹ and 19-07² has severely restricted residents' rights and dramatically reduced setbacks and other protections that, taken together, will increase adverse impacts, such as needless proliferation of obtrusive or incommodious wireless facilities.

PLEDGE: If elected, I pledge, to the fullest extent of my powers in office, to prioritize the interests of County residents by:

- **Co-sponsoring** Council action to immediately halt implementation of ZTA 19-07 and return the zoning code to the provisions in place prior to the adoption of 19-07 on July 27, 2021.
- **Opposing** the proposed ZTA 22-01³, which would worsen the impacts of ZTA 19-07.
- **Convening** a working group of residents and other stakeholders that will present recommendations to the Council for updating zoning, regulations, and fees for wireless facilities in the County. A majority of the working group will be residents, independent health and environmental-science experts, and qualified outside legal counsel with expertise in protecting residents' interests and the County's autonomy over zoning in light of federal law. County executive branch would provide technical and staff support.
- **Co-sponsoring** regulatory improvements based upon input from the working group that will minimize, to the extent possible, adverse impacts of wireless facilities and infrastructure.
- **Requiring** proposals related to wireless facilities undergo environmental impact assessment.
- **Supporting** policies that ensure wireless facilities do not violate County requirements.

I affirmatively sign the foregoing pledge to residents of Montgomery County. I have received a copy of the attached background information.

Background Information

Zoning Text Amendments relating to “small” wireless facilities

- On July 27, 2021, the Council approved Zoning Text Amendment (ZTA) 19-07, which enables deployment of telecommunications towers in County rights-of-way in residential and agricultural zones. These zones include most single-family homes and many (if not most) multifamily dwellings in the County.
- On May 15, 2018, the Council approved ZTA 18-02, which allowed similar deployments in commercial and mixed commercial/residential zones, with the placement of towers just 10 feet from existing buildings (including homes and schools).
- Montgomery County was not required to adopt these ZTAs in order to comply with federal law:
 - Montgomery County is not and was not vulnerable to liability for “a lot of money” if it failed to adopt these ZTAs, as some have claimed. The Supreme Court ruled in 2005 that localities cannot be fined or liable for money damages for failing to deploy a cell tower.⁴
 - The attached comparison table summarizes key areas in which 19-07 is more permissive, with towers much closer to homes, than FCC guidelines.
- Both of these ZTAs were passed without input from the Office of the People’s Counsel (OPC), a required step to amend the zoning code.⁵ OPC was created to “protect the public interest” in zoning matters.⁶ The Council had previously defunded OPC and voted again on May 11, 2022 to withhold funding.⁷

Recent federal court decisions regarding FCC

- On August 13, 2021, the U.S. Court of Appeals for the D.C. Circuit ruled in favor of *Environmental Health Trust et al.*⁸, as follows:
 - The Federal Communications Commission (FCC) violated federal law (the Administrative Procedures Act, or APA) by failing to provide a “reasoned explanation” for deciding that its wireless radiation exposure limits do not need updating, even though these limits have not been reviewed since 1996.
 - The Food and Drug Administration (FDA) has not provided an “articulation of the factual... bases” for its conclusions, which “represent[s] a failure by the FDA”, and therefore the FCC cannot rely upon FDA webpage FAQs on cell phone safety.
 - All other expert agencies in the federal government have been silent on the question of safety, and “silence does not even indicate whether the expert agencies... considered any of the evidence”.
 - The Court ordered FCC to “provide a reasoned explanation for its decision” and to address the impacts of RF radiation on children and the environment. FCC has not yet complied with this order.
- Additional background regarding the *EH Trust* decision:
 - Petitioners submitted over 11,000 pages of scientific evidence indicating health effects of wireless radiation exposure at levels below FCC’s current limits.
 - FCC is required to set exposure limits to protect public health, but it is not a health agency and relies on other expert agencies’ analyses (which have not been done).
 - FDA acknowledges that it has not made any determination about the safety of cell towers.^{9,10}
- Title 47 Section 332 of the US Code¹¹ says local governments may not “regulate the placement” of cell towers based on environmental effects of radiofrequency emissions, which is based on the

premise that the FCC complies with environmental protection law before it seeks to preempt local zoning authority.

- However, in 2019 the U.S. Court of Appeals for the D.C. Circuit in the *Keetoowah* case found that FCC violated federal law (the APA) by failing to justify its assertion that “small cell” wireless facilities “pose little to no environmental risk”.¹² The court held that the FCC acted in an arbitrary and capricious manner and that FCC’s “public interest analysis did not meet the standard of reasoned decisionmaking.” Although almost three years have passed since that decision, we are not aware of FCC having provided any analysis of the environmental effects of small cell networks or of their cumulative effects.
- Wireless carriers have asserted that “environmental effects” includes “health effects”, however this has not been tested in court. Courts have issued decisions based on “potential” health effects or “concerns” about health effects, but not on imminent or actual effects.¹³ There is an open legal question about this assertion.¹⁴

Wireless facilities’ regulatory compliance in the County

- The County has been approving wireless transmission facilities on rooftops of multifamily residential buildings since at least 1996, as far back as its public database is available. Many of these multifamily homes provide relatively affordable housing in our high-priced County.
- Residents have brought to the attention of the County’s Transmission Facilities Coordination Group (also known as the Tower Committee) errors in many applications for wireless facilities. For example, in 2020, residents pointed out to the Committee an apparent pattern of errors relating to the underreporting of expected levels of exposure to wireless radiation. This pattern affected at least 25 sites, including nine residential buildings and two County high schools.¹⁵ All had been favorably recommended by the Committee before the errors were discovered, requiring the Committee to seek corrections and re-consideration.
- Applicants’ own estimates often predict that their antennae on top of residential buildings will generate levels of exposure to wireless radiation in certain areas atop the building and/or over the sides that will exceed federal exposure limits for the general public, sometimes by dozens of times.¹⁶ In one example, the maximum anticipated level of exposure in one area on the rooftop was predicted to be as high as 114 times FCC limits.¹⁷
- The Tower Committee does not include any resident representatives, nor are residents permitted to speak at its meetings.
- The County currently has no policy or procedure to ensure that, after installation, wireless facilities – whether in rights-of-way, on school property, on private property, or on buildings – comply with County requirements and do not exceed FCC exposure limits, even when applications anticipate exceeding those limits.

Comparison between FCC guidelines and recent zoning changes adopted by the Council
For Residential and Agricultural Zones

Topic	Description	FCC guideline	ZTA 19-07 < 30 feet from homes¹⁸	ZTA 19-07 ≥ 30 feet from homes¹⁹
Setbacks	Minimum distance from a dwelling (previously 300 feet)	<ul style="list-style-type: none"> No requirement or specific guidance 	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> Allowed
Shot clock	Number of days to process an application to install a small cell tower	<ul style="list-style-type: none"> 90 days, or longer if needed²⁰ 	<ul style="list-style-type: none"> 90 days 	<ul style="list-style-type: none"> 90 days
Notice	Whether notice of an application is sent to nearby residents	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> Sent to property owners within 300 feet 	<ul style="list-style-type: none"> Eliminated
Hearing process	Administrative hearing to consider applications and hearing examiner autonomy	<ul style="list-style-type: none"> Permitted at any distance 	<ul style="list-style-type: none"> Eliminated hearing examiner ability to reject an application 	<ul style="list-style-type: none"> Eliminated
Appeals	Ability for residents to appeal a hearing decision	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> Eliminated 	<ul style="list-style-type: none"> Eliminated
Measurement	Ensuring compliance with FCC radiofrequency exposure limits	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> None 	<ul style="list-style-type: none"> None
Fees	Amount County may charge the applicant for use of the County right-of-way ²¹	<ul style="list-style-type: none"> Can recover all costs 	<ul style="list-style-type: none"> \$2600 	<ul style="list-style-type: none"> \$690
Aesthetics	Ability of Counties to specify the visual look of cell towers	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> Hearing examiner minimal latitude 	<ul style="list-style-type: none"> Same color as pole
Antenna size	Maximum size of a “small cell” antenna, less than 50 feet from the ground	<ul style="list-style-type: none"> 3 cubic feet 	<ul style="list-style-type: none"> 6 cubic feet 	
Liability	Antenna owner responsible for liability arising from its deployment	<ul style="list-style-type: none"> Allowed 	<ul style="list-style-type: none"> No requirement 	

Note: Table above summarizes the changes enacted by ZTA 19-07, which amended the zoning code section 59-3.5.2; this summary does not capture all aspects of a complex zoning code, nor does it reflect the applicability of section 59-3.5.14, which is the subject of a proposed ZTA 22-01 (see endnote 3).

References

- ¹ https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/zta/2018/20180515_18-44.pdf
- ² https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/zta/2019/20210727_19-17.pdf
- ³ https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220215/20220215_3C.pdf
- ⁴ <https://www.supremecourt.gov/opinions/04pdf/03-1601.pdf>
- ⁵ See Zoning Ordinance, Appendix B, section 2(a)
https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-64694
- ⁶ https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-1897
- ⁷ PHED Committee recommended withholding OPC funding:
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220511/20220511_36.pdf
Full Council adopted this recommendation without discussion:
<https://www.youtube.com/watch?v=hrdi8QFDKK4>
Recommendation shown on the summary for that Council meeting:
<https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/agenda/col/2022/20220511/summary-20220511.pdf>
- ⁸ [https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/$file/20-1025-1910111.pdf)
- ⁹ See letter dated January 11, 2022, from FDA Center for Devices and Radiological Health
https://ehtrust.org/wp-content/uploads/FCC_FDA-Communications-FCC-Lawyer-and-Mother-on-Cell-Tower-Radiation-.pdf
- ¹⁰ See public comments by local resident groups regarding Montgomery County's reliance on FDA statements:
<https://www.regulations.gov/comment/FDA-2021-P-1347-0732>
- ¹¹ <https://www.law.cornell.edu/uscode/text/47/332>
- ¹² <https://docs.fcc.gov/public/attachments/DOC-359025A1.pdf>
This paragraph has been updated from an earlier version.
- ¹³ Maryland is located in the Fourth Circuit of the federal appeals courts. This court has ruled against using "potential" health effects, or "concerns" about health effects as a basis for rejecting a permit; however that does not preclude placement decisions based upon actual health effects, known harms, or imminent harms.
<https://www.courtlistener.com/opinion/626095/t-mobile-northeast-llc-v-city-of-newport-news/>
- ¹⁴ https://www.supremecourt.gov/DocketPDF/21/21-629/196710/20211025140205639_Santa%20Fe%20Alliance%20Petition.pdf
- ¹⁵ <https://techwisemocomd.org/wp-content/uploads/2021/01/Why-Did-25-Wireless-Applications-with-Errors-Pass-MoCo-Tower-Committee-Review-Red3.pdf>
- ¹⁶ See County tower database for examples: https://montgomerycountymd.gov/cable/Towers/database_towers.html
- ¹⁷ See page 124
<https://montgomerycountytfcg.s3.amazonaws.com/Applications/MC2020031117+Application.pdf>
- ¹⁸ "Conditional use" refers to permits that require public notice and a zoning hearing. ZTA 19-07 changed this setback from 300 feet to less than 30 feet.
- ¹⁹ "Limited use" refers to permits that may be issued without notice and without a zoning hearing. ZTA 19-07 reduced this setback from 300 feet to 30 feet or greater from any building intended for human occupation.
- ²⁰ See page 54
<https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>
- ²¹ Localities may charge fees to recover their costs. FCC established a "safe harbor", meaning any fees at or below this amount are automatically presumed lawful without having to estimate costs. Prior to 19-07, the fee was \$16,390 per application (see pdf page 7)
https://apps.montgomerycountymd.gov/ccllms/DownloadFilePage?FileName=8356_1_5209_Resolution_18-601_Adopted_20160913.pdf

Public Comment by Resident Groups of Montgomery County, Maryland

The undersigned are resident groups of Montgomery County, Maryland (the "County") with the mandate of advocating for fair, transparent, and accurate regulation of cell poles and cell towers and the protection of all residents. This public comment is on the petition submitted December 21, 2021 by Americans for Responsible Technology to the Food and Drug Administration ("FDA") relating to human exposure to radiofrequency radiation (FDA-2021-P-1347).¹

Enactment of Significant Changes in the Residential Zoning Code

On July 27, 2021, our County Council (the "Council") (in a 7–2 vote)² passed a zoning amendment (Zoning Text Amendment, or ZTA 19–07) that allows small cell towers to be placed with no minimum setback from homes (the previous setback was 300 feet). The ZTA does not provide residents with any meaningful notice or opportunity to be considered prior to the placement of a tower in front of their homes and eviscerates residents' rights under the long-standing appeals process in the County zoning code. This ZTA, first introduced in 2019, was overwhelmingly opposed by residents at the only public hearing on this ZTA held November 19, 2019. Since that hearing, and during the COVID-19 pandemic, the Council drastically revised the originally-proposed zoning amendment to bring towers even closer to homes – including reducing the minimum setback without any notice from 60 feet down to 30 feet – at the urging of wireless providers and lobbyists. Against public outcry, the Council provided no mechanism for setbacks adequate to protect vulnerable populations such as children, the elderly, nursing homes, and persons with disabilities. Despite overwhelming evidence of a badly broken process, the Council failed to correct the tower application review procedures that for years have led to wireless facilities being placed without resident input, in violation of zoning code requirements on height, setback, hearings under conditional use, pole placement, and without ensuring compliance with federal human exposure limits. This failure is despite receiving documentation, photos, and public testimony documenting these deficiencies.³

In passing this zoning amendment, the Council relied on the premise, unsupported by evidence, that the Federal Communications Commission (the "FCC") radiofrequency radiation exposure limits set in 1996 (which the FCC reaffirmed in 2019, based to a significant extent on

¹ For the full text of the Americans for Responsible Technology petition see: https://www.americansforresponsibletech.org/_files/ugd/2cea04_db07f220b02245a88cc4e9e5561dad15.pdf
For the public docket, including public comments on the petition, see: <https://www.regulations.gov/docket/FDA-2021-P-1347>

² Individual Councilmembers in favor of deploying cell towers 30 feet from homes and those that voted for Zoning Text Amendment 19–07 include: Hans Riemer (lead sponsor), Gabe Alborno (co-sponsor), Craig Rice (co-sponsor), Tom Hucker (President), Andrew Friedson, Evan Glass, and Nancy Navarro.

³ See Attachment A – MC4T.org Presentation for West Montgomery County Citizens Association - October 10, 2018.

input from the FDA) adequately protect the public's health, safety and welfare. Despite the fact that the FDA has not provided evidence to substantiate this premise, several Councilmembers repeated and promoted this premise. The Council further relied on this premise in its continued failures to correct ongoing violations of the County code that regulates cell towers and to ensure that emissions are in compliance with federal limits. The Council's reliance on this unsubstantiated premise has in the past harmed – and will continue to harm – our community.

Recent Challenges to FCC Radiofrequency Exposure Limits

On August 13, 2021, the U.S. Court of Appeals for the D.C. Circuit ruled in favor of Environmental Health Trust et al. that the FCC failed to provide a reasoned explanation for its determination that its wireless radiation guidelines – set in 1996 – adequately protect against harmful effects of exposure to radiation from cell phones, cell towers, and other wireless devices. The FCC ignored evidence that included over 11,000 pages of peer-reviewed, scientific, and human evidence demonstrating harm. The Court found that the FCC had failed to examine much of the harm documented on the record – such as impacts to reproduction, the nervous system and wildlife – and that the FCC had improperly relied on inadequate and conclusory statements from the FDA. The Court specifically noted that although the FDA stated in a 2018 webpost, "based on our ongoing evaluation of this issue, the totality of the available scientific evidence continues to not support adverse health effects in humans caused by exposures at or under the current radiofrequency energy exposure limits" – that there were, in fact, no reports on the record showing an adequate review of the research by the FDA. Although the FDA later released a literature review, it was focused on cancer and did not include evaluation of research on endpoints such as neurological impacts and damage to reproduction. The August 13, 2021 Court ruling specifically noted how non-cancer harms were ignored by the FCC. The Court ordered the FCC to address impacts on children, the health implications of long-term exposures, and technology developments since the FCC last updated its guidelines in 1996.

This Court decision came at a pivotal time as localities throughout the nation, including our County, have been pressured by the FCC to roll out "small cell" antennas in public rights-of-way and residential areas without any apparent scientific examination as to whether the FCC's exposure limits protect public safety.

Council's Promotion of Safety Levels & Emissions Exceeding Those Same Levels⁴

For years, the Councilmembers sponsoring the ZTA actively promoted to the public the purported safety of cell towers in close proximity to residences. As time has passed, that promotion of safety has gone beyond references to the FCC and FDA and has evolved into name-calling and attacks on residents questioning the Council's actions on "small cells." Throughout this zoning

⁴ See **Attachment B** for references to various materials relating to this section.

amendment process, members of the Council have urged residents to trust the safety of the wireless equipment installed close to their homes while denigrating the residents who presented scientific evidence of harms.

In October 2018, Councilmember Hans Riemer, lead sponsor of the ZTA, wrote an opinion in the Washington Post entitled "Montgomery County should have wireless broadband."⁵ He noted it was time to deploy small cells in residential areas while acknowledging "this possibility has stirred up tremendous *anxiety* among some residents [who have] demanded we keep the antennas and poles out of residential neighborhoods ... [but] this would institute a cumbersome hearing and examination process for every antenna." Councilmember Hans Riemer said "the County must act now to place cell towers ... If the industry gets its preferred approach, the poles will be higher and closer to houses. Companies won't pay fair market value for using public space. They'll make taxpayers subsidize the roll-out, even though they have no commitment to providing universal coverage to their communities." Further, he said "I met with FCC Chairman Ajit Pai, and separately with every FCC Commission member and urged them to partner with us to speed deployment rather than remove us from the table. In response, Pai has changed the membership of the [Intergovernmental Advisory Committee] [by] packing it with local government officials who support his agenda." *While the lead sponsor mentions how the industry could bring poles closer to homes, it was he who, in fact, heavily led the efforts since 2018 to bring these installations 30 feet from homes to/through July 2021. The lead sponsor also served on the Intergovernmental Advisory Committee from 2017 to 2019.⁶ The lead sponsor's inaccurate labeling of resident testimony and input as "anxiety" is consistent with his attempt to dismiss the substantial body of scientific evidence provided by residents to the Council, both in writing and in formal oral testimony in public hearing, documenting the known and foreseeable harms that would result after the passage of this ZTA.*

Prior to ZTA 19-07, Councilmember Hans Riemer supported a series of failed zoning amendments that would have permitted cell towers closer to residences, including ZTA 16-05 and ZTA 18-11, which did not pass due to overwhelming public opposition. During public hearings related to the current and prior ZTAs, residents provided oral testimony documenting harms they experienced from radiofrequency radiation and the County's inadequate approach to safety. One resident discussed her brother who passed away from glioblastoma.⁷ A military veteran described his experience with insomnia and radiofrequency radiation.⁸ Given the acrimonious atmosphere of name-calling described below, many residents are uncomfortable sharing their stories on the record.⁹

⁵ See <https://www.washingtonpost.com/blogs/all-opinions-are-local/wp/2018/10/22/montgomery-county-should-have-wireless-broadband/>

⁶ See <https://www.fcc.gov/consumer-and-governmental-affairs/about-bureau/office-intergovernmental-affairs/iac-members/general>

⁷ See <https://www.youtube.com/watch?v=DrEs62DXk6k>

⁸ See Takoma Park City Council meeting 2018, testimony on County-wide ZTA proposal <https://youtu.be/wYwMGmwU9cU?t=6881>

⁹ See Attachment B

The County relied on the FCC's 1996 exposure limits to protect safety while at the same time approving applications for wireless facilities on building rooftops, including atop affordable housing buildings, even when the applications' predicted level of emissions from those facilities significantly exceeded these federal limits. In one of numerous examples, rooftop RF radiation at an apartment building was stated to be 89 times higher than federal limits, without any requirement or demonstration that levels inside the building were within federal limits.¹⁰ (Federal rules allow rooftop levels to exceed FCC limits as long as signs and barriers are properly placed to warn residents not to go in these areas. No one in the general public, particularly inside the building, is supposed to be exposed to levels over federal limits).¹¹ In another example of the County's lack of attention to safety, a local news segment highlighted that proposed apartment rooftop antennae were predicted, via computer modeling, to generate areas of RF radiation that would exceed FCC exposure limits for the general public by up to 25 times those limits. Nevertheless, the County issued a permit without any plan to actually take or require onsite measurements to determine whether residents inside the building were being exposed to RF radiation in excess of federal exposure limits.¹²

A March 2020 Washington Post Opinion piece, featuring Councilmember Hans Riemer's push for "small cell" deployment despite public opposition, noted that "[t]he real evidence keeps piling up. The Food and Drug Administration ("FDA") in early February said it's continually monitoring the situation and found 'abundant evidence' to support the conclusion that 'there is no consistent or credible scientific evidence of health problems' caused by cellphones."¹³ A year later, Councilmember Hans Riemer referred to proactive, diligent constituents as "alot of kooky people complaining about wireless radiation from these devices ... the health impacts ... [are] deeply studied and are well known and are not a concern."¹⁴ Co-sponsor of the zoning amendment, Councilmember Alborno, said at a June 29, 2021 Council meeting on "small cells" that "I do put a tremendous amount of faith in our federal agencies ... and the systems we have in place, have

¹⁰ See Attachment C – Letter Dated December 1, 2020 to Marjorie Williams, Chair, and Members of the Montgomery County Tower Committee regarding 25 applications with serious errors passing the Montgomery County Tower Committee reviews.

See page 56 for anticipated exposure of 8,968% (89x) in excess of federal limits:

<https://montgomerycountytfcg.s3.amazonaws.com/Applications/MC2020081251+Application.pdf>

¹¹ See FCC 19-126 (Signage and Access Control) <https://docs.fcc.gov/public/attachments/FCC-19-126A1.pdf> and also Office of Engineering and Technology (OET) Bulletin 65 at pages 10, 32, 52, 58, and 62) https://transition.fcc.gov/Bureaus/Engineering_Technology/Documents/bulletins/oet65/oet65.pdf

¹² In November 2019, the 25x anticipated level was highlighted on the local CBS news affiliate:

<https://www.wusa9.com/article/news/local/radio-frequency-predictions-cause-verizon-permit-delay-takoma-park/65-0739176c-2125-407e-9bc8-8bf32edc4fe8>

While the news segment says that the County was going to reconsider, ultimately it recommended the application to proceed with an anticipated emissions level 2,598% above (approximately 25x) FCC limits. See page 3:

<https://montgomerycountytfcg.s3.amazonaws.com/Applications/MC2019080964+Application.pdf>

¹³ See https://www.washingtonpost.com/opinions/local-opinions/the-deployment-of-5g-sparks-a-turf-war-in-montgomery-county/2020/03/05/706510b2-5279-11ea-b119-4faabac6674f_story.html

¹⁴ March 8, 2021 Montgomery County Council Transportation and Environment Committee Meeting (<https://youtu.be/r3qqX0uEA?at=1635>) (@approx. 32:00)

conducted their own extensive research on a variety of issues that impact us."¹⁵ And at the same meeting, Councilmember Hans Riemer reiterated that radiofrequency radiation is "one of the most extensively studied issues out there. And if we were hearing from people like Dr. Fauci¹⁶, Dr. Walensky, the head of the FDA, that they had a concern like we would all know, if our leading scientific agencies were concerned about this. We do not hear from them."¹⁷

Reliance on FCC and FDA statements has contributed to the placement of cell towers at schools in the County. There are eleven large (known as "macro") towers at Montgomery County public schools—with 81% of those towers at schools where at least one-third of the students receive free or reduced cost meals, according to the County's own data.¹⁸ We are unaware of any activity by the County or school superintendents to gather reliable data on exposure to children. Lax tower reviews and lack of attention to safety or compliance with federal limits have contributed to the County failing to verify radiofrequency emissions at schools to ensure towers are within federal limits—as well as ignoring evidence of emissions in excess of such limits.¹⁹ This is particularly at odds with the County's approach to periodic safety testing standards with other human toxins like lead and radon, for which the County has adopted standards more stringent than Environmental Protection Agency standards. The Council has also ignored residential requests to ensure safeguards for utility workers, firefighters, and first responders who may need to work in close proximity to cell towers in order to perform their duties.

Councilmembers have a fiduciary obligation to residents to be informed of the consequences of Councilmembers' decisions, to seek appropriate expertise so as to protect the public health, and to act on such information to protect the public health, safety, and welfare. This obligation includes the need for Councilmembers to be informed of levels of RF exposure to the public and vulnerable populations, including emissions and exposures resulting from the Council's actions and its adoption of ZTA 19-07.

Residents Continue to Struggle and Plead for a Voice in the Process

As part of County procedure²⁰, the "Office of the People's Counsel (OPC)" is required to provide input on ZTA 19-07 and prior zoning amendments, but OPC currently has no staff after

¹⁵ VIDEO — ZTA 19–07 starts @ approx. 2:04:28 — https://youtu.be/Fy98kb_omS4?t=7468

¹⁶ It was brought to the Council's attention by numerous residents that Dr. Anthony Fauci is an infectious disease doctor and likely would not opine in this area.

¹⁷ See fn. 15

¹⁸ <https://wjla.com/news/health/mcps-places-controversial-cellular-towers-at-predominantly-high-poverty-schools-stats-show-113428>

¹⁹ See **Attachment C** – Letter Dated December 1, 2020 to Marjorie Williams, Chair, and Members of the Montgomery County Tower Committee regarding 25 applications with serious errors passing the Montgomery County Tower Committee reviews.

²⁰ See https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-64694 (noting that required staff consultations for a zoning text amendment must include one staff representative "each from the Montgomery County Planning Board; the Office of the County Attorney; the

being defunded by the Council. As a result, residents struggle for a voice²¹ because the purpose of the OPC is "promoting a full and fair presentation of relevant issues in administrative proceedings in order to achieve balanced records upon which land use decisions can be made." The OPC is also tasked with providing "technical assistance to citizens and citizens associations [to] encourage effective participation in, and increased public understanding of and confidence in, the County land use process."

ZTA 19-07 is proof of residents' pertinent questions and issues having been given a back seat to the desires of (and fearmongering by) the wireless industry and its lobbyists. For example, the County Council's attorney noted the following in briefing materials, despite the County already allowing wireless companies access to poles 300 feet from homes and in public rights-of-way, prior to the passage of ZTA 19-07:

"[i]n recent years, *industry-sponsored bills* have been brought before the [Maryland] General Assembly which specifically list Montgomery County as being a restrictive jurisdiction. Less permissive standards than surrounding jurisdictions decrease the County's desirability. And, from a legal perspective, if these bills were to move forward the state could impose rules on the County that are less favorable than this [zoning change]."²² [emphasis added]

An example of Councilmember interaction with the wireless industry is Councilmember Hans Riemer's providing a promotional statement for the pro-industry group MD5G Partnership. In the press release announcing the formation of this Maryland group, Councilmember Riemer was the only elected official quoted.²³ Since then, the group has consistently repeated false talking points often used by Councilmember Riemer, such as "junk science" and "we are falling behind," among others.

Despite opposition from residents, it cannot be over-emphasized that the Council relied heavily on input from the wireless industry. As part of promotional materials about the zoning amendment, Councilmember Hans Riemer touted the safety of small cell towers and radiofrequency radiation generally by often citing federal agencies such as the FCC and FDA to illustrate to the public that the Council's roll-out of cell towers in close proximity to residences was safe. The Council refused to consider numerous peer-reviewed scientific studies submitted by residents including the same studies referenced by the County in its own June 10, 2019 opening

Office of Zoning and Administrative Hearings; the Department of Permitting Services; the Board of Appeals; the *People's Counsel*; and the Office of the County Executive." [emphasis added]

²¹ See also https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-1896
Surrounding areas with an Office of the People's Counsel or similar resident advocate include Hartford County, Prince George's County, Baltimore, Washington D.C., and the state of Maryland.

²² See page 21 (Agenda Item #4D, July 27, 2021 Council Meeting)
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2021/20210727/20210727_4D.pdf

²³ See Attachment B.

brief in *Montgomery County, Maryland et al. v. FCC*.²⁴ In pro-industry fashion, Councilmember Riemer vehemently challenged sources other than federal statements on RF safety. Councilmember Riemer went so far as to call his own constituents "peddlers of junk science", "anti-vaxxers," and that they were somehow connected to the KGB. He did so publicly and often.²⁵

In the *Montgomery County v FCC* petition²⁶, the County asked the FCC to "confirm whether the 1996 RF standards will adequately protect public health and safety" prior to a 5G roll-out. The County further stated in its petition:

"[i]f the new 5G environment, in fact, poses health risks, any prior rollout of 5G will have potentially injured citizens of Montgomery County and other municipalities, including sensitive populations like children, that cannot be undone. Such a result would be unconscionable."²⁷ [emphasis added].

About Our Community – A Washington D.C. Suburb

The County is uniquely situated for several reasons. It is home to federal agencies that play a role in setting health and safety standards – including the National Institutes of Health,²⁸ which reported "clear evidence" of cancer harm from radiofrequency radiation in a National Toxicology Program study published in 2018.²⁹ The County is also home to the Executive Director of Environmental Health Trust as well as the attorney who represented Environmental Health Trust in its recent, consolidated case against the FCC. In addition, the County is home to professionals who work in fields from law to medicine to marketing/public relations, climate action, government, and academia. These professional constituents have tirelessly provided their knowledge to Councilmembers, but residents' expertise and input were – and continue to be – dismissed. Instead, Councilmembers have proactively and callously exhibited a pattern of consistently deferring to – and speculating about – the desires of the wireless industry, the FCC, and the FDA for input on residential wireless zoning.

²⁴ The previous Council filed suit in mid-2018. The current Council, sworn into office in December 2018 for a four-year term, allowed the already-filed lawsuit to proceed. However, when the Ninth Circuit dismissed on procedural grounds the petition regarding exposure limits, the current Council declined to participate in a follow-up petition. However, Environmental Health Trust, as a co-petitioner did file a follow up petition, which led to the previously mentioned August 13, 2021 D.C. Circuit Court decision. For the County's brief see:

<https://ehtrust.org/wp-content/uploads/Montgomery-County-Brief-on-Merits-filed-6-10-2019.pdf>

²⁵ See Attachment B.

²⁶ See fn. 24.

²⁷ See fn. 24 at p. 55.

²⁸ Other federal agencies with physical headquarters in Montgomery County, Maryland include the Food and Drug Administration, the Consumer Product Safety Commission, the National Cancer Institute, the National Institute of Standards and Technology, and the National Council on Radiation Protection and Measurements.

²⁹ See https://ntp.niehs.nih.gov/ntp/htdocs/lt_rpts/tr595_508.pdf.

Despite the access and proximity to these unique resources, and in an about-face from the County's arguments in *Montgomery County v. FCC*, seven members of the current sitting Council voted for the ZTA allowing a rollout of 5G "small cells." Seven Councilmembers made a critical decision to enact a zoning amendment that will impose irreparable, foreseeable, and preventable harm on residents and property values in the County for years to come. This ill-fated decision was irresponsibly made by the Council, relying on the unsupported, and industry-hyped, premise that the FCC has established a standard for radiofrequency radiation exposure for human populations that protects public health, safety, and welfare. Such reliance was based on the unsubstantiated premise that the FDA has established an official position, based on a reasoned explanation, that current FCC exposure limits for radiofrequency protect public health, safety, and welfare. Residents of the County, including children and sensitive populations, will regrettably suffer the repercussions of the Council's "unconscionable" actions.³⁰

SEE FOLLOWING PAGE FOR SIGNATURES

Attachments:

- Attachment A – MC4T.org Presentation to West Montgomery County Citizens Association - October 10, 2018
- Attachment B – Sources and statements
- Attachment C – Letter Dated December 1, 2020 to the Montgomery County Government's Tower Committee

³⁰ See fn. 24, page 55. "Unconscionable" was the term used by the County in its own 2019 petition against the FCC.

Signatures

MC4T

Montgomery County Coalition for the Control of Cell Towers (MC4T.org) fights for fair, transparent, and accurate regulation of cell poles and cell towers to minimize adverse impacts to surrounding land uses, respect the harmony and aesthetic character of the communities, and protect the safety of all residents.

MocoSafeG

MocoSafeG.org is a group of residents who value safer technology, safer internet access, and safer cell phone service for people who live, work, shop in, or visit Montgomery County, MD. MocoSafeG values wired and fiber technology infrastructure where available. Our group encourages critical thinking about how 4G and 5G cell antennas, cell poles, and cell towers have been – and will be – placed in environments where human life, animal life, and plant life co-exist.

For press and other inquiries, please contact MC4T: controlcelltowers [at] gmail.com

Dear Montgomery County Council,

I am a resident who has grown to love MoCo. When I moved here, I had no idea that I could be facing the rollout of over 33,000 small cell towers. I am a technologist with heightened sensitivity to RF/EME waves. I'm well aware that these 5G towers will be military grade, millimeter wave technology.

Furthermore, the FCC lost their cause on 8.13.21, regarding their outdated 26-year-old guidelines and have yet to comply with the court order.

EHT et al., v. FCC Court Oral Argument and Press Conference

<https://www.youtube.com/watch?v=5oXhnuAkLq4&t=970s>

Dr. Kent Chamberlin on the NH 5G Commission Findings and Wireless Safety:

<https://www.youtube.com/watch?v=t85QgvfKNkE>

Notable slides:

What happened when cell towers were placed on fire stations?

Within a week of installation many firefighters developed unusual symptoms of headaches, fatigue, insomnia, memory loss, confusion, nausea and weakness. After a time, firefighters in stations with adjacent cell towers were found to have forgotten CPR or became lost responding to a fire in a city they grew up in.

[Physicians for Safe Technology](#)

Article Title:
Mortality by
neoplasia and
cellular telephone
base stations in the
Belo Horizonte
municipality, Minas
Gerais state, Brazil

The article reports on research that analyzed the correlation between how close people lived to a cell tower and cases of deaths by neoplasia. Data obtained from government databases.

Covered timeframe 1996-2006; conclusions based on study of 856 cell towers.

The largest power density measured during the study was $40.78 \mu\text{W}/\text{cm}^2$ ($407.8 \text{ mW}/\text{m}^2$)



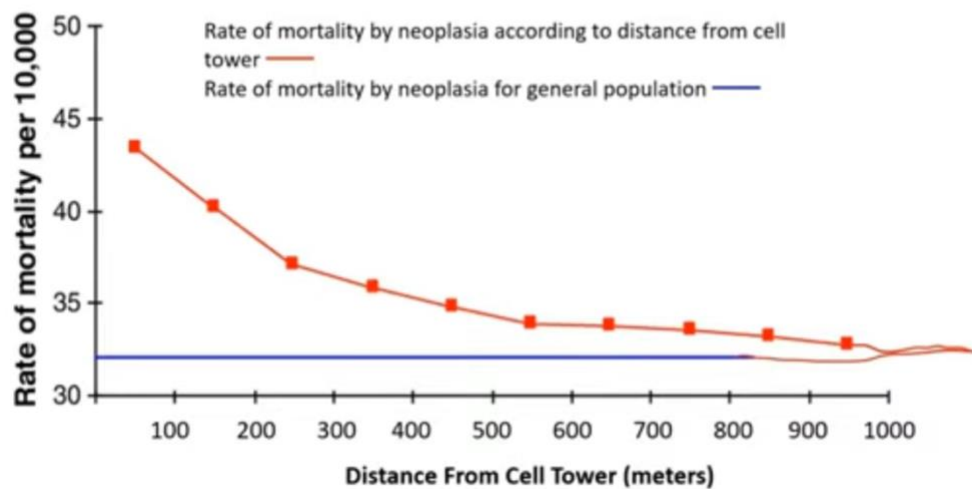
Adilza C. Dode, Mônica M.D. Leão, Francisco de A.F. Tejo, Antônio C.R. Gomes, Daiana C. Dode, Michael C. Dode, Cristina W. Moreira, Vânia A. Condessa, Cláudia Albinatti, Waleska T. Caiaffa,

"Mortality by neoplasia and cellular telephone base stations in the Belo Horizonte municipality, Minas Gerais state, Brazil", Science of The Total Environment, Volume 409, Issue 19, 2011, Pages 3649-3665, ISSN 0048-9697

<https://doi.org/10.1016/j.scitotenv.2011.05.051>

30:38 / 59:12

Take-Away from Article Referenced on Previous Slide



Cell Tower Radiation is Not Healthy Pittsfield Board of Health USA

youtu.be/TUa4o0B8W08

Today, I'm asking our Council to be as wise as the Pittsfield Board of Health and put a pause on ZTA 22-01.

Sincerely,

Nicole Williams

Testimony of
Rick Meyer
North Potomac, MD

Regarding
**Zoning Text Amendment (ZTA) 22-01, Antenna on Existing
Structure - Use Standards**

September 13, 2022

I am Rick Meyer and speak this afternoon in opposition to ZTA 22-01 because this ZTA which seeks to accommodate inadequacies and weaknesses of mmWave technology -- is simply no longer needed.

We repeatedly heard demands from two wireless carriers that invested billions in **mmWave** frequency auctions that they **MUST** be granted access to residential rights-of-way to deploy mmWave with very short setbacks.

There have also been implied threats of lawsuits by wireless industry alleging “denial of service” unless essentially unfettered access to residential zones was immediately granted.

Thus, the Council passed ZTA 18-02 in 2018 and opened the barndoor for **access** to more than 33,000 eligible utility and streetlight poles to attach wireless antennas:

- as limited use
- in public rights-of-way
- **inside** residential zones
- so long as the existing pole was 60 feet from nearest dwelling.¹

So, given this urgent industry imperative how many applications from wireless companies have been submitted in the four years since June 2018 for first time antenna collocations **on poles** in residential zones -- according to the Montgomery County Tower Committee database.²

¹ Memorandum to PHED Committee. From: Ndou, Dunn and Rodriguez-Hernandez. **Re: Worksession #3 for ZTA 19-07**. March 5, 2021. Page 3.
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210310/20210310_PHED2.pdf

² https://montgomerycountymd.gov/cable/Resources/Files/Towers/databases/MC%20Database%2009_12_22.xlsx

33.³ That's it. 33 in four years with an eligible pool of 33,000 poles.

By contrast, **C-band** technology seems to be rapidly overtaking mmWave particularly in Montgomery County. C-band goes much farther, does a better job of penetrating buildings and foliage and **is cheaper** to roll out.⁴

As proof that mmWave is becoming obsolete, how many applications have been filed since June 2018 in Montgomery County for new and additional antennas **on rooftops, water towers, monopoles, and lattice towers**— where C-Band is typically deployed?

766 applications vs 33.⁵

³ From the current Tower Committee Database as referenced above. Counting applications submitted since June 2018 in residential zones **only**. Does NOT include withdrawn applications.

⁴ Verizon Merges C-Band, mmWave for Faster 5G. Sasha Sagan, PC Magazine. May 5, 2021, <https://www.pcmag.com/news/verizon-merges-c-band-mmwave-for-faster-5g>

⁵ Based on our research the overwhelming number of these Tower Committee applications included installations to upgrade C-Band.

Keep in mind that all three major wireless carriers proudly display coverage maps on their marketing websites showing 4G and 5G wireless coverage is positively glowing in Montgomery County. All three.⁶

Even with 60 ft setbacks.

ZTA 22-01 is simply superfluous and gratuitous.

⁶ <https://www.verizon.com/coverage-map/>
<https://www.t-mobile.com/coverage/coverage-map?INTNAV=tNav:Coverage:5G4GCoverageMap>
<https://www.att.com/maps/wireless-coverage.html>

Date: September 13, 2022 – Montgomery County Council Public Hearing Testimony

Re: ZTA 22-01, Antenna on Existing Structure – Use Standards – **Opposition to reducing setback**

From: Roberta G (rg) Steinman, 9009 Fairview Road, Silver Spring, Maryland, 20910

Dear Council President and Councilmembers,

I am strongly opposed to reducing the setback for an antenna on existing structures from 60 feet to 30 feet. I support either keeping the 60 foot setback, or increasing it.

Please, do not approve ZTA 22-01 because the 5G rollout and its reduced setback:

- **Overrides individual rights,**
- **Will not help bridge the digital divide,**
- **Would have harmful effects on human health and biodiversity,**
- **Would increase greenhouse gas emissions and worsen climate impacts due to increased power demands,**
- **Would harm tree canopies, which are critical to mitigating global warming and drought, and**
- **Expand the cycle of consumption, contributing to our world's E-waste Emergency**

Overrides Individual Rights and Excludes Public Participation: This law would allow wireless companies to **put** thousands of cell towers and the large 5G equipment boxes **on almost every block of every street in our county**, as close as 30 feet from our homes, and within 10 feet in mixed commercial/residential areas,¹ and it would do so without public participation or public protection. The ZTA also eliminates public notices and hearings. **No notice. No hearing. No community input.** The rights of local residents and the ownership of private property would automatically be subservient to the telecom companies' profit-making interest. It is no longer a question of residents' rights, but corporate motives. Allowing companies unfettered access to build cell towers in neighborhoods in the name of 5G is a bad policy, and this alone has led to a **massive pushback from Montgomery County citizens.**

5G will not help bridge the digital divide and will disproportionately affect low-income communities Since 98.8% of Montgomery County already has broadband access, **the digital divide is about affordability, not accessibility.** Low-income communities are at a digital disadvantage because they cannot afford home broadband connections, or the costs of computer purchase, maintenance and service--none of which are addressed by this ZTA or previous ZTAs. Thus they have few options for getting online other than using their cell phones. "If the Council really wants to support equity in Montgomery County, councilmembers can address the issue directly by supporting affordable fiber broadband connections; affordable computers with free tech support and education; and funding a full analysis of the digital inequity in the county so that policy recommendations can be science-based and data-driven."² Coverage can be improved today with existing cellular technology. Montgomery County needs affordable broadband, not 5G cell towers, to bridge the digital divide.

But what ZTA 22-01 would do is allow multiple telecom companies to put thousands of cell towers and the large 5G equipment boxes as close as 30 feet from our homes. Property values are likely to go down for any residents who find that an intrusive, visually unpleasant telecom tower has invaded their front yard. The economic hit is likely to be especially hard on those with smaller properties, whose homes are close to the street. **The result would be a disproportionate impact on low-income communities and communities of color. ZTA 22-01 must be subject to a review for its impact on racial equity and social justice.**

¹ In 2018 the Montgomery County Council passed ZTA 18-02, which allows placement of small-cell towers within 10 feet from homes in mixed commercial/residential areas.

² https://www.thesentinel.com/communities/montgomery-county-needs-affordable-broadband-not-5g-cell-towers-to-bridge-the-digital-divide/article_c4cb0ec6-e1f3-11eb-9735-5bb51f9713d4.html

Peer-Reviewed Scientific Literature documents the harmful effects of wireless radiation on health

The FCC still has not updated its 1996 exposure limits for radio-frequency radiation from cell towers, cellphones, and other wireless devices with the latest science. Yet, over this 26-year period, there has been a vast amount of research by respected scientists and institutions – literally thousands of scientific articles in peer-reviewed journals – showing harmful effects of wireless radiofrequency radiation on human health, on the environment, and on the climate. International independent scientists are calling for biologically-based public exposure standards and reducing wireless radiation.

More than 240 scientists who have published peer-reviewed research on the biologic and health effects of nonionizing electromagnetic fields (EMF) signed [the International EMF Scientist Appeal](#), which calls for stronger exposure limits. The appeal makes the following assertions:³

“Numerous recent scientific publications 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. Damage goes well beyond the human race, as there is growing evidence of harmful effects to both plant and animal life.”

Radiation from Wireless Infrastructures has also been shown to be Harmful to Biodiversity

In addition to the harmful effects on humans, radiofrequency/microwave (RF/MW) radiation from wireless infrastructures and devices has been shown to have harmful effects on animal, insect and plant life. And yet, there are NO US agency wireless radiation “safety” limits for trees, plants, birds and bees.

The main component of the 5G network that will affect the earth’s ecosystems is the millimeter waves, which have never been used at such scale before. In numerous studies, the millimeter waves have been linked to disturbances in birds, bees, amphibians, and plants. Birds exposed to RF/MW radiation from infrastructures express abnormalities in fertility, nesting patterns, navigation and reduced populations.⁴ When affected by radiation, honeybees, our key agricultural pollinators, don’t return to the hive; the strength of colonies and productivity of queens are reduced; and eggs don’t transform into larvae.⁵ Amphibians are harmed, with tadpoles suffering deformities and a 90% mortality rate from cellular towers only 140 meters away.⁶ Plants are affected on a cellular, molecular and whole plant scale.⁷ Cellular towers’ radiation cause harm to trees: discoloration and thinning of leaves, distorted growth of

³ <https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/>

⁴ Balmori, A. (2009). Electromagnetic pollution from phone masts. Effects on wildlife. *Pathophysiology*, 16(2-3), 191-199. doi: 10.1016/j.pathophys.2009.01.007. Retrieved from https://www.researchgate.net/publication/24180316_Electromagnetic_pollution_from_phone_masts_Effects_on_wildlife. And, Sivani, S. & Sudarsanam, D. *Impacts of radio-frequency electromagnetic field (RF-EMF) from cell phone towers and wireless devices on biosystem and ecosystem- a review*. Biology and Medicine. Volume 4, Issue 4. January 6, 2013. P.207.

⁵ Halabi, N., Achkar, R., & Haidar, G. (2013). The effect of cell phone radiations on the life cycle of honeybees. *Eurocon 2013*, page 5. doi: 10.1109/eurocon.2013.6625032. Retrieved from https://www.researchgate.net/publication/246044829_The_Effect_of_Cell_Phone_Radiations_on_the_Life_Cycle_of_Honeybees. And, Warnke, Ulrich. *Birds, Bees and Humankind: Destroying Nature by ‘Electrosmog’*. Competence Initiative for the Protection of Humanity, Environment and Democracy. March 2009.

⁶ Balmori, A. (2010). Mobile Phone Mast Effects on Common Frog (*Rana temporaria*) Tadpoles: The City Turned into a Laboratory. *Electromagnetic Biology And Medicine*, 29(1-12), 31-35. doi:10.3109/15368371003685363. Retrieved from <https://www.ncbi.nlm.nih.gov/pubmed/20560769>

⁷ Vian, A., Davies, E., Gendraud, M., & Bonnet, P. (2016). Plant Responses to High Frequency Electromagnetic Fields. *Biomed Research International*, 2016, 1-13. doi: 10.1155/2016/1830262. Retrieved from https://www.researchgate.net/publication/294576990_Plant_Responses_to_High_Frequency_Electromagnetic_Fields

trunks as well as dead leaves and branches.⁸ Because all ecosystems of the earth are interconnected, if one component of an ecosystem is disrupted the whole system will be affected.

Do No Harm – Apply the Precautionary Principle and Follow the Science

The latest cellular technology, 5G, will employ millimeter waves for the first time in addition to microwaves that have been in use for older cellular technologies, 2G through 4G. Furthermore, 5G will not replace 4G; it will accompany 4G for the near future and possibly over the long term. If there are synergistic effects from simultaneous exposures to multiple types of Radio Frequency Radiation (RFR), our overall risk of harm from RFR may increase substantially. Cancer is not the only risk as there is considerable evidence that RFR causes neurological disorders and reproductive harm, likely due to oxidative stress.⁹

Wireless technology has changed considerably over the past 25 years, and **new radiation standards need to be adopted to reflect current scientific data and present-day concerns.**

5G is an Energy Hog, and this translates into higher greenhouse gas emissions

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.”¹⁰ Furthermore, the ability for more devices to be used on the same network creates more incentive for consumers to buy electronics and use them more often, thus multiplying the harmful impact on the environment through increased energy use. And higher energy consumption inevitably means higher greenhouse gas emissions. Based on the County’s recently passed Climate Assessments Bill (**Bill 3-22**), **ZTA 22-01 would be subject to a climate assessment review for the potential impacts of its proposed policies.**

5G would Harm Tree Canopies, which are critical to mitigating global warming and drought

A rollout of 5G would also result in a major loss of tree canopy, due to “line of sight” requirements for the higher-spectrum millimeter wavelengths. The proposed dense network of ‘small-cell’ towers on poles in front of our homes would mean the severe pruning (if more than 25% of a tree is pruned, it is likely to die) and removal of untold number of trees, and a reduction in shade tree planting sites. Yet we are at a critical ecological moment in time when trees are more important than ever.

Tree canopies are the critical renewable technology needed to combat increased warming and drought due to climate change. Trees absorb carbon dioxide — the greenhouse gas emitted by our cars and power plants. The “line of sight” cutting would eliminate the carbon sequestration of thousands of trees. Trees also cool neighborhoods, reducing energy needs. And trees increase rainwater absorption, mitigating the effects of drought. 5G would undermine these important biological services that trees provide. This ZTA fails in every way to protect our vital tree canopy. Further, the 5G permitting process would also eliminate the forest conservation review and other standards currently required for cell

⁸ Waldmann-Selsam, C., Balmori-de la Puente, A., Breunig, H., & Balmori, A. (2016). Radiofrequency radiation injures trees around mobile phone base stations. *Science Of The Total Environment*, 572, 554-569. doi:10.1016/j.scitotenv.2016.08.045. Retrieved from https://www.researchgate.net/publication/306435017_Radiofrequency_radiation_injures_trees_around_mobile_phone_base_stations

⁹ Joel M. Moskowitz, PhD, is director of the Center for Family and Community Health in the School of Public Health at the University of California, Berkeley, <https://blogs.scientificamerican.com/observations/we-have-no-reason-to-believe-5g-is-safe/>

¹⁰ “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)

towers. Even worse, a considerable amount of independent research indicates that the trees left behind that are close to antennas would also be harmed from constant exposure to radio-frequency radiation.¹¹ **This potential loss of trees and tree canopies must be part of the Climate Impact Assessment.**

5G devices contribute to our world's E-waste Emergency and increased demands for energy

5G will speed the obsolescence of existing technology and encourage people to swap out their existing devices for new 5G devices, contributing to our world's ever growing e-waste emergency. E-waste contains a laundry list of chemicals that are harmful to people and the environment including mercury, lead, beryllium, brominated flame retardants, and cadmium, and more. As consumers gain access to more technologies, the cycle of consumption expands: new devices are developed; older devices are thrown out, even if they are still functional. Metals used in the manufacturing of the smart devices used today often cannot be recycled in the same way many household items can be recycled. Because these technologies cannot be recycled, they create tons of waste when they are created, and tons of waste when they are thrown away. E-waste is projected to reach nearly 75 million metric tons of e-waste worldwide each year by 2030.¹² Furthermore, the ever-expanding cycle of consumption leads to evermore demand for energy to power the multitude of new connected devices exacerbating the greenhouse gas emissions.

Let Science, coupled with Public Participation, guide our actions

Remember the wonders of lead, asbestos, tobacco, CFCs, and fossil fuels? Those chickens did come home to roost. So let's **critically evaluate *this new technology before we dive in*** — and not be sorry later. Let us pause our headlong rush to speed the deployment of 5G. Rather than lining our residential streets with cell towers to accommodate the telecom industry's profit-based technology policies, we need to pause and study the extensive Science-based research, and couple that with transparency and robust public participation, to guide our decisions about the design and use of these powerful technologies.¹³

*****THESE ARE STRUCTURES ZTA 22-01 IS TALKING ABOUT*****

Under section 3.5.14.C. of the Zoning Ordinance, an "Antenna on Existing Structure" is defined as "one or more antennas attached to an existing support structure, including a building, a transmission tower, a monopole, a light pole, a utility pole, a water tank, a silo, a barn, a sign, or an overhead transmission line support structure. Antenna on Existing Structure includes related equipment." Currently, the setback for an Antenna on Existing Structure is 60 feet. ZTA 22-01 will reduce that setback to 30 feet, so that these antennas are treated similarly to telecommunications towers. (from Feb 10, 2022, Legislative Attorney, Livhu Ndou, Memorandum to County Council, https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2022/20220215/20220215_3C.pdf)

Thank you for considering my comments,
~ Ms. Roberta G (rg) Steinman

¹¹ For a sample of research articles on impact of wireless radiation's adverse impact on trees, see <https://techwisemocomd.org/tag/take-action-montgomery-county/>

¹² The Global E-waste Monitor 2020, p.13. https://www.itu.int/en/ITU-D/Environment/Documents/Toolbox/GEM_2020_def.pdf

¹³ <https://techwisemocomd.org/2020/01/04/community-vision-for-takoma-zta19-07-testimony/>

Written testimony for ZTA-2201

From: Sandra Crowe, Montgomery County resident since 1990

We think of pollution in an air context. It's something we see, identify, and can almost touch. We know it's there. With wireless pollution it's not so simple. It's there, but because we don't see it or feel it, so we don't think of it as pollution. In fact we don't think of it at all. But one of the best indicators of this presence in our lives is its' impact on nature, in particular those closest to the ground... insects.

As cited by the American Bee Journal (2/22)...“Up until recently, the range of frequencies used for wireless communication has not risen above 6 GHz (2G, 3G, 4G, and WiFi). The impending deployment of the new and highly anticipated 5G technology utilizes a signal of 120 GHz. Research on insects showed that as the power density of frequencies above 6 GHz increased, the power absorbed by the invertebrates studied increased from three to 370 percent (Thielens et. al. 2018) making the importance of being able to understand the potential threat to pollinators from electromagnetic radiation all the more urgent”

In addition, The research review [“Electromagnetic radiation as an emerging driver factor for the decline of insects”](#) published in Science of the Total Environment found “sufficient evidence” of effects including impacts to flight, foraging and feeding, short-term memory and mortality. ([Balmori 2021](#))

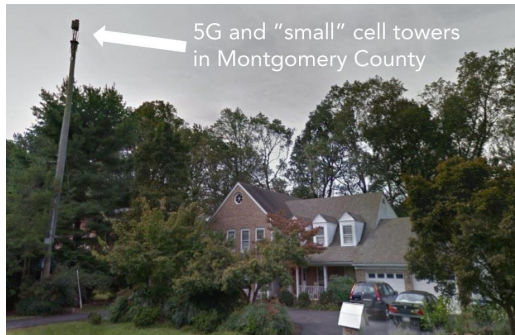
But it doesn't stop there. Even flora and fauna are affected. A landmark [research review](#) by U.S experts of over 1,200 studies on the effects of non-ionizing radiation to wildlife entitled “Effects of non-ionizing electromagnetic fields on flora and fauna” published in Reviews on Environmental Health found adverse effects at even very low intensities including impacts to orientation and migration, reproduction, mating, nest, den building and survivorship. (([Levitt et al., 2021a](#), [Levitt et al., 2021b](#), [Levitt et al., 2021c](#)).

In addition...“[A review of the ecological effects of RF-EMF](#)” published in Environment International reviewed found RF had a significant effect on birds, insects, other vertebrates, other organisms, and plants in 70% of the studies reviewed with development and reproduction in birds and insects the most strongly affected. ([Cucurachi 2013](#)).

Why do we have our hands over our ears and eyes when it comes to the dangers of this exposure not only to humans, but to nature and the environment? There is so much we cannot control and this is something we can. Many countries such as Italy, Switzerland, Israel, China, Russia, and India, have more stringent cell tower radiation limits (10 to 100 times) compared to the U.S. FCC and ICNIRP. In fact, India dropped their RF limits by 1/10th in 2012 after an Inter-Ministerial Committee set up by the Ministry of Environment and Forests [reviewed the research](#) on birds, bees, plants and animals and found 593 of the 919 showed impacts as [summarized](#) in the journal Biology and Medicine. FCC safety standards have not been updated or changed since 1996 while the technology has grown and shifted at a rapid pace since then. How do we know the real impact of long term exposure?

A 30 foot set back is an indirect attack to wildlife, our eco system, let alone our children and future generations. Why would we want to impose this on them? We still have some control over how much wireless pollution we emit into the air. We still have the chance for a layer of protection against this. This is an opportunity for you to step up and not contribute to an already growing problem. Say no to ZTA-2201 while you can, for now and for our collective future.

Testimony against Montgomery County Council Cell Tower ZTA 22-01
By Steve Steckler, Rockville Maryland



30 feet is not the magic number.

First, there is no legally correct reason that the setback has to be 30 feet to meet federal law. This is simply a number developed by Councilman Hans Riemer as “the number” based on zero legal precedent.

Say not to 30 feet!

The Council should serve the community by basing the setbacks on facts, not fear. All too often we hear that “our hand are tied” or “they will sue us.” The recent Flower Hill decision shows that yes, they might sue, but the town might win! Further, keeping the setback at 60 feet will be just fine for networks! If they need to go closer, they can document the need and apply for a special exception.

The judge ruled that all the Telecommunications Act of 1996 requires of a local government -- the local government only must allow a service provider to provide wireless telephone service which can connect to landlines. Nothing more!

*We are talking about putting transmitting antennas in front of bedroom windows.
Do the right thing and vote NO!*

September 1, 2022

[Analysis of ExteNet Sys. v. Village of Flower Hill by Attorney
Robert Berg Esq., Legal Advisor for the Environmental Health Trust](#)

Summary: In a [landmark legal decision](#), federal district court judge Frederic Block held on July 29, 2022 that the Village of Flower Hill, NY, acted within its powers under the Telecommunications Act of 1996 when it denied the application of ExteNet, Inc. ("ExteNet"), a telecommunications company working for Verizon Wireless, to install 18 "small cell" 4G wireless antennas on public rights-of-way in the Village. The case is [ExteNet Sys. v. Village of Flower Hill](#), No. 19-CV-5588-FB-VMS, pending in the United States District Court for the Eastern District of New York.

Analysis: In 2016, Verizon had identified the area around Flower Hill as having deficient 4G LTE service, and asked ExteNet to design and install a network of 66 small wireless facilities to improve coverage, 18 of which would be located within Flower Hill. In May 2017, ExteNet applied for a permit for one small cell facility, and the Village imposed a moratorium on such applications while it considered an ordinance regulating them. That ordinance was enacted in 2019, by which time ExeNet had applied for 18 such permits. Following meetings with Village officials, revised applications from ExteNet, multiple public hearings and a public forum, the Village Board voted to deny ExteNet's applications, and approved a written statement of findings prepared by the Village Attorney explaining the reasons. The reasons for the Board's denial were: (1) the significant adverse aesthetic and property value impacts of the 18 nodes permeating the tiny village; (2) no gap in wireless coverage for Verizon and no need to justify the significant adverse impacts; and (3) ExteNet's abject refusal to submit an actual fixed plan for each of the 18 wireless nodes and poles, instead offering multiple different plans with different pole/node locations and configurations, abject refusal to provide onsite photo simulations for each of the proposed nodes, and refusal to comply with the public notice provisions of the village code.

ExteNet sued the Village in federal court under the Telecommunications Act of 1996 ("TCA"), claiming that the Village's ordinance regulating small cell facilities constitutes an effective prohibition on personal wireless services, was discriminatory, and was not supported by substantial evidence -- all in violation of the TCA. Additionally, ExteNet alleged that the denial violated New York's Transportation Corporations Law.

In rejecting ExteNet's arguments, the District Court made several very notable findings based on well-established, controlling Second Circuit law. First, Judge Block noted that the TCA "is not a model of clarity. In part, this is because it 'strikes a balance between two competing aims - to facilitate nationally the growth of wireless telephone service and to maintain substantial local

control over siting of towers." Relying on *Omnipoint Communications, Inc. v. City of White Plains*, 430 F.3d 529, 534 (2nd Cir. 2005). Judge Block then pointed out that the Second Circuit holds that this balance can be found by requiring local governments to "allow service providers to fill gaps in the ability of wireless telephones to have access to land-lines." Relying on *Sprint Spectrum L.P. v. Willoth*, 176 F.3d 630, 643 (2nd Cir. 1999). That's all the TCA requires of a local government -- the local government only must allow a service provider to provide wireless telephone service which can connect to landlines. Nothing more!

This is the key takeaway of this important decision. Why? Because in 2018, the Federal Communications Commission ("FCC") issued a ruling that purports to expand the scope of the TCA to include wireless services beyond providing access to a telephone network. In that ruling, *In re Accelerating Wireless Broadband Deployment by Removing Barriers to Infrastructure Inv.*, 33 F.C.C.R. 9088, 9104-05 (2018), the FCC "clarif[ied] that an effective prohibition occurs where a state or local legal requirement materially inhibits a provider's ability to engage in any of a variety of activities related to its provision of a covered service. This test is met not only when filling a coverage gap but also when densifying a wireless network, introducing new services, or otherwise improving service capabilities."

Judge Block held that the FCC's 2018 ruling exceeds the scope of the TCA which only covers providing wireless telephone service access to landlines. Judge Block noted: "Improved capacity and speed are desirable (and no doubt, profitable) goals in the age of smartphones, but they are not protected by the Act," relying again on *Willoth*.

Judge Block then examined the Village Board's decision denying ExteNet's application to determine whether it was supported by substantial evidence, as required under the TCA. Judge Block found that substantial evidence showed that Verizon's wireless customers throughout the Village can make a wireless telephone call, even though the signal strength might not be especially high; consequently, there is no gap in coverage justifying ExteNet's application. Having found a single reason supported by substantial evidence for the Board's denial of the application, the Court found no need to evaluate the Board's other reasons, citing *T-Mobile Ne, LLC v. Town of Islip*, 893 F.Supp.2d 338, 355 (E.D.N.Y. 2012) ("If the Court finds that even one reason given for the denial is supported by substantial evidence, the decision of the local zoning body cannot be disturbed.").

Keep in mind the following caveat and a few additional positive points about this important legal decision:

Judge Block is a federal district judge within the Second Circuit. His decision relies on favorable Second Circuit decisions which he, as a district court judge, is obligated to follow. Other circuits either have not addressed this specific issue or may be more favorably inclined towards the FCC's 2018 broad interpretation of the reach of the TCA. Judge Block's decision does not bind

any other federal court. However, Judge Block is a very well-respected, seasoned jurist who is applying thoughtful Second Circuit precedent. We believe Judge Block's decision will be persuasive to other courts, and we recommend that the decision be disseminated broadly to interested parties.

Further, the other reasons provided by the Village Board for denying the application -- aesthetics, property devaluation, and ExteNet's refusal to provide actual fixed plans and photo simulations for each of the proposed nodes and refusal to comply with the Village Code notice provisions, if supported by substantial evidence, in our view, would also support denial of the applications under the case law.

[Download the judge's decision in ExteNet Sys. v. Village of Flower Hill.](#)

**

Legal and/or media inquiries about the [Flower Hill, NY decision](#) can be sent to the Environmental Health Trust's legal advisor, Robert Berg Esq., at robertbergesq@aol.com.

For additional information on 5G wireless deployments in the United States, please visit the Environmental Health Trust website [here](#).

TESTIMONY BY SUE PRESENT
ON
ZONING TEXT AMENDMENT (ZTA) 22-01
PUBLIC HEARING – SEPTEMBER 13, 2022

Good afternoon President Alborno and Members of the Council,
My name is Sue Present. Please reject ZTA 22-01. It poses threats to residents, their homes, and their neighborhoods.

For example:

Where the ZTA allows antenna attachments, utility companies must then permit the antenna attachments on their poles, per FCC mandate.¹ And utility companies require the vast majority of the antenna attachments to go onto replacement poles that are taller, larger, and stronger than the pre-existing poles, to support the weight of the antenna facilities and to prevent dangerous overloading of the poles.² There are no County height limits on the replacement poles. Some replacement poles have been very tall, reaching 60 feet or more in height, not include the height of the attached antennas.³

Utility poles often get replaced long before antenna applications are submitted or reviewed.⁴ With no provisions for notice to residents or opportunity for the public to comment before DPS issues the right-of-way permits and before the work takes place, neighbors are blindsided. Yet, neighbors are stuck with the obtrusive replacement poles, even when antenna applications are never filed (because, for example, the providers realize that the

¹ FCC [One Touch Make Ready Rules](#); and for context, also see FCC [Declaratory Ruling](#) and [47 U.S.C. § 224](#)

² PEPCO Guidelines. See for example, TFCG application No. [2019010697](#), pdf pg. 16, PEPCO Guidelines, Structural notes 1 – 3, and Clearances note 5.

³ For example, [DAS node S1](#), which is installed on the replacement utility pole at 9101 River Road.

⁴ See *data* Montgomery Public Utility ROW permits database, <https://data.montgomerycountymd.gov/Community-Recreation/data-Montgomery-Public-Utility-ROW-permits/c79p-fhp7/data#SaveAs>

applications would not satisfy zoning standards), rejected, withdrawn, or placed on indefinite hold.⁵

Neighbors get stuck with double poles, too, because the pre-existing utility poles languish – often for years – after replacement utility poles have been installed. There are no County regulations that limit the time that utilities have to remove the pre-existing poles after the replacement poles have been installed for antenna facilities. Double poles are roadway hazards.⁶ They impede drivers’ visibility of pedestrians and vice versa. And they undermine Vision Zero strategies.

When utility poles and electrical wires are increased in height for the antenna attachments, tree foliage is removed to provide a

⁵ For example, these public utility poles in a Calverton neighborhood, which were provided right-of-way permits after the utility submitted requests for its customer Crown Castle, and the utility indicated that the replacement poles were for attachments to the poles and that the permits were needed per FCC “Make Ready.”

PROW Permit #	Date Issued	Street Numbers	Street Name	Suffix	Nearest Cross Street	PEPCO Pole ID (on DPS application)	Setback in Feet
377576	10/12/2020	13204 and 13208	Bellevue	St	Tampico Way	816446-090980	~48
377582	10/12/2020	3112 and 3116	Cordoba	St	La Plata St	815446-320100	~44
377584	10/12/2020	12517 and 12521	Galway	Dr	Kilkenny St	815447-550550	~46
377590	10/12/2020	12337 and 12341	Pretoria	Dr	N/A (Mid-block)	814446-600420	~40
377594	10/12/2020	12300 and 12304	Blakely	Ct	Shanandale Dr	814445-150160	~56

⁶ Gagne, Amanda, *Evaluation of Utility Pole Placement and the Impact on Crash Rates*, Worcester Polytechnic Institute Publications, April 23, 2008, <https://web.wpi.edu/Pubs/ETD/Available/etd-043008-155826/unrestricted/Gagne.pdf>, accessed Aug. 17, 2022. See pp. 64 – 65: “Another suggested remedy is remove old utility poles after they have been replaced or hit. At several points along the route old pole was left standing next to the replacement pole (see Figure 38), which increases the density of utility poles thereby increasing the risk of a crash occurring. Perhaps even more disturbing is remnants of a hit utility pole were left alongside the road creating another object for motorists to crash into, refer to Figure 39.”

radial safety clearance of up to 15 feet.⁷ This loss of tree foliage can adversely affect the aesthetic appearance of a residential property, and it can diminish the character of the neighborhood. It can result in loss of winter windbreaks, loss in summer shade, loss of tree canopy, and it can contribute to heat island effects, too.^{8, 9} And consequences of the loss of foliage can harm residents' health, seasonal comfort, and their ability to afford energy bills.¹⁰

Other threats posed by this ZTA include: pedestrian, school bus stop, and child-play hazards related to large ground-mounted equipment cabinets; disturbances from buzzing equipment boxes; declines in neighborhood quality associated with diminished aesthetics and graffiti, safety problems, and stigma; and reductions in home property values, which Montgomery County's own expert has affirmed.¹¹

⁷ Depending upon the voltage of the electrical service, PEPCO will remove foliage to provide a radial safety clearance of up to 15 feet from the cross arms and electrical lines. See PEPCO.COM FAQ: [How much will be trimmed from trees?](#)

⁸ Montgomery County Capital Budget FY23, [Street Tree Preservation](#)

⁹ Fenston, Jacob, *Volunteers Map Heat Islands In Montgomery County*, WAMU, DCist, Aug. 08, 2022, <https://dcist.com/story/22/08/08/volunteers-map-heat-islands-montgomery-county/>, accessed Aug. 17, 2022.

¹⁰ Montgomery County Capital Budget FY23, [Street Tree Preservation](#): "Winter windbreaks can lower heating costs by 10 to 20 percent, and summer shade can lower cooling costs by 15 to 35 percent."

¹¹ See the [Burgoyne Declaration \(Exhibit O, PDF pp.669 - 679\)](#), the substance of which was attached as an exhibit to filings made to the FCC, submitted on multiple dates, including the [Comments](#) that were submitted on 10/29/2019, by Montgomery County and likeminded localities. On that date, Montgomery County joined with communities and associations of local governments, that included: The National League of Cities; Clark County, Nevada; Cobb County, Georgia; Howard County, Maryland; Montgomery County, Maryland; the City of Ann Arbor, Michigan; The City of Arlington, Texas; the City of Bellevue, Washington; the City of Boston, Massachusetts; the City of Burlingame, California; the Town of Fairfax, California; the City of Gaithersburg, Maryland; the City of Greenbelt, Maryland; the Town of Hillsborough, California; the City of Kirkland, Washington; the City of Lincoln, Nebraska; the City of Los Angeles, California; the City of Monterey, California; the City of Myrtle Beach, South Carolina; the City of New York, New York; the City of Omaha, Nebraska; the City of Portland, Oregon; the City of San Bruno, California; the Michigan Coalition to Protect Public Rights-of-Way; the Texas Municipal League; and the Texas Coalition of Cities for Utility Issues.

The memo introducing ZTA 22-01 asserts that the ZTA aligns with regulations adopted through ZTA 19-07. That's false! There are technically different standards in ZTA 22-01 for the setback, which, unlike ZTA 19-07, fails to exclude any setback encroachments that are allowed under Section 4.1.7.B.5.¹² As a result, ZTA 22-01 provides fewer protections when homes have porches, bay windows, and other building encroachments.

In addition, ZTA 19-07 articulates a series of protections on the replacement utility poles and streetlight poles in the rights-of-way that are absent from ZTA 22-01, because, although ZTA 22-01 is dependent upon replacement street poles, it does not regulate them. Protections on the replacement street poles that ZTA 19-07 articulates include:

- A replacement pole must be at least 150 feet from the nearest antenna occupied or controlled by the same carrier.¹³
- Height restrictions on replacement utility poles require them to be no more than 10 feet taller than the pre-existing poles, including the height of the antenna attachments.¹⁴
- Height restrictions are imposed on replacement streetlight poles (which vary by zone and width of roadway), but the

¹² [Sec. 3.5.2.C.2.b.iii.](#) In the Agricultural, Rural Residential, and Residential zones, the pre-existing pole and the replacement tower must be at least 30 feet from any building intended for human occupation, excluding any setback encroachments allowed under Section [4.1.7.B.5.](#)

¹³ [Sec. 3.5.2.C.2.b.v\(e\)](#)

¹⁴ [Sec. 3.5.2.C.2.b.vii\(c\)](#)

height restrictions on replacement streetlight poles
subsume the height of the antenna attachments, too.¹⁵

- A pre-existing utility pole must be removed within 180 days of the replacement utility pole installation.¹⁶
- A pre-existing streetlight pole must be removed within 10 business days after activation of the replacement facility.¹⁷

But most importantly, the reason that ZTA 22-01 does not align with ZTA 19-07 is because, as Councilmember Riemer, the ZTA sponsor, is aware, utility poles are exempt from regulation by the zoning ordinance. This is infrastructure of State regulated utility companies that has sovereign immunity.¹⁸ And, by the way, Council Staff reminded the PHED Committee of the exemption for utility poles in the memorandum for the February 10, 2021 meeting.¹⁹ Mr. Riemer also knows, or he should know, that County and municipal infrastructure, including streetlight poles, is exempt through sovereign immunity, too.²⁰ Our County leaders have continued to present the public with confusing and inaccurate information about which poles ZTA 19-07

¹⁵ [Sec. 3.5.2.C.2.b.vii\(b\)](#): in the Agricultural, Rural Residential, and Residential zones, for streetlights, the height of the pole that is being replaced:

- (1) plus 6 feet when abutting a right-of-way with a paved section width of 65 feet or less, or up to 25 feet where the height of the pole being replaced is less than 20 feet tall, whichever is greater; or
- (2) plus 15 feet when abutting a right-of-way with a paved section width greater than 65 feet;

¹⁶ [Sec. 3.5.2.C.2.b.vi](#).

¹⁷ *Id.*

¹⁸ See MCC Chapter 8, [Sec. 8-1.\(d\) Exemptions](#) and [Sec. 8-1.\(f\) Zoning restrictions and referrals](#).

¹⁹ See the [Feb. 5, 2021 Staff memorandum to the PHED Committee](#), Sec. V(C), Utility Poles, pp. 9 -10. On pg. 10, the memo states, ZTA 19-07 applies to all replacement telecommunications towers and replacement utility poles that are no longer owned or used by a utility company.” Please note that utility poles that are no longer owned or used by a utility company are not utility poles; they are merely poles.

²⁰ See MCC Chapter 8, [Sec. 8-1.\(d\) Exemptions](#), [Sec. 8-1.\(f\) Zoning restrictions and referrals](#), and Editor’s note, containing County Attorney Opinion dated [7/29/98](#), which discusses the County’s sovereign immunity, and County Attorney Opinion dated [5/20/91](#), which discusses the sovereign immunity of the County and its municipalities.

applied to, and which ones were excluded.²¹ Essentially, the ZTA 19-07 limited use regulations that concern replacement-pole wireless facilities in the rights-of-way are impotent.

For the Racial Equity and Social (RESJ) Justice Statement on this ZTA, OLO evaluates health and safety impacts that are not discussed above.²² OLO recognizes the federal D.C. Circuit Appeals Court decision, in *Environmental Health Trust v. FCC*, in which the Court “finds that the Federal Communications Commission’s (FCC) claims about the health and environmental impacts of 5G technology are insufficient.”²³ And OLO recognizes that Appeals Court issued a remand, “ask[ing] the FCC to provide additional information to justify its claim that its current guidelines adequately protect against the harmful effects of exposure to radiofrequency radiation.”²⁴ To date, the FCC has not provided the information that the Court requested and that the public deserves.

Unfortunately, the setback impacts were never evaluated by OLO for its RESJ Statement.²⁵ Data show that, compared to the County’s

²¹The reminder of the exemption for utility poles did not stop Mr. Riemer from continuing to assert that ZTA 19-07 would apply to utility poles. In that [meeting on February 10th](#), beginning at approximately minute mark 50, Mr. Riemer presented a series of slides of maps of neighborhoods that he characterized as “case studies.” In these slides he depicted utility poles and streetlight poles in the rights-of-way to demonstrate how applying setbacks with ZTA 19-07 would affect opportunities for wireless coverage. And slides identified that he was referencing the [AntennaZTA website](#).

Verification through the AntennaZTA website and GoogleMaps of the case study neighborhoods displayed confirms ownership of the street poles as follows: in Montgomery Knolls and Franklin Knolls, Silver Spring street poles are Pepco utility poles; in Greenwood Knolls, Wheaton, street poles are Pepco utility poles; in Kenwood Park, Bethesda, street poles are Pepco utility poles; in Takoma Park with the adjacent right-of-way in Silver Spring, the street poles are Pepco utility poles and a few City streetlight poles; and in Westleigh, North Potomac, the street poles are County streetlight poles and some Pepco utility poles. **All of the street poles that Mr. Riemer referenced in the slides that he displayed were exempt from the regulations in ZTA 19-07.**

²² [Racial Equity and Social Justice \(RESJ\) Zoning Text Amendment Statement on ZTA 22-01: Antenna on Existing Structure — Use Standards, completed by the Office of Legislative Oversight on March 14, 2022](#)

²³ *Id.*

²⁴ *Id.*

²⁵According to an e-mail message sent to Sue Present, on September 1, 2022, by Chris Cihlar Ph.D., Director, Office of Legislative Oversight, OLO conducted a Racial Equity and Social Justice evaluation that culminated in a neutral statement concerning Racial Equity and Social Justice impacts of ZTA 22-01. With its limited time and resources

population at large, persons of color and residents with lower incomes more frequently live in the zones that are affected by this ZTA.²⁶ Their populations tend to be concentrated in areas where homes are on smaller lots and have shorter front-foot setbacks.²⁷ Thus, the harmful effects posed by ZTA 22-01 would have disparate adverse impacts on these residents. The Council should be protecting these residents, not adopting legislation that effectively targets and threatens them with harm.

ZTA 22-01 is unnecessary to meet the law. And it is unnecessary to provide residents with reliable 4G and 5G services. This ZTA does nothing to prioritize or incentivize attachments on poles in the non-residential zones over residential zones; and this ZTA does nothing to prioritize or incentivize attachments on poles on the high speed, high volume roadways over our neighborhood streets and other sensitive locations. ZTA 22-01 does offer perverse incentives for providers to pepper our neighborhoods with antenna attachments on street poles. With the application reviews, permitting, and installations for these antenna facilities being relatively cheap, quick, and easy, and with the process bypassing requirements for notices to residents and opportunities for public comments, this ZTA generates incentives to site antenna facilities with less thought, care, and oversight for residents and neighborhoods than other siting processes do, such as those that require an OZAH review.

Simply put, passage of ZTA 22-01 would be a financial coup for the wireless industry, but a big, big loss for residents and neighborhoods.

available, OLO chose to evaluate the merits of 5G for that Statement; OLO did not evaluate the impacts of the ZTA's setback reduction.

²⁶ M-NCPPC [Equity Focus Areas map](#) combined with [MCAtlas \(zoning\)](#)

²⁷ *Id.*

With ZTA 22-01 we lose safety, comfort, health, income, aesthetics, home values, neighborhood quality, and opportunities for due process. And those who would particularly lose out with ZTA 22-01 are persons of color and residents with lower incomes. Residents were hoodwinked by Mr. Riemer's previous small cell legislation. And now ZTA 22-01 is a lame attempt at a cover-up, with promotional messaging that has been deceitful.

For those of you whose names were on the ballot in the recent Primary election, please demonstrate the trusted leadership and integrity that we heard about during your political campaigns. And to those of you who have maxed out your service on the Council, I urge you to not to let your action on ZTA 22-01 besmirch your final days on the Council. Don't leave us with threats of antenna facilities on our neighborhood street poles.

Reject ZTA 22-01! Thank you.

Attachment: "Say NO to Zoning Text Amendment 22-01" (PPT) 

September 8, 2022

Dear Council President and Members,

Please submit this testimony into the OFFICIAL RECORD opposing ZTA 22-01 and reply to confirm that it has been added thereto.

I attest and affirm that the following statements are true and accurate within my personal knowledge.

Principles for Finding Common Ground: Please read my testimony and consider it in your discussions and actions regarding Zoning Text Amendment (ZTA) 22-01. Many, if not all of you, consider yourself to be concerned about protecting the environment. Let's start by taking inspiration from an environmental icon, Jane Goodall, as to guiding principles for how to approach issues. In a recent book, she offers three principles: wisdom, direct experience, and compassion.¹ Wisdom is more than information and knowledge, it also involves the heart. Approach an issue with knowledge and heart, have direct experience with or connect with people who have direct experience with the issue, and show compassion. I propose we take these principles to listen and open your hearts and minds as you approach the issues of ZTA 22-01 and wireless technologies.

Listening To All Residents: Do you wonder why Marc Elrich was elected and recently re-elected in spite of an openly hostile and antagonistic Council, endorsements and accolades by the Washington Post for his opponents, and many millions of dollars advertising for his opponents funded by PACs and personal finances? It is because he has heart. He is a person before he is a politician. He listens to residents. He cares about their cares. He doesn't disparage residents, he doesn't try to bully or accuse residents he disagrees with of being conspiracy theorists or of spreading false information by KGB.² He listened to residents in response to ZTA 19-07 and offered moderate solutions that were rejected by the Council³

It's time that this Council listens to all its residents, welcomes their information, meets with them, and seeks solutions to address their needs. This means setting aside politics, previous policy positions, friendships and alliances with fellow Councilmembers, and being curious to learn why people like me and so many others are so opposed to ZTA 22-01 and MoCo's approach to wireless technologies. We are interested in finding safe and fair solutions for modern internet and technology in Montgomery County and near our homes. Do not disparage

¹ Goodall and Abrams, *The Book of Hope*, Celadon Books, New York, NY, 2021

² Council Meetings on ZTA 19-07 on June 29, and in July 13, July 20th, 2021 and NPR radio interview on July 17th, 2021.

³ See County Executive Elrich's Memo of July 5th and Amendments submitted to Council July 20th, 2021.

us, do not bully us with name calling, do not ignore us or our information or our proposed solutions.

Many, if not nearly all of you, have refused to meet with residents regarding 19-07 and now 22-01. County staff estimated that there are 32,000 existing poles with setbacks between 30 and 60 feet.⁴ Thus ZTA 22-01 could affect hundreds of thousands of residents across MoCo. And yet, all of these lives are dismissed as “an administrative adjustment”.

Why would I spend my time devoted to this issue rather than on professional and family projects? I purchased my home here, have lived in Montgomery County for over 30 years and raised my children here while they attended public schools. We are settled in our neighborhood, we trusted Montgomery County, so we decided to age in place.⁵ And yet, if you continue with 22-01 and policies of 19-07, none of us, including families with young children, will be able to live in our homes. How can we be uprooted? Where would the resources come from?

Why is the Council so resistant to resident input on wireless? I am frequently asked: “Why is the Council ignoring you? Why are they resistant to science and information? Why won’t they meet with you?” So, I ask you all, “Why is it you ignore us”? Where is your interest in Open Meetings? In transparency? In resident responsiveness? In the People’s Counsel? In caring about our health, the environment, trees, wildlife, birds, bees, pollinators? Racial Justice and Social Equity? Bridging the digital divide? I know you profess to care about these issues, so why don’t you want to learn more about threats to these cherished values from your ZTAs?

The lead champion of ZTA 19-07 and 22-01 has said that in his whole political career, he has never seen such an outpouring of resident resistance on an issue as with these cell tower Amendments.⁶ It has been 6 years in the making and resident opposition is not abating, if anything it is bolstered by recent Court cases and intensifying. You are on the wrong side of history, but we will pay with our health for your policies if they continue to ignore the legal and scientific evidence on wireless technology.

So why do you not want to even meet with us? Perhaps it is because of industry advertising and lobbying. The wireless industry is estimated to be as much as a \$4-5 trillion worldwide industry. Anyone who watches TV is bombarded with ads for 5G, seemingly every 2 minutes. 5G is the future, 5G is cool, 5G is the way to connect to be modern?. Who doesn’t love or at least depend

⁴ See page 3, “setback”

https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210310/20210310_PHED2.pdf

⁵ I understand that the lead sponsor in pre-election debates indicated that he does not favor the County’s long standing principle in its Master Plan—aging in place. Sounds like us elders are disposable and are being relegated to institutional living. And who will pay for that? How do our costs of institutional living figure into your cost/benefit analyses for MoCo?

⁶ Council Meetings on ZTA 19-07 on June 29, and in July 2021.

on their laptops, cell phones, tablets, and other devices to function in this world? Who wouldn't want to be up-to-date with the latest technology? And then there is the lure of political success, the lobbyists who sponsor conferences, offer positions on their committees, and perhaps might even offer future job possibilities. Harvard cites the Federal Communications Commission (FCC) as a "captured agency dominated by the industries it is supposed to be regulating."⁷

Are you not skeptical? Do you not want to know the "other" side? Haven't we learned the obvious from the tobacco and opioid debacles that we cannot depend on industry-funded "research" or advertising. This is not conspiracy theory, it is rational analysis of understanding what are the motivations behind actions and perspectives. A systematic review found that 82% of radiofrequency studies that were independently funded or funded by governments found negative health effects from mobile phones. However, only 33% of studies funded by industry found negative effects.⁸

Council Responsibilities and Process: Looking at the Council's voting on ZTA 19-07, it seems that several Councilmembers had doubts about the County's wireless ZTAs and this ambivalence was evidenced by fluctuating voting. I urge all of you on the Council to listen to and vote your conscience and not be swayed by the voices and surrogates for the wireless industry or any political allegiances. The information below on some of the legal and scientific issues should at least give you pause. Think of the cell towers near children in stand-alone pre-schools and nursery schools as well as in churches and synagogues and on or near public schools. Each of you is responsible for the consequences of your actions. The Councilmembers took an oath of office to both uphold the Constitution and the laws of Maryland. Your oath and the imbedded ethical values both demand that you take very seriously the risks of imposing harm on residents.⁹

The statements made by Councilmembers immediately before the vote on ZTA 19-07 were that there is no evidence of risks of harm to human health and if there was, we would know from our government agencies (see legal below). Further, other Councilmembers, also pushing for a vote just weeks before an expected major Court decision, said if anything new came from the Court decision, the Council would amend the ZTA.¹⁰ In fact, 2.5 weeks later the Court had significant rulings pertinent to safety of cell towers and wireless technologies. However, during the Council's first Town hall (remote) when they returned in September after August recess, no questions on cell towers were addressed. Later we were told by the county staff person managing the events that the Council had informed them that the Council would not be accepting or addressing any questions on cell towers or 19-07. During the Council meetings in the spring of 2021 leading up to the vote on July 27th, there was no meaningful public

⁷ https://ethics.harvard.edu/files/center-for-ethics/files/capturedagency_alster.pdf

⁸ <https://www.ncbi.nlm.nih.gov/pmc/articles/PMC1797826/>

⁹ Councilmembers cannot rely on a defense of relying on others; they have individual responsibility for their own actions.

¹⁰ July 27th MoCo Council meeting.

discussions. In the Council meetings after reconvening in the fall of 2021 during Zoom Council meetings, town halls, and most debates, chats on zoom call were controlled so only “approved” chats and Q & As were visible to others and addressed. Add to this that offices were closed because of COVID restrictions, calls being answered by voicemail, and even when contact could be made with a staffer, requests for phone calls or remote meetings with Council members were widely refused. Is this inclusive democracy by our once esteemed County Council?

Landmark Court Ruling Against the FCC and its outdated exposure standards for wireless technologies: On August 13, 2021 (2.5 weeks after the Council pushed through a vote on 19-07) the U.S. Court of Appeals for the D.C. Circuit ruled in favor of Environmental Health Trust et al. as follows: The Federal Communications Commission (FCC) violated federal law (the Administrative Procedures Act, or APA) and was “capricious and arbitrary” by failing to provide a “reasoned explanation” for deciding that its wireless radiation exposure limits do not need updating, even though these limits have not been reviewed since 1996. The Food and Drug Administration (FDA) has not provided an “articulation of the factual... bases” for its conclusions, which “represent[s] a failure by the FDA”, and therefore the FCC cannot rely upon FDA webpage FAQs on cell phone safety. All other expert agencies in the federal government have been silent on the question of safety, and “silence does not even indicate whether the expert agencies... considered any of the evidence”. The Court ordered FCC to “provide a reasoned explanation for its decision” and to address the impacts of RF radiation on children and the environment. FCC has not yet complied with this order.

Additional background regarding the EH Trust decision: Petitioners submitted over 11,000 pages of scientific evidence indicating health effects of wireless radiation exposure at levels below FCC’s current limits. FCC is required to set exposure limits to protect public health, but it is not a health agency and must rely on other expert agencies’ analyses (which have not been done). The Federal Drug Administration (FDA) acknowledges that it has not made any determination about the safety of cell towers.^{11, 12, 13}

More specifically, the Court found that the FCC did not provide evidence of properly examining evidence such as the testimony of persons injured by wireless radiation and impacts from long-term wireless exposure and impacts to children, the developing brain, the reproductive system and wildlife and the environment.

¹¹ See letter dated January 11, 2022, from FDA Center for Devices and Radiological Health https://ehtrust.org/wp-content/uploads/FCC_FDA-Communications-FCC-Lawyer-and-Mother-on-Cell-Tower-Radiation-.pdf

¹² See public comments by local resident groups regarding Montgomery County's reliance on FDA statements: <https://www.regulations.gov/comment/FDA-2021-P-1347-0732>

¹³ This section is from Background Information on candidate pledge document produced by residents <https://techwisemocomd.org/wp-content/uploads/2022/07/Voter-Guide2.pdf> and <https://ehtrust.org/>

The FCC must now re-examine the submissions on their record. The Court specifically ordered the FCC to provide a reasoned explanation for the above issues as well as the ubiquity of wireless devices and the technological developments since the FCC last updated its guidelines.

ZTA 22-01 Does not meet standards of Racial Equity and Social Justice (RESJ) —22-01 is another step towards widening the digital divide: RESJ impact statements are challenging to produce and the initial Statement or assessment of 22-01 noted “... if the reduced set back requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity.”¹⁴ The Statement on the effect on the digital divide relied heavily on a report that was almost entirely based on industry-funded information.¹⁵

Compared to wireless from cell antennas and towers, wired broadband is less costly, more reliable, more secure, faster, and supports wireless in homes at resident discretion. Angela Siefer, Executive Director of the National Digital Inclusion Alliance (which represents over 850 affiliates in 48 states)¹, testified to the U.S. Congress in 2020 on this topic: “The excitement around 5G has led to claims 5G will solve the digital divide. It will not.”¹⁷

Furthermore, the Statement did not address social justice and the disparate effects by age, gender and disability status.¹⁸ “Researchers at the Environmental Working Group, a respected nonprofit, have called for child exposure levels 200-400 times lower than the current FCC limits.¹⁹ The bones of children's skulls are not as fully developed as adults, leaving their developing brains more vulnerable.²⁰ In a study by Santini, women living near cell towers were much more likely to report adverse health outcomes than men.²¹ Further data estimate prevalence of electro sensitivity (ES) as recognized by the Americans with Disabilities Act (ADA) suggest cell towers closer to homes, enabled by 22-01, could result in adverse health outcomes in up to 30% of the population, and cause a constructive eviction in 0.65% of the population –

¹⁴ <https://www.montgomerycountymd.gov/OLO/Resources/Files/resjis/ZTA/2022/ZTA22-01.pdf>

¹⁵ The Brookings Report was funded by T-Mobile, the author was chair of an industry –funded organization. Brookings has received significant industry funding with donors including AT&T T-Mobile, Verizon, Google. <https://www.brookings.edu/research/enabling-opportunities-5g-the-internet-of-things-and-communities-of-color/>; https://www.brookings.edu/wp-content/uploads/2016/11/turner_lee_cv_december-2016.pdf; <http://www.tprcweb.com/past-board-members/>; <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>; https://www.brookings.edu/wp-content/uploads/2022/02/brookings_contributorslist_fy2022.pdf

¹⁷ <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf>;

<https://www.racialequitytools.org/glossary>

¹⁸ <https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/RacialEquity/Bill27-19.pdf>;

https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-118171.

¹⁹ <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-021-00768-1>

²⁰ <https://www.marylandmatters.org/2021/07/23/opinion-children-deserve-safety-assurances-when-it-comes-to-cellphone-radiation/>

²¹ See Table 2-<https://www.tandfonline.com/doi/abs/10.1081/jbc-120020353>

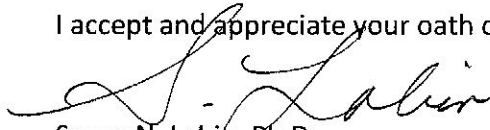
this is approximately 7,000 people in Montgomery County alone being forced to flee their homes.”

Request for Council Action: Let the new Council take up the issue of 22-01. The very existence of 22-01 indicates the complexity of the Zoning Codes related to wireless facilities and the need for a thorough analysis of such codes. This would also allow time for a more thorough RESJ impact assessment, and Environmental and Climate as well as Economic Impact assessments. Attempting to push through 22-01 as “an administrative” change is not only contrary to goals of transparency, but is dangerously pernicious. There is no legal justification requiring 22-01.²³ If the Council persists in considering 22-01 this session, it should at least schedule a nighttime hearing so the many people on the wait list can be given an opportunity to provide verbal testimony. Let the Council and community hear the voices of the residents. If the Council persists, let the PHED Committee refrain from bringing the amendment to the Council for a vote. If the Committee persists, we urge Councilmembers to vote “NO” on 22-01.

CLOSING

I have presented no matter of mere “concern” or any other non-substantive matter, but solely matters of substance, of fact, and law.

I accept and appreciate your oath of office.



Susan N. Labin, Ph.D.

Submitted September 8, 2022 11:30 am.

²³ There were legal justifications presented for ZTA 19-07 “We don’t feel that we can put up roadblocks even if we wanted to because federal action has been very clear as to what the expectation is.” (Riemer, Council meeting June 29th). However, the Courts have been very clear that the County maintains its rights to regulate the location of towers. Numerous other municipalities have passed zoning codes compliant with federal law, such as San Rafael, CA. which are far more protective of residential areas (<https://www.cityofsanrafael.org/documents/resolution-14621/>)(<https://www.cityofsanrafael.org/documents/resolution-14621/>). Also see an example municipal ordinance that is FCC compliant and the proposed alternative approach by County Executive Elrich in his memo dated July 15, 2021. The assertion that the County was required to implement ZTA 19-07 was based on an incorrect assessment about the ability of federal executive agencies to override legislation by Congress as well as appellate court precedent. The City of Portland case dealt with Section 235 of the telecom act and how applications are processed; that case did nothing to change the interpretation of The Telecommunications Act of 1996, Section 332c7B(i)(II), which preserves the long-held right of state and local jurisdictions over zoning authority and tower location (<https://drive.google.com/file/d/1ISfUHqk2vQxoiXZqFLyhh-3mJZD9RJjb/view>).

Hello, my name is Susan Labin. Thank you for the opportunity to speak to you today. I am speaking as a long-time resident of Montgomery County in opposition to Zoning Text Amendment (ZTA) 22-01.

I have 6 issues for you today:

1. I ask each Councilmember to consider whether you are acting as Public servant or as politician positioning for your next job or committee assignment?
2. Is this another industry debacle like tobacco and opioid travesties, but even larger? How do the lobbyists and the constant barrage of 5G advertising affect you?
3. You are accountable to your conscience and for upholding your oath of office. You do not have to agree with us, but you do have a fiduciary duty to find solutions that respect residents' interests. Rather than treating us as obstacles, think of us as your resources and partners.
4. The US Court of Appeals for the DC Circuit last year resoundingly ruled for Environmental Trust et.al., against the FCC. It called the FCC "arbitrary and capricious" in failing to consider the vast amount of scientific evidence on the negative effects of wireless technologies on humans, children, and the environment. I urge the Council not to act in same manner. The court clarified that no federal agency has ever reviewed the body of scientific evidence on cell towers.
5. What problem are you solving? Wired internet is almost universally available in MoCo. Wired is about 50 x less costly, far faster, more reliable, more secure, uses less energy, and allows for wireless in one's home. Where are the County's Climate and Economic assessments? As per congressional testimony: "... 5G will **not** solve the digital divide".
6. As for social justice, 22-01 will disproportionately affect the vulnerable: Electro Sensitivity is a medical diagnosis protected by ADA. What about the County's legal exposure for costs from dislocation, harm, and even death for thousands of residents?

Hundreds of thousands of residents may be affected by 22-01-this is not a trivial "administrative" correction.

VOTE your conscience: CANCEL all action or VOTE NO on 22-01.

Dear Council President Alborno and Members of the County Council,

I am opposed to ZTA 22-01.

Please add this to the official testimony for opposition to ZTA-2201.

I urge you and the entire Council to cancel all action on ZTA 22-01 this fall. Instead, allow the incoming Council to consider changes to the zoning code.

Last summer while Montgomery County residents were trying to survive a pandemic, Mr. Riemer's PHED Committee added radical amendments to their ZTA 19-07 offering up incredible handouts and concessions just to benefit wireless corporations (and ignoring opposition testimony of dozens of residents). Those amendments included lopsided procedures and low-ball fees for conditional use hearings.

There is no FCC or federal requirement, no plausible legal justification, for ZTA 22-01. ZTA 22-01's purpose is yet another gratuitous handout to the wireless industry.

The Montgomery County Council needs to stop reciting pro-wireless bias narratives that rubber-stamp and cheerlead the interests of telecom corporations. What is preempted is an actual moratorium that's specific to wireless — for which Montgomery County is NOT GUILTY!

What the County's attorneys continue to advise Councilmembers cannot be squared with what the FCC told the Supreme Court! The **FCC never concluded that every limitation on any covered service is effectively prohibitory** — and told that to the Supreme Court! In addition, the FCC stated that ***“[n]othing in the Small Cell Order suggests that wireless carriers may ‘construct any and all towers,’ or small cells, that they ‘deem [...] necessary’ in their ‘business judgment.’*** In addition, the Commission did not conclude that every limitation on any covered service is effectively prohibitory. See the DETAILS of what a Montgomery County resident researched and presented as to why it is wrong to construe that the small cell order implies that localities may never constrain a carrier's preferences.

https://drive.google.com/file/d/1_M410pm3umwW99oG7duUecbw8BvGOJsQ/view?usp=sharing

The County is recklessly and fecklessly devoted to giving maximum locations to wireless facilities AS IF doing so is law — all the while falsely alleging legal consequences when, in fact, ***“there is not a shred of evidence in the legislative history suggesting that . . . Congress intended plaintiffs to be able to recover damages and attorney's fees.”*** See the DETAILS of what a resident researched and presented about the history of City of Rancho Palos Verdes v. Abrams all the way up to the Supreme Court. Review this comprehensive look at why a telecom company can NOT sue a local jurisdiction for damages. Enforcing violations of **§332(c)(7) would undermine the policies that the Telecommunications Act (TCA) reflects!** Researched by a Montgomery County resident:

<https://drive.google.com/file/d/16ADxPEmDZAdQy6yAUUJbfZYXLuXts91Z/view?usp=sharing>

Additionally reflective of the TCA is that streaming videos, viewing online movies, sending/receiving emails, browsing the Internet, and engaging in tele-medicine are NOT part of “personal wireless service” or even a telecommunications service and the preemptive provisions in 47 U.S.C. 253 and 332(c)(7). The Telecommunications Act's **(TCA) 47 U.S.C. 253 and 332(c)(7) do not apply to these aforementioned services in isolation.**

A coverage gap analysis is all about voice service — NOT any perceived need to expand the aforementioned data services. Coverage required is for outdoor, wireless phone calls (which require up to “5 bars” of telecommunication service). As per the FCC itself, coverage is ***“outdoors and stationary. It is not meant to reflect where service is available when a user is indoors or in a moving vehicle.”*** —

— <https://www.fcc.gov/BroadbandData/MobileMaps/mobile-map>

WHY is it that the following has not dawned on the Montgomery County Council — that it's ***exceedingly unlikely*** that the US Congress in 1996 intended for the US population to be sickened, injured, and die from the profoundly deleterious effects of RF/EMF 24/7/365 where we live, work, and play ***in order to*** allow the wireless industry to maximize its profits???

The Council's own staff, in its Racial Equity and Social Justice impact statement on ZTA 22-01, did not find that 22-01 would have a positive net impact on racial equity or social justice in the County. And that was after relying on a “report” that was “generously” supported by T-Mobile. At the same time, they noted that “if the reduced set back requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity.” The statement did not even consider the social justice impacts of close proximity towers on vulnerable populations. (Please see additional racial equity information in the addendum.)

The Council has yet to respond substantively to the FCC's court loss in EHT et al. v. FCC (2021) and other recent case law such as Extenet v. Flower Hill (2022)¹. In the EHT case, a federal appeals court ruled that it was illegal for the FCC to rely upon FDA webpages in its decision-making, because FDA has not provided “factual bases” for its webpage. Why then does the Council believe that it can rely on these same webpages? In addition to threatening residents' health and promoting inequity, ZTA 22-01 will further increase tree loss, harms to vegetation, birds, and insects as a result of proliferation of pole mounted wireless facilities.

I urge the entire Council to rescind ZTA 19-07 and to press FCC (in light of FCC's court loss in EHT et al. v. FCC), based on a thorough review of ALL the science, to issue a well-reasoned explanation for new exposure limits that are truly protective; AND I urge the entire Council to cancel all action on ZTA 22-01.

Sincerely,

V Bailey

Silver Spring, MD

¹ **ExteNet v Flower Hill is a treasure trove of case cites of all of the case law that Council has ignored.** This New York District Court's decision from late July will undoubtedly be influential to other circuit courts.

ExteNet Sys. v. Vill. of Flower Hill, No. 19-CV-5588-FB-VMS (E.D.N.Y. Jul. 29, 2022) —

<https://casetext.com/case/extenet-sys-v-vill-of-flower-hill>

The District Court affirmed the following:

>>> that the lack of a gap in coverage is relevant here and can constitute substantial evidence justifying denial of a permit

>>> that the FCC's 2018 [small cell] ruling exceeds the scope of the TCA that only covers the provision of wireless telephone service access to a telephone network because the TCA requires an application for a wireless facility be the least intrusive means for closing a significant gap in a remote user's ability to reach a cell site that provides **access to land-lines**

>>> that because the TCA is not in question — that there's no small cell entitlement to which to legally give deference — as per one of the most-cited cases on the basic standards of review of agency statutory interpretation; by not substituting its own construction of the [plain statutory language of the TCA] and the phrase, “personal wireless services” — the Court affirmed that the [TCA] is not in question

>>> that even though ExteNet focused on the lack of need for improved 4G LTE coverage — and that **improved capacity and speed** are desirable (and, no doubt, profitable) goals in the age of smartphones — they **are not protected by the Act**

In asserting the above, the District Court's decision reveals a volume of former decisions and precedents with case law that is quite clear — IF IT'S READ:

>>>> “... the FCC's [small cell] ruling is [NOT] entitled to deference under *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984) [because] Chevron deference applies only when the [TCA] statute in question is silent or ambiguous [or in question]. Although the Second Circuit found the phrase “personal wireless services” “opaque,” it ultimately relied on “[t]he plain statutory language” [of the TCA] to define it. Therefore, the **phrase was not ambiguous.**” — citing *Chevron U.S.A., Inc. v. Nat. Res. Def. Council, Inc.*, 467 U.S. 837 (1984) — as per <https://casetext.com/case/chevron-inc-v-natural-resources-defense-council-inc-american-iron-and-steel-institute-v-natural-resources-defense-council-inc-ruckelshaus-v-natural-resources-defense-council-inc>

>>>> “A gap in 4G coverage does not establish that the target area is underserved by voice cellular telephone service.” — as per *Crown Castle NG East LLC v. Town of Hempstead*, 2018 WL 6605857, at *9 (E.D.N.Y. Dec. 17, 2018) — <https://casetext.com/case/crown-castle-ng-e-llc-v-town-of-hempstead-1>

>>>> “We hold only that the Act's ban on prohibiting personal wireless services precludes denying an application for a facility that is the least intrusive means for closing a significant gap in a remote user's ability to reach a cell site that provides access to land-lines.” — as per *Willloth*, 176 F.3d at 643 — <https://casetext.com/case/sprint-spectrum-v-willoth#p643>

which means

>>>> “. . . local governments must allow service providers to fill gaps in the ability of wireless telephones to have access to land-lines” — as per *Sprint Spectrum L.P. v. Willloth*, 176 F.3d 630 (2d Cir. 1999) — <https://casetext.com/case/sprint-spectrum-v-willoth>

>>>> ***"It is not up to the FCC to construe the [Act] to say something it does not say, nor up to the Court to find broadband communication encompassed by the law."*** — as per Clear Wireless LLC v. Bldg. Dep't of Vill. of Lynbrook, 2012 WL 826749, at *9 (E.D.N.Y. Mar. 8, 2012) — <https://casetext.com/case/clear-wireless-llc-v-bldg-dept-of-the-village-of-lynbrook#p9>

>>>> ***"If the Court finds that even one reason given for the denial is supported by substantial evidence, the decision of the local zoning body cannot be disturbed."*** — as per T-Mobile Ne. LLC v. Town of Islip, 893 F.Supp.2d 338, 355 (E.D.N.Y. 2012 - <https://casetext.com/case/tmobile-ne-llc-v-town-of-islip#p355>

>>>> ***[The TCA] "strikes a balance between two competing aims — to facilitate nationally the growth of wireless telephone service and to maintain substantial local control over siting of towers."*** — as per Omnipoint Communications v. White Plains, 430 F.3d 529 (2d Cir. 2005) — <https://casetext.com/case/omnipoint-communications-v-white-plains#p531>

>>>> ***"The [1996 Telecommunications] Act provides ... that "[n]othing in this section affects the authority of a State or local government to manage the public rights-of-way . . . , on a competitively neutral and nondiscriminatory basis[.]"*** — as per the preemptive effect of the TCA's 47 U.S.C. § 253(a) — <https://casetext.com/statute/united-states-code/title-47-telecommunications/chapter-5-wire-or-radio-communication/subchapter-ii-common-carriers/part-ii-development-of-competitive-markets/section-253-removal-of-barriers-to-entry>

Addendum:

The below slides are excerpted from a report by Montgomery County Residents. The entire report can be found here: <https://techwisemocomd.org/2022/09/05/project-wtf-no-to-zta-22-01/>

ZTA 22-01 DOES NOT PROVIDE RACIAL EQUITY AND SOCIAL JUSTICE*

ZTA 22-01 takes aim at the rights-of-ways in residential zones that abut homes that are on smaller lots and have shorter setbacks.

Persons of color and persons of low and modest incomes live in these homes with greater frequency than the County population at large.

**According to Chris Cihlar Ph.D., Director, Office of Legislative Oversight, his office conducted a Racial Equity and Social Justice evaluation that culminated in a neutral statement concerning Racial Equity and Social Justice impacts of ZTA 22-01. OLO evaluated the merits of 5G for that Statement; OLO did not evaluate the impacts of the ZTA's setback reduction.*

9/5/2022

PROJECT WTF - A public information series provided by Montgomery County Resident Advocates

Continues...

ZTA 22-01 MOST INJURES THE PERSONS AND COMMUNITIES THAT RACIAL EQUITY AND SOCIAL JUSTICE LEGISLATION AIMS TO PROTECT

Persons of color and residents with lower-incomes are particularly at risk for the adverse effects of ZTA 22-01. They tend to live in affected areas more frequently than the County population at large, in homes on smaller parcels and with shorter front foot setbacks. Where the ZTA 22-01 setback reductions apply in neighborhood rights-of-way, State and federal laws are triggered that concern utility installations for attachments, and that pre-empt County regulatory protection.

- FCC "Make Ready" rules require the County to issue a right-of-way permit for a larger-girth, taller replacement pole. Pole authorizations are often issued months in advance of when the applications for the wireless antenna facility applications are submitted and reviewed. This can leave residents with thicker and taller replaced poles, even when the wireless applications are later rejected, withdrawn, or placed on indefinite hold.
- The County cannot restrict the height of the replacement utility poles for antenna attachments. Some replacement poles have already been approximately 70 feet tall!
- The County cannot set time limits for the removal of the pre-existing utility poles, when the new thicker and taller poles are installed. As a result, the old poles can languish next to the replacement poles for years, resulting in double poles, which are hazardous and eyesores.
- The County cannot restrict PEPCO's tree foliage removal, done for safety when poles and electrical wires are increased in height. Tree foliage is also removed when it impedes antennas' "line of sight" transmission. But foliage removal, particularly when aggressive, can deleteriously impact residents' immediate comfort, health, finances, well-being, and the removal can have longer-term adverse impacts upon properties and neighborhoods.

9/5/2022

PROJECT WIT - A public information series provided by Montgomery County Resident Advocates

HOTTEST AREAS ARE OFTEN LOW INCOME COMMUNITIES AND COMMUNITIES WHERE MORE RESIDENTS OF COLOR LIVE*

Tree foliage removal poses disparate and significant adverse impacts of ZTA 22-01 upon residents who are persons of color and residents with lower incomes. And the consequences of these adverse disparate impacts can include diminished health, comfort, and excessive utility bills.

Foliage is removed from trees in the rights-of-way and on private properties that are in close proximity to the replacement taller pole and re-attached electrical wires, for safety. Tree foliage in rights-of-way that presents line-of-sight obstructions for providers' antenna networks is also removed so that antennas can communicate effectively with each other.

Foliage removal can result in loss of winter windbreaks, loss in summer shade, loss of tree canopy, and it can contribute to heat island effects, too. Loss of tree foliage can also adversely affect residential property aesthetics and diminish the character of the neighborhood.


* See: [Volunteers Map Heat Islands In Montgomery County](#)

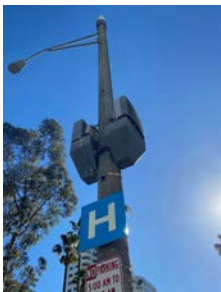
9/5/2022

PROJECT WIT - A public information series provided by Montgomery County Resident Advocates

Testimony Submitted to the Montgomery County Council Showing Property Value Will Drop from ZTA 22-01

by Zena Carmel-Jessup, Silver Spring Maryland

	<p>Research referenced by Montgomery County itself shows loss of property value from wireless antenna facilities in front of homes! Cell antennas 30 feet from homes will impact the property value of homes sitting right in front of the tower!</p> <p>(Content taken from Environmental Health Trust Property Value Devaluation from Cell Antennas)</p> <p>Montgomery County Own Legal filings state property values will drop from small cells.</p> <p>"many deployments of small cells could affect property values, with significant potential effect..." - Legal filing by Montgomery County Maryland and other Cities, 4/7/2017, Docket No. 16-421, Reply Comments of Smart Communities Siting Coalition which includes Montgomery County</p> <p>"Considering that the Smart Communities' prior filings show that the addition of facilities of this size diminish property values, it is strange for the Commission to assume that approval can be granted in the regulatory blink of an eye....A good example lies in the Commission's discussion of undergrounding.⁶² The Commission at once appears to recognize that communities spend millions of dollars on undergrounding projects, and that allowing poles to go up in areas where poles have been taken down has significant impacts on aesthetics (not to mention property values)."</p> <p>- Ex Parte Submission from lawyers representing Montgomery County . Letter to Ms. Marlene H. Dortch, Secretary Federal Communications Commission September 19, 2018</p> <p>Realtors state property values will drop</p> <ul style="list-style-type: none">● Realtor Magazine: Cell Towers, Antennas Problematic for Buyers "An overwhelming 94 percent of home buyers and renters surveyed by the National Institute for Science, Law & Public Policy
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(NISLAPP) say they are less interested and would pay less for a property located near a cell tower or antenna. What's more, of the 1,000 survey respondents, 79 percent said that under no circumstances would they ever purchase or rent a property within a few blocks of a cell tower or antennas, and almost 90 percent said they were concerned about the increasing number of cell towers and antennas in their residential neighborhood."

- National Association of REALTORS Magazine ["Homeowners Complain About 'Ugly' 5G Boxes in Their Yards"](#) January 27, 2021
"Wireless companies are installing boxes in front of homes as part of their 5G network rollout. But homeowners aren't pleased, **calling the chest freezer-sized boxes a big eyesore in their front yards.**"
- [A Field Guide to Cell Towers, The National Association of Realtors](#)
 - This field guide lists numerous publications **indicating wildlife effects as well as human health risks and impacts to property values** from the aesthetics and perceived health implications.
- The California Association of Realtors' Property Sellers Questionnaire **specifically lists "cell towers" on the disclosure form for sellers of real estate.** The seller must note "neighborhood noise, nuisance or other problems from.." and includes cell towers and high voltage transmission lines on the long list problems. [Click here to see the California Association of Realtors' Property Sellers Questionnaire](#) (p. 3-4 under K. Neighborhood)

Studies Show Cell Antennas Near Homes Drop Property Values from 7% to 20%

- [The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods](#) study found that buyers would pay as much as 20 percent less, as determined at that time by an opinion survey in addition to a sales price analysis.
- [The Disamenity Value of Cellular Phone Towers on Home Prices in Savannah, Georgia](#) (The Empirical Economics Letters, Aug. 2019) found proximity to cell phone towers can reduce selling price up to 7.6%.

Numerous articles state property value will drop

- "Cellphone towers bring extra tax revenue and better reception to a section of the city, but many are skeptical because of the potential



(b) A small cell attached at the top of a streetlight pole (Heilman, 2018).



Fig. 9. Street view on the Shepley street with view of the mobile phone tower antenna mounted on a street light pole (Heilman, 2018).



health risks and the impact on property values. Increasing numbers of people don't want to live near cell towers. In some areas with new towers, **property values have decreased by up to 20%.**

-National Business Post: [Your new neighbor, a cell tower, may impact the value of your home](#) 2022

- A recent survey by the National Institute for Science, Law & Public Policy (NISLAPP) found **that 94 percent of homebuyers are "less interested and would pay less" for a property located near a cell tower or antenna.**

-["Do neighborhood cell towers impact property values?"](#)
Pennsylvania Association of Realtors

- **"Properties that are approximately close to the tower will suffer substantial degradation to their value** based on the nature of the unusual feature in the residential neighborhood." - [Appraiser: Cell Tower Will Affect Property Values](#)
- "While most states do not require disclosure of neighborhood nuisances, such as cell towers or noisy neighbors, a few states do, **and more are likely to in the future.**"- [Real Estate Q&A: Is There an Obligation to Tell Buyers About Nearby Cell Phone Tower?](#) (RISMedia, Apr. 26, 2021)
- "Understanding EMF values of business and residential locations is relatively new for the real estate industry. Cell phone towers bring extra tax revenue and better reception to a section of the city, but many are skeptical because of potential health risks and the impact on property values. Increasing numbers of people don't want to live near cell towers. **In some areas with new towers, property values have decreased by up to 20%.**" - ["Examining invisible urban pollution and its effect on real estate value in New York City"](#) – by William Gati in New York Real Estate Journal September 2017
- "In 32 years of experience as a Real Estate Appraiser specializing in detrimental conditions, takings, adverse impacts and right-of-way, I have found that aesthetics (or rather the adverse impact on aesthetics) of externalities routinely has the largest impact on property values. As a result, proximity to towers of all types (cell, wind turbine, and electric transmission) has an impact on property values. The same is true with all sorts of surface installations such as pump stations and communication equipment boxes. This would apply to new small cell and DAS equipment,



although again, one would expect that the less intrusive the facility, the less significant the impact. Small cell and DAS installations can be unsightly, bulky, inconsistent, and even noisy.” - [“Impact of Communication Towers and Equipment on Nearby Property Values”](#) prepared by Burgoyne Appraisal Company, March 7, 2017

- “As we expected, the results clearly show that cell phone towers negatively affect adjacent property values, although in a relatively modest way. The negative impact decreases with the distance to the tower **with by far the largest effect occurring within the first 200 m.** Furthermore, the research confirms that all types of towers exert similar impact on property values despite various towers having different visual effects which demonstrate that the residents’ concern is more on health impacts than visual effects.” - [The Impact of Cell Phone Towers on House Prices: Evidence from Brisbane, Australia](#) (Environmental Economics and Policy Studies, Jan. 1, 2018)
- “On average, the potential external cost of a wireless tower is approximately \$4132 per residential property, which corresponds to a negative price effect of 2.65%. **The negative price impact of 9.78% is much more severe for properties within visible range of a tower compared to those not within visible range of a tower.** This negative impact vanishes as radii distances exceed 0.72 km.” [Wireless Towers and Home Values: An Alternative Valuation Approach Using a Spatial Econometric Analysis](#) (Journal of Real Estate Finance & Economics, May 1, 2018)
- [The effect of distance to cell phone towers on house prices](#) S Bond, Appraisal Journal, Fall 2007, Source, Appraisal Journal ([Found on page 22](#))
- [Using GIS to Measure the Impact of Distance to Cell Phone Towers on House Prices in Florida](#)
- [Florida State University Law Review Volume 24 | Issue 1 Article 5 1996 The Power Line Dilemma: Compensation for Diminished Property Value Caused by Fear of Electromagnetic Fields](#)
- [New Zealand Ministry for the Environment. “Appendix 5: The Impact of Cellphone Towers on Property Values”](#) Source: New Zealand Ministry for the Environment website
- [Powers, turbines and transmission lines impacts on property value edited by Sally Bond Sally Sims and Peter Dent. 2014](#)

The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods, was published in The Appraisal Journal of the Appraisal



Institute in 2006. The Appraisal Institute is the largest global professional organization for appraisers with 91 chapters.

The study indicated that:

- Homebuyers would pay from 10%–19% less to over 20% less for a property if it were in close proximity to a cell phone base station.
- The ‘opinion’ survey results were then confirmed by a market sales analysis.
- The results of the sales analysis showed prices of properties were reduced by around 21% after a cell phone base station was built in the neighborhood.”

Jim Turner, Esq., Chairman of the National Institute for Science, Law and Public Policy, says,

“The results of the 2014 NISLAPP survey suggest there is now high awareness about problems from cell towers and antennas, including among people who have never experienced cognitive or physical effects from the radiation. A study of real estate sales prices would be beneficial at this time in the United States to determine what discounts homebuyers are currently placing on properties near cell towers and antennas.”

The Appraisal Journal study added,

“Even buyers who believe that there are no adverse health effects from cell phone base stations, knowing that other potential buyers might think the reverse, will probably seek a price discount for a property located near a cell phone base station.”

James S. Turner, Esq., Chairman of the National Institute for Science, Law & Public Policy and Partner, Swankin & Turner in Washington, D.C., says,

“The recent NISLAPP survey suggests there is now a high level of awareness about potential risks from cell towers and antennas. In addition, the survey indicates respondents believe they have personally experienced cognitive (57%) or physical (63%) effects from radiofrequency radiation from towers, antennas or other radiating devices, such as cell phones, routers, smart meters and other consumer electronics. Almost 90% are concerned about the increasing number of cell towers and antennas generally. A study of real estate sales prices would be beneficial at this time in the United States to determine what discounts homebuyers are currently placing on properties near cell towers and antennas.”



Research on 5G and Small Cell Radiation Exposure

American Academy of Pediatrics Website

“Electromagnetic Fields: A Hazard to Your Health?” on Cell Tower Radiation

“In recent years, concern has increased about exposure to radio frequency electromagnetic radiation emitted from cell phones and phone station antennas. An Egyptian study confirmed concerns that living nearby mobile phone base stations increased the risk for developing:

- Headaches
- Memory problems
- Dizziness
- Depression
- Sleep problems

Short-term exposure to these fields in experimental studies have not always shown negative effects, but this does not rule out cumulative damage from these fields, so larger studies over longer periods are needed to help understand who is at risk. In large studies, an association has been observed between symptoms and exposure to these fields in the everyday environment.”

–[American Academy of Pediatrics](#)

Reviews That Recommend Cell Towers Be Distanced Away From Homes and Schools

- A review paper entitled “[Limiting liability with positioning to minimize negative health effects of cellular phone towers](#)” reviewed the “large and growing body of evidence that human exposure to RFR from cellular phone base stations causes negative health effects.” The authors recommend restricting antennas near home and within 500 meters of schools and hospitals to protect companies from future liability ([Pearce 2020](#)).

- An [analysis](#) of 100 studies published in Environmental Reviews found ~80% showed biological effects near towers. “As a general guideline, cell base stations should not be located less than 1500 ft from the population, and at a height of about 150 ft.” ([Levitt 2010](#))
- A [review](#) published in the International Journal of Occupational and Environmental Health found people living less than 500 m from base station antennas had an increased adverse neuro-behavioral symptoms and cancer in eight of the ten epidemiological studies ([Khurana 2011](#)).
- A [paper](#) by human rights experts documented the accumulating science indicating safety is not assured and considered the issue within a human rights framework to protect vulnerable populations from environmental pollution. “We conclude that, because scientific knowledge is incomplete, a precautionary approach is better suited to State obligations under international human rights law.” ([Roda and Perry 2014](#))
- A review entitled [“Evidence for a health risk by RF on humans living around mobile phone base stations: From radiofrequency sickness to cancer”](#) reviewed the existing scientific literature and found radiofrequency sickness, cancer and changes in biochemical parameters. ([Balmori 2022](#))

Cell Towers Radiofrequency Radiation and Cancer

World Health Organization International Agency for Research on Cancer

In 2011, radiofrequency radiation was [classified](#) as a Class 2B possible carcinogen by the World Health Organization’s International Agency for Research on Cancer (WHO/IARC). The WHO/IARC scientists clarified that this determination was for RFR *from any source* be it cell phones, wireless devices or cell towers. Since 2011, the published peer-reviewed scientific evidence associating RFR to cancer and other adverse effects has significantly increased.

In 2019, the WHO/IARC advisory committee [recommended](#) that radiofrequency radiation be re-evaluated as a “high” priority in light of the new research. The date of the re-evaluation has not been set.

Currently, several scientists conclude that the weight of current peer-reviewed evidence supports the conclusion that radiofrequency radiation is a proven human carcinogen ([Hardell and Carlberg 2017](#), [Peleg et al, 2018](#), [Miller et al 2018](#)).

Research Studies to Know

- European Parliament requested a research report [“Health Impact of 5G”](#) which was released in July 2021 and concluded that commonly used RFR frequencies (450 to 6000 MHz) are probably carcinogenic for humans *and* clearly affect male fertility with possible adverse effects on the development of embryos, fetuses and newborns.
- A large-scale [animal study](#) published in Environmental Research found rats exposed to cell tower emission RF levels had elevated cancers, the very same cancers also found in the US National Toxicology Program animal study of cell phone RF. [Falcioni 2018](#)
- A [study](#) published in Electromagnetic Biology and Medicine found changes in blood considered biomarkers predictive of cancer in people living closer to cell antenna arrays ([Zothanslama 2017](#)).
- A [study](#) published in the International Journal of Environmental Research and Public Health found higher exposure to cell arrays linked to higher mortality from all cancer and specifically lung and breast cancer ([Rodrigues 2021](#)).
- A [study](#) published in Science of the Total Environment 10 year study on cell phone antennas by the local Municipal Health Department and several universities in Brazil found a clearly elevated relative risk of cancer mortality at residential distances of 500 meters or less from cell phone towers ([Dode 2011](#)).
- A [study](#) commissioned by the Government of Styria, Austria found a significant cancer incidence in the area around the transmitter as well as significant exposure-effect relationships between radiofrequency radiation exposure and the incidence of breast cancers and brain tumors ([Oberfeld 2008](#)).
- A [review](#) published in Experimental Oncology found “alarming epidemiological and experimental data on possible carcinogenic effects of long term exposure to low intensity microwave (MW) radiation.” Even a year of operation of a powerful base transmitting station for mobile communication reportedly resulted in a dramatic increase of cancer incidence among the population living nearby ([Yakymenko 2011](#)).

A Myriad of Health Effects Reported in People Living Close to Cell Antennas

Surveys of people living near cell tower antennas in [France](#), [Spain](#), [Iraq](#), [India](#), [Germany](#), [Egypt](#), [Poland](#) have found significantly higher reports of health issues including sleep issues, fatigue and headaches ([Santini et al 2003](#), [López 2021](#), [Alazawi 2011](#), [Pachua and Pachua 2016](#), [Eger et al 2004](#), [Abdel-Rassoul et al., 2007](#), [Bortkiewicz et al., 2004](#)).

A [study](#) published in American Journal of Men’s Health linked higher cell tower RFR exposures to delayed fine and gross motor skills, spatial working memory, and attention in school adolescents ([Meo 2018](#)).

A [study](#) published in Environmental Research and Public Health found higher exposures linked to higher risk of type 2 diabetes ([Meo 2015](#)).

A study following people for 6 years linked increased cell phone and cell phone tower antenna exposure to altered levels of hormones including cortisol, thyroid, prolactin and testosterone ([Eskander et al 2021](#)).

A [study](#) that followed people in a German town after a cell tower was erected found stress hormones adrenaline and noradrenaline significantly increased over the first 6 months after the antenna activation and decreased dopamine and PEA levels after 18 months ([Buchner 2011](#)).

Research on 4G LTE Health Effects

Many new “small” cells are 4G Long Term Evolution (LTE) antennas. Industry states that 4G is the backbone for 5G networks and so they are densifying 4G facilities in residential neighborhoods. However, just like 5G, 4G LTE was deployed *without premarket safety testing* for long term exposure.

Studies on 4G exposure to rodents found behavioral changes ([Broom et al., 2019](#)), damage to the testes ([Yu et al., 2019](#)), reduced sperm ([Oh et al 2018](#)), damage to the optic nerve ([Ozdemir et al 2021](#)) and impacts to neuronal activity ([Souffi et al 2022](#)).

Studies on human volunteers have found 4G impacts brain waves [Vecsei et al., 2018](#), [Yang et al., 2017](#), [Lv et al., 2014](#), [Wei et al., 2018](#)). A study on human cells found continuous exposure decreased human cell proliferation and increased intracellular ROS in human cells ([Choi et al 2020](#)).

September 9, 2022

Council President Gabe Albornoz
Montgomery County Council
100 Maryland Ave, 6th Floor
Rockville, MD 20850

RE: Support - ZTA 22-01, Antenna on Existing Structure – Use Standards

Dear Council President Albornoz and Members of the Council,

Enclosed in this packet, you will find letters on behalf of the MD5G Partnership, urging you to support Zoning Text Amendment (ZTA) 22-01 to reduce the setback for antennas on existing structures from 60-feet to 30-feet. MD5G Partnership represents more than 35 organizations statewide that have come together in support of building connected communities through enhanced wireless networks. We have seen firsthand the benefits of wireless connectivity across sectors including education, public safety, healthcare, transportation, and tech.

In 2018, ZTA 18-02 was passed by County Council allowing the deployment of small cells in commercial and mixed-use areas. Then in 2021, the council passed ZTA 19-07 to allow small cell antennas in residential zones. As the demand for mobile data continues to grow with more devices connecting to wireless networks than ever before, these were critical steps toward ensuring the county is future-proof and has the wireless networks it needs to keep residents and businesses connected and safe.

However, the existing zoning ordinances contain inconsistencies that are addressed by ZTA 22-01. If an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way.

The small cells that will be enabled as a result of ZTA 22-01 will add much-needed capacity to provide the connectivity we all demand today and to prepare for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; employees working from home; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and much more.

We urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we depend on.

Thank you,



Laura Toraldo, Executive Director, MD5G Partnership



10200 Connecticut Avenue, Suite 308, Kensington, MD 20895

September 7, 2022

TO;

Gabriel Albornoz, President
Montgomery County Council
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

SUBJECT: ZTA-22-01 reference amendment on Commercial Use Zoning to address Antennas on Existing Structures, Use Standards.

Dear Council President Albornoz and members of the Montgomery County Council,

Through this letter, the Hispanic Chamber of Commerce of Montgomery County asks that you represent the interests of minority small business owners, facilitating on the road and on work site communications via cellular networks by approving the amendment proposed by Councilmember Reimer that would reduce the setback for 5G transmission boxes/ antennas on existing structures.

The Chamber strongly favors this amendment and we ask that you support this motion and approve the requested modification, as it would greatly help our workforce and members of the small business community.

The amendment provides a more reasonable approach that will ease the establishment of a good cellular communication network by allowing the setback minimum to be at 30 feet instead of 60 feet from a dwelling unit in a rural residential, residential or Planned Unit Development zone. This amendment impacts Chapter 59 of the Montgomery County Code 3.5.14.C – “Antenna on Existing Structure” under Division 3.5 “Commercial Uses”.

Many County small business owners and their staff depend on timely communication at sufficient speeds to conduct civil engineering and construction trade work, as well as in other areas of industry requiring substantial mobility and access to information. We ask that you expedite this amendment as it will facilitate placing 5G cellular tower nodes (antennas) in strategic locations to optimize cellular communications coverage at sufficient speeds for timely sharing of engineering designs and real time imaging. Thank you for your continued support and service.

Carmen Ortiz Larsen
President and Chair of the Board of Directors

A handwritten signature in black ink that reads 'Carmen Ortiz Larsen'.



September 7, 2022

Montgomery County Council
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Re: Support - Zoning Text Amendment (ZTA) 22-01

Dear President and Members of the Council

The Wireless Infrastructure Association (WIA) writes in support of the proposed Zoning Text Amendment 22-01 (the "Amendment"). If adopted, this Amendment would pave the way to increased wireless connectivity in Montgomery county and continue to the deployment of 5G networks – the next generation of wireless services.

WIA works to support the responsible and sustainable deployment of wireless infrastructure to efficiently deliver wireless access to all communities. Our members include broadband infrastructure providers, wireless carriers, equipment manufacturers, and professional services firms that collectively own and operate wireless networks in Maryland and throughout the United States.

While in the past years Montgomery County has made steps to modernize county processes and rules to deploy wireless networks more efficiently, the existing zoning ordinances contain inconsistencies that are addressed by the Amendment. Specifically, if an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole because under current guidelines the use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that is capable of hosting the wireless equipment at hand. This current policy fully contradicts how the wireless industry operates in the real world. Using collocation opportunities, the wireless industry first explores already-existing infrastructure that can host wireless equipment before digging the ground for additional vertical assets. The Amendment reconciles this current discrepancy between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way to the benefit of Montgomery County residents and communities.



Wireless
Infrastructure
Association

The demand for wireless services from our customers – your constituents – creates a shared responsibility of government and industry to ready the next-generation networks that will serve consumers today and into the future. The small cells that will be enabled by the Amendment will add much-needed capacity to provide the connectivity we all demand today and to prepare for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; remote working opportunities; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and much more. As more Montgomery County residents rely on these wireless services, the Amendment would allow the wireless industry to explore additional opportunities to deploy wireless infrastructure, resulting in greater investment, increased capacity, and advanced wireless connectivity fueling the jobs of today and tomorrow.

We urge you passage of this important Amendment.

Thank you for your time and consideration. Please do not hesitate to contact me if you have any questions.

Sincerely,

A handwritten signature in blue ink, appearing to read "Arturo Chang", written over a large, stylized blue "A" that serves as a signature element.

Arturo Chang
Director and Senior Counsel
State Government Affairs
703.535.7451
Arturo.Chang@WIA.org



September 13, 2022

The Honorable Gabe Alborno
Council President
Montgomery County Council
100 Maryland Avenue
Rockville, Maryland 20850

Dear Council President Alborno:

The Montgomery County Chamber of Commerce (MCCC) supports the ZTA 22-01, *Antenna on Existing Structure - Use Standards*. This proposed zoning text amendment would reduce the setback for antennas on existing structures from 60 feet to 30 feet.

ZTA 22-01 addresses inconsistencies in zoning ordinances related to small cell infrastructure. For example, if an applicant needs to install equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way.

While ZTA 22-01 is technical in nature its passage will significantly advance the ability to implement 5G technologies in Montgomery County. The small cells that will be enabled because of ZTA 22-01 will add much-needed capacity, which is now a core economic necessity for any jurisdiction, and Montgomery County is no different. The County's economy heavily relies on innovation to create jobs and advance economic activity. The opportunities for innovation and advancement in health care, transportation, public safety, education, manufacturing, entertainment, and many other sectors cannot be understated.

Again, MCCC supports the passage of ZTA 22-01 and as always, we look forward to working with Montgomery County on this and other important issues.

Sincerely,

A handwritten signature in blue ink, appearing to read "G. Godwin", is written over a light blue horizontal line.

Georgette "Gigi" Godwin
President & CEO
Montgomery County Chamber of Commerce

cc: Members, Montgomery County Council



CLYDE E. BOATWRIGHT
STATE PRESIDENT

MARYLAND STATE LODGE FRATERNAL ORDER OF POLICE®

8302 COVE ROAD BALTIMORE, MD 21222



KENNETH SCHUBERT
SECRETARY
EARL KRATSCH
TREASURER

September 01, 2022

**Honorable Gabe Albornoz, Council President,
Honorable Evan Glass, Vice President,
Honorable Andrew Friedson District 1,
Honorable Craig Rice, District 2,
Honorable Sidney Katz, District 3,
Honorable Nancy Navarro, District 4,
Honorable Tom Hucker, District 5
Honorable Will Jawando, At-Large,
Honorable Hans Riemer, At-Large
Montgomery County Government
100 Maryland Avenue, 6th Floor
Rockville, Md 20850**

Dear Honorable Council President and Councilmembers,

On behalf of the MD5G Partnership, we urge you to support Zoning Text Amendment (ZTA) 22-01 to reduce the setback for antennas on existing structures from 60-feet to 30-feet. MD5G Partnership represents more than 35 organizations statewide that have come together in support of building connected communities through enhanced wireless networks. We have seen firsthand the benefits of wireless connectivity across sectors including education, public safety, healthcare, transportation, and tech.

In 2018, ZTA 18-02 was passed by County Council allowing the deployment of small cells in commercial and mixed-use areas. Then in 2021, the council passed ZTA 19-07 to allow small cell antennas in residential zones. As the demand for mobile data continues to grow with more devices connecting to wireless networks than ever before, these were critical steps toward ensuring the county has the wireless networks it needs to keep residents and businesses connected and safe.

However, the existing zoning ordinances contain inconsistencies that are addressed by ZTA 22-01. If an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that

Representing the Professional Police Officers of the State of Maryland

are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way.

The small cells that will be enabled as a result of ZTA 22-01 will add much-needed capacity to provide the connectivity we all demand today and to prepare for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; employees working from home; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and so much more.

Robust wireless networks help keep us safe. Across the U.S., 80% of 911 calls are made from a mobile device. And communication infrastructure helps emergency personnel do their jobs safely and effectively by providing real-time access to the information they need.

We urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we depend on.

Respectfully Yours,

A handwritten signature in black ink, appearing to read 'Clyde Boatwright', with a stylized flourish at the end.

Clyde Boatwright
State President

Representing the Professional Police Officers of the State of Maryland



Statement of Daniel Flores
Vice President, Government Relations

Support of Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure

Tuesday, September 13, 2022

1:30pm – 2:30pm

Zoning Text Amendment (ZTA) 22-01

My name is Daniel Flores, Vice President of Government Relations for the Greater Washington Board of Trade. I am here to urge you to support Zoning Text Amendment (ZTA) 22-01 to reduce the setback for antennas on existing structures from 60-feet to 30-feet. The resulting enhanced wireless networks are needed to build connected communities, foster inclusive economic growth, and improve our region's global competitiveness. We have seen firsthand the benefits of wireless connectivity across sectors including education, public safety, healthcare, transportation, and technology.

In 2018, ZTA 18-02 was passed by the County Council allowing the deployment of small cells in commercial and mixed-use areas. Then in 2021, the council passed ZTA 19-07 to allow small cell antennas in residential zones. These were critical steps to ensure the county has the wireless networks needed to keep residents and businesses connected and safe, as demand for more data and devices continues to grow at faster pace than ever before.

However, the existing zoning ordinances contain inconsistencies that are addressed by ZTA 22-01. If an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefits of this change include the reduced proliferation of infrastructure in the right-of-way, improved network efficiencies and better deployment options.

(Statement of Daniel Flores: Support of Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure Continued)

The small cells enabled as a result of ZTA 22-01 will add much-needed capacity to provide the connectivity we all demand today while preparing for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; employees working remotely; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and so much more.

Wireless infrastructure deployment, driven by private sector investment, will serve as an important economic boost for communities large and small across the state. According to CTIA – which represents the US wireless communication industry – the build out of 5G, the next generation of wireless coverage, will generate over \$11 billion in GDP and 34,000 new jobs for Maryland in the next ten years. 5G will transform major industries, supporting a new wave of innovation from transportation to public safety, healthcare, and education.

As a member of the MD5G Partnership representing more than 35 organizations statewide, we urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we depend on.



12050 Baltimore Ave
Beltsville, MD 20705

September 8, 2022

Council President
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Dear Council President:

On behalf of the MD5G Partnership, we urge you to support Zoning Text Amendment (ZTA) 22-01 to reduce the setback for antennas on existing structures from 60-feet to 30-feet. MD5G Partnership represents more than 35 organizations statewide that have come together in support of building connected communities through enhanced wireless networks. We have seen firsthand the benefits of wireless connectivity across sectors including education, public safety, healthcare, transportation, and tech.

In 2018, ZTA 18-02 was passed by County Council allowing the deployment of small cells in commercial and mixed-use areas. Then in 2021, the council passed ZTA 19-07 to allow small cell antennas in residential zones. As the demand for mobile data continues to grow with more devices connecting to wireless networks than ever before, these were critical steps toward ensuring the county has the wireless networks it needs to keep residents and businesses connected and safe.

However, the existing zoning ordinances contain inconsistencies that are addressed by ZTA 22-01. If an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way.

The small cells that will be enabled as a result of ZTA 22-01 will add much-needed capacity to provide the connectivity we all demand today and to prepare for the future. Strong wireless networks enable distance learning for students of all ages; telehealth for patients and health care providers; employees working from home; small businesses to thrive in the digital economy; older adults to stay in touch with family and combat social isolation; public safety personnel to utilize the best resources for our safety; and so much more.

Wireless infrastructure deployment, driven by private sector investment, will serve as an important economic boost for communities large and small across the state. The build out of 5G, the next generation of wireless coverage, will generate over \$11 billion in GDP and 34,000 new jobs for Maryland in the next ten years. 5G will transform major industries, supporting a new wave of innovation from transportation to public safety, healthcare, and education.

We urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we depend on.

Sincerely,

Jane Builder
Principal Manager Network Advocacy



September 9, 2022

The Honorable Gabe Alborno
President
Montgomery County Council
Council Office Building
100 Maryland Avenue, 6th Floor
Rockville, MD 20850

Zoning Text Amendment 22-01

Dear Council President Alborno:

On behalf of the Greater Bethesda Chamber of Commerce, we urge you to support Zoning Text Amendment (ZTA) 22-01 to reduce the setback for antennas on existing structures from 60-feet to 30-feet. In order to maintain and create a more prosperous environment for business in Greater Bethesda, we know wireless connectivity is crucial.

In 2018, ZTA 18-02 was passed by County Council allowing the deployment of small cells in commercial and mixed-use areas. Then in 2021, the council passed ZTA 19-07 to allow small cell antennas in residential zones. As the demand for mobile data continues to grow with more devices connecting to wireless networks than ever before, these were critical steps toward ensuring the county has the wireless networks it needs to keep residents and businesses connected.

However, the existing zoning ordinances contain inconsistencies that are addressed by ZTA 22-01. If an applicant needs to install their equipment 30 feet from a building, they must install a new pole or a replacement pole. The use of existing poles 30 feet from a building is prohibited. The unintended consequence is that applicants are incentivized to apply for new poles or replacement poles even when there is an existing pole that works just as well. ZTA 22-01 reconciles discrepancies between new, replacement and existing poles by allowing telecommunication facilities on existing poles that are at least 30 feet away from a building. The benefit of this change is the reduced proliferation of infrastructure in the right-of-way.

The small cells that will be enabled as a result of ZTA 22-01 will add much-needed capacity to provide the connectivity we all demand today and to prepare for the future. Strong wireless networks are a necessity for our Greater Bethesda businesses to thrive in this digital economy. In addition, Wireless infrastructure deployment, driven by private sector investment, will serve as an important economic boost for communities large and small across the state. The build out of 5G, the next generation of wireless coverage, will generate over \$11 billion in GDP and 34,000 new jobs for Maryland in the next ten years. 5G will transform major industries, supporting a new wave of innovation from transportation to public safety, healthcare, and education.

On behalf of the Greater Bethesda Chamber and our membership, we urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we need now and for our future.



Messaging in support of Zoning Text Amendment (ZTA) 22-01, Antenna on Existing Structure

Hearing to be held on Tuesday, September 13 from 1:30 – 2:30.

On behalf of physicians and patients in Montgomery County and the region, we urge you to support any and all improvements to the digital infrastructure which will enhance connectivity resulting in improved patient care. In particular, enhancements which will reduce infrastructure barriers to telemedicine connectivity and improve the development and utilization of digital health applications to improve health outcomes is needed.

5G, the next generation of wireless networks, is unleashing advances in digital health through remote sensors that can share vitals with clinicians and health care facilities in real time to take preventative action.

Goldman Sachs estimates that connected devices could create [\\$305 billion](#) in annual health system savings from decreased costs and mortality due to the enhanced ability to monitor and communicate with patients managing chronic illnesses.

We urge you to support Zoning Text Amendment (ZTA) 22-01 to enhance the wireless networks we depend on to provide quality, timely, efficient and effective medical care to the people of Montgomery County.

Submitted by Tuesday Cook, M.D., President, Montgomery County Medical Society

Analysis of wireless zoning and ZTA 22-01 under the Telecommunications Act

Montgomery County was not and is not required to adopt ZTA 19-07 or 22-01 in order to comply with federal law

- During the deliberations for ZTA 19-07, the Council inaccurately characterized *City of Portland v. FCC*¹ with respect to the effective prohibition standard of wireless services.
 - Re: Section 253 of the Telecommunications Act, the Ninth Circuit upheld FCC orders regarding shot clocks and fees with respect to processing applications
 - Re: Section 332, *City of Portland* did not address or alter municipalities' rights to determine location of towers. For this section, the Fourth Circuit (whose rulings govern in Maryland) has defined effective prohibition as a total lack of coverage, which is not our situation in Montgomery County, where we already have extensive 4G and 5G coverage (see *Cellco v. Board of Supervisors of Fairfax County*²).
 - The Fourth Circuit's *Cellco* definition of effective prohibition is a much more difficult standard to demonstrate. The Fourth Circuit ruled "a plaintiff's burden of proof on the prohibition of service claim is substantial and is particularly heavy" and requires meeting a two-part test: a) an "effective absence of coverage" and b) a lack of "reasonable alternative sites". The court wrote: "even if [the carrier's] maps demonstrate some gap in 4G LTE wireless and data coverage, they do not meet Verizon's heavy burden of demonstrating an effective absence of all forms of coverage."
- A recent case in the Second Circuit, *Extenet v. Flower Hill*³, upheld a local government's decision to block deployment of a network of small cells.
 - *Flower Hill* took an even stricter textual interpretation of the Telecommunications Act's effective prohibition standard, which was a much higher hurdle than the "material inhibition" standard proposed by FCC.
 - *Flower Hill* goes a step further and rejects the idea that all telecommunications services are protected from effective prohibition by section 253. It cites *Sprint v. Willoth* (Second Circuit 1999), which found that effective prohibition, in the context of wireless services, applied only to the ability of a wireless telephone to make a phone calls to a landline. In other words, sections 253 and 332 protect voice service only, but not data or data speeds. The federal judge in *Flower Hill* cited *Clear Wireless* 2012: "it is not up to the FCC to construe the Act to say something it does not say, nor up to the Court to find broadband communication encompassed by the law."
- Montgomery County is not and was not vulnerable to liability for "a lot of money" if it failed to adopt these ZTAs, as some of Councilmembers have claimed⁴. The Supreme Court ruled in 2005 that localities cannot be fined or liable for money damages for failing to deploy a cell tower.⁵

The Council likely has more latitude to consider health effects than Councilmembers claim

- Wireless carriers have asserted that "environmental effects" includes "health effects", however this has not been tested in court.⁶ Courts have issued decisions based on "potential" health effects or "concerns" about health effects, but not on imminent or actual effects.⁷
- The Pittsfield, Massachusetts Board of Health recently ordered Verizon to take down a tower after it sickened local residents. Verizon responded by suing the Board of Health. After the Mayor refused to provide legal counsel, the Board of Health rescinded the order due to lack of

legal representation. A group of residents is now suing the mayor for this decision. The lawsuit lays out the legal basis for state law protecting the Board of Health's ability to protect residents' safety, notwithstanding the Telecom Act.⁸ the Montgomery County Council, separate from its powers as the District Council deciding zoning matters, sits as Montgomery County's Board of Health and has fiduciary duties to its residents in its capacity as the Board of Health.

- The implications of *Environmental Health Trust et al. v. FCC* (DC Circuit 2021) may afford localities significant, additional latitude in limiting small cell deployments. Montgomery County in its original lawsuit against the FCC made the case against FCC attempting to force small cell deployments prior to FCC determining that these deployments are safe⁹. *City of Portland* dismissed this lawsuit because the FCC had closed its notice of inquiry regarding radiofrequency exposure limits. Given that the DC circuit subsequently ruled that closing the notice of inquiry was an illegal violation of the Administrative Procedures Act, Montgomery County's original petition against the FCC is more relevant than ever. Councilmembers have significant latitude to protect public safety, and at the moment, have no federal assessment of safety data to rely upon.

The Council likely has more latitude to consider environmental effects than Councilmembers claim

- Title 47 Section 332 of the US Code¹⁰ says local governments may not "regulate the placement" of cell towers based on environmental effects of radiofrequency emissions, which is based on the premise that the FCC complies with environmental protection law before it seeks to preempt local zoning authority.
 - However, in 2019 the U.S. Court of Appeals for the D.C. Circuit in the *Keetoowah* case found that FCC violated federal law (the APA) by failing to justify its assertion that "small cell" wireless facilities "pose little to no environmental risk".¹¹ The court held that the FCC acted in an arbitrary and capricious manner and that FCC's "public interest analysis did not meet the standard of reasoned decisionmaking." Although almost three years have passed since that decision, FCC has not provided any analysis of the environmental effects of small cell networks or of their cumulative effects.
 - Given that the DC circuit ruling in *Environmental Health Trust et al. v. FCC*, ruled that closing the notice of inquiry was an illegal violation of the Administrative Procedures Act, Councilmembers may have significant latitude to protect the environment.

References

- ¹ <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>
- ² <https://cite.case.law/f-supp-3d/140/548/>
- ³ <https://casetext.com/case/extenet-sys-v-vill-of-flower-hill>
- ⁴ <https://bethesdamagazine.com/2021/08/16/d-c-court-of-appeals-rules-fcc-must-provide-more-information-related-to-5g/>
- ⁵ <https://www.supremecourt.gov/opinions/04pdf/03-1601.pdf>
- ⁶ See petition for certiorari arguing the legal case that environmental effects do not include health effects:
https://www.supremecourt.gov/DocketPDF/21/21-629/196710/20211025140205639_Santa%20Fe%20Alliance%20Petition.pdf
- ⁷ Maryland is located in the Fourth Circuit of the federal appeals courts. This court has ruled against using "potential" health effects, or "concerns" about health effects as a basis for rejecting a permit; however that does not preclude placement decisions based upon actual health effects, known harms, or imminent harms.
<https://www.courtlistener.com/opinion/626095/t-mobile-northeast-llc-v-city-of-newport-news/>
- ⁸ https://mdsafetech.org/wp-content/uploads/2022/07/Pittsfield-Civil-Action-Complaint-72822-w_-Cover-Sheet-7-28-22.pdf
- ⁹ <https://ehtrust.org/wp-content/uploads/Montgomery-County-Brief-on-Merits-filed-6-10-2019.pdf>
- ¹⁰ <https://www.law.cornell.edu/uscode/text/47/332>
- ¹¹ <https://docs.fcc.gov/public/attachments/DOC-359025A1.pdf>

September 8, 2022

**Re: Racial Equity and Social Justice (RESJ) Zoning Text Amendment Statement on ZTA 22-01:
Antenna on existing structure – use standards**

Dear Ms Tesfaye and Dr. Bonner-Tompkins,

cc: Chris Cihlar, Director, Office of Legislative Oversight (OLO)
Tiffany Ward, Director, Office of Racial Equity and Social Justice

Thank you for preparing the recent RESJ impact statement for the proposed Zoning Text Amendment 22-01, published March 14, 2022¹ (the “Statement”). As you note, predicting the impact of zoning text amendments on RESJ can be a challenging endeavor.

Appreciating just how challenging and yet how critical a task you have undertaken, I ask you to consider the additional information and related analysis provided below and, based on your evaluation of this content, to revise the Statement accordingly. Your openness to such revision would be a model for both the Council and the general public as to how the consideration of RESJ impacts is an ongoing process, responsive to new evidence and community engagement. It would also underscore the importance of the mission entrusted to you.

The information below indicates that 22-01 would have a negative net impact on RESJ in our County, will not improve the digital divide (and potentially worsen it), and will cause significant adverse social justice impacts. In light of OLO’s position as legislative staff charged with assessing a proposal by a Council Committee chair, my hope is that this letter will prove a helpful source of information.

A public hearing is scheduled on this ZTA for September 13, 2022, so there is time to withdraw and reissue this statement with a negative net impact prior to any Council worksession on this ZTA.

In its current form, the Statement considers two dimensions of impact: (a) the digital divide, which it says may be improved and (b) health inequities, which may be worsened. But, it says, because the magnitude of the effect on each dimension cannot be quantified, it is difficult to “distinguish” the net impact. If after reading the contents of this letter you determine that 22-01’s ability to improve the digital divide in the County is either neutral or negative, then the net impact of 22-01 would be negative. (A neutral impact on one dimension and a negative impact on the second dimension is net negative, regardless of magnitude).

This letter is organized in 4 sections:

- 1) Conclusions on the digital divide relied almost entirely on industry-funded information
- 2) Evidence indicates 22-01 will not improve the digital divide, and if anything is likely to worsen it
- 3) The Statement does not consider social justice impacts on protected classes that would be disproportionately affected by reduced setbacks and resulting proliferation of antenna

- 4) Fact checking certain statements in the health inequities section that were either factually inaccurate or misleading

- 1) **Conclusions on the digital divide rely almost entirely on industry-funded information**

The Statement's conclusions regarding the digital divide are based almost exclusively on what the Statement calls "Research from the Brookings Institution". However this publication by Brookings is industry-funded, not independent analysis.

- a. **Brookings report was funded by T-Mobile.**

The report itself reads "Support for this publication was **generously** provided by T-Mobile."² [Emphasis added]

- b. **Brookings author was chair of an industry-funded organization**

The Brookings article was published by author Dr. Nicol Turner-Lee in 2019 (not 2022 as published in the Statement). According to her CV³, she was a board member beginning in 2014 of TPRC. According to the TPRC website, Dr. Turner-Lee was chair of its board from 2019 to 2021.⁴ TPRC also lists on its website its top-tier funders during her time as chair, which included AT&T, T-Mobile, Verizon, and CTIA (Communications Technology Industry Association). According to its own website, CTIA is "the voice of America's wireless industry". It is often considered the most influential lobbyist on behalf of the wireless industry. In Montgomery County's lawsuit against the FCC and its Small Cell Order, CTIA filed a brief as an intervenor against the County⁵.

- c. **Brookings Institution has received significant industry funding**

Brookings donors include AT&T⁶, T-Mobile, Verizon, Google⁷ (which runs a 5G wireless service called Google Fi that serves approximately 500,000 subscribers⁸). Between July 1 and December 31, 2019, the government of Germany, which is the largest beneficial owner of T-Mobile USA⁹, donated over \$2 million to Brookings.

- d. **T-Mobile stands to benefit financially from the passage of ZTA 22-01, and similar ordinances across the country for which it is advocating**

By expanding the number of poles available for antenna attachment, ZTA 22-01 would save T-Mobile and other wireless carriers a significant amount on site fees. Historically, wireless carriers would contact a landowner and negotiate payment to rent space for an antenna on the landowner's property. This was the case with larger "macro towers", as well as rooftop antenna (in which case the carrier pays the building owner a rental fee for space on the rooftop). While carriers have claimed that they need access to public rights-of-way in order to allow for densification, in practice we have not seen that to be the case in Montgomery County. Instead, many of the applications to attach wireless facilities to utility poles are directly in front of or adjacent to locations where carriers would have previously had to pay rental fees. Take for example 8000 Flower Ave in Takoma Park.¹⁰ This location is surrounded by R-40, R-30 and R-10 residential zoning¹¹. However in the 8000 block, there is a small shopping center, with a dry cleaners and a barber shop. In the past, T-Mobile would have had to pay rent rental fees to the shopping center's landlord to put an antenna on the rooftop. However, after the passage of prior small cell ZTAs 18-02 and 19-07, T-Mobile's contractor applied to attach

an antenna to a utility pole in front of the shopping center, just 62 feet from a home. FCC has preempted and prohibited local government from charging fees for this real estate; instead the County can only charge up to its actual out-of-pocket administrative costs for processing permits (although the County approved a fee schedule earlier this year with fees significantly below its costs, meaning taxpayers are now subsidizing these deployments¹²). These cost-based fees are below the fair market rates that T-Mobile and other carriers would pay to property owners.

OLO should not rely upon industry-funded materials for this or any other assessment. If OLO cannot find any independent, unbiased information, then its assessment could report that to the Council. In circumstances where OLO believes it is necessary and unavoidable to cite industry-funded information, OLO should clearly disclose the funding source behind the analysis and consider the influence of such conflicts of interest in its assessment.

2) Evidence indicates 22-01 will not improve the digital divide, and if anything is likely to worsen it

The digital divide can be looked at on two dimensions: a) access to connectivity, and b) the affordability of that connectivity. First consider (a), access.

Connectivity at home is quite different than mobile wireless access outside the home. 22-01 deals only with residential neighborhoods, and therefore only affects access in the home. As the Statement points out, the percentage of homes with wired broadband in Montgomery County across all cited ethnicities is quite high. To measure access, the important but missing data point is the percentage of homes passed with wired broadband, broken down by ethnicity (“passed” means that the service is available to that home). Homes that are not passed by wired broadband is an urgent problem that the County should be and is focused on to ensure broadband providers provide wired access to all locations, much as the rural telephone program did decades ago. Assuming that the number of homes subscribing to broadband (which is what the Statement cited) is less than the number passed, then the real problem for the digital divide in Montgomery County is affordability, not access.

If it were the case that there is a disparity by race or ethnicity among homes in the County not passed by wired broadband, what is the basis for concluding that carriers would prioritize these areas for small cell wireless deployments? Council staff acknowledged this issue in 2021 with respect to ZTA 19-07; 22-01 is no different.¹³ Telecom carriers would be expected to act rationally and prioritize installing antennas in locations likely to generate the highest return on capital, where customers can afford the most expensive new services.

Angela Siefer, executive director of the National Digital Inclusion Alliance (which represents over 850 affiliates in 48 states)¹⁴, testified to the U.S. Congress in 2020 on this topic. She noted that in previous telecom deployments, low-income areas are usually where the coverage gaps are and “there is no reason to think 5G will be any different.” She was incredibly clear in her

assessment: “The excitement around 5G has led to claims 5G will solve the digital divide. It will not.”¹⁵

Now consider (b), affordability. Wireless Internet is and has always been far more expensive than wired Internet. Wireless data in the US costs between \$3 and \$8 per gigabyte, depending on the information source¹⁶. Wired data costs less than \$0.09 per gigabyte, assuming an average wired data plan of \$50 per month¹⁷ and the average family of four using 536 GB per month¹⁸. Therefore mobile wireless is between 33 and 89 times more expensive than wired broadband.

In addition, wired connections typically do not have data caps or throttling, a practice by which wireless carriers advertise unlimited data but “throttle”, or reduce, users to a lower speed after reaching a data cap. (In 2019, AT&T paid a \$60 million FTC fine for not disclosing its throttling policy¹⁹.) As data usage over a wired connection increases, the average cost per gigabyte continues to decrease. This has been especially important since covid-19 began. Nationally, as users rely increasingly on connectivity at home for all of the uses pointed out by OLO – such as social services, healthcare, education and employment – household data usage since the pre-pandemic level has increased by 56%, and by 264% in the previous four years.²⁰

In other words, a telecom strategy for the County that forces lower-income users to rely on mobile wireless at home would actually worsen the digital divide. Whereas a household with wired broadband can continue to increase its daily usage without any incremental cost out of pocket (zero marginal cost), a user reliant on a smartphone or mobile wireless hotspot for Internet access will face constant marginal cost, and therefore linearly increasing total cost.

OLO has staff who perform economic impact statements who could include an analysis of the negative economic impact on low income populations of the foregoing pricing dynamics. The higher cost of wireless data may be even further exacerbated by the fact that lower-income smartphone users are more likely to have “prepaid” plans, which often have a higher cost per gigabyte than “postpaid” or contract plans. Higher-income users who may have higher credit scores can obtain lower, postpaid pricing.²¹ Consider the financial analogy of bank lending: those with the best credit scores can borrow at lower rates, and those with no credit may have no choice but payday lending at high interest rates.

In summary, expecting expensive new small cell deployments to solve the digital divide is a bit like saying that “Lexus lanes” for only \$90 round-trip daily²² will provide a quick way of commuting to work for low-income commuters. Expensive new telecom services may be welcomed by those who can afford them, but the Statement does not provide data to support the idea that 22-01 would improve the digital divide.

3) The Statement does not consider social justice impacts on protected classes that would be disproportionately affected by reduced setbacks and resulting proliferation of antenna

Footnote 1 of the Statement cites a definition of “racial equity and social justice”. However the glossary cited does not contain a definition of social justice; the term “social justice” does not appear on this webpage.²³

The Council adopted a definition of social justice when it passed bill 27-19²⁴, which established the requirement for RESJ impact statements. The definition in the County code section 2-81C includes other areas of RESJ not yet addressed by the Statement²⁵:

Social justice means that everyone deserves to benefit from the same economic, political and social rights and opportunities, **free from health disparities**, regardless of **race, socioeconomic status, age, sex** – including on the basis of gender identity or orientation, religion, **disability, or other characteristics**. [Emphasis added]

Several protected classes would be severely and disproportionately impacted by ZTA 22-01, as described below. Note that 22-01 not only reduces proximity, but is intended to increase proliferation of antennae, and in turn dramatically increase radiofrequency density in residential neighborhoods. The PHED Committee legislative attorney estimated approximately 32,435 poles are located 30 to 60 feet from homes, which would almost double the 33,368 poles located 60 feet or more from homes²⁶

- a. **Socioeconomic status and other characteristics.** Those living on smaller plots of land or in homes in closer proximity to public rights-of-way would be more adversely affected than those living on larger plots of land with greater setbacks from the public rights-of-way. “Other characteristics” can be construed in this context to include environmental justice. Should residents living on smaller plots of land or in multi-family dwellings with shorter setbacks from public rights-of-way be subjected to different environmental or health disparities? In a study by Santini, those living 10 meters or less (approximately 33 feet, which is similar to the setback proposed under 22-01) suffered higher rates of fatigue, headache, depression, difficulties concentrating, skin problems, and dizziness, compared to those living more than 10 meters away.²⁷
- b. **Age.** Children suffer particular effects of radiofrequency emissions²⁸. The American Academy of Pediatrics acknowledges that children are “disproportionately” vulnerable to cell phone radiation, the same kind of radiofrequency emissions emitted by cell towers.²⁹ Researchers at the Environmental Working Group, a respected nonprofit, have called for child exposure levels 200-400 times lower than the current FCC limits.³⁰ The bones of children's skulls are not as fully developed as adults, leaving their developing brains more vulnerable.³¹ The US Court of Appeals for the DC Circuit, in its *EHT et al. v. FCC* remand last year, ordered FCC to consider the effects of radiofrequency emissions on children³² – something the FCC has not yet done and no federal agency has ever done.
- c. **Sex.** Women have been reported to suffer disproportionate effects of cell tower emissions. In the Santini study, women living near cell towers were much more likely to report adverse health outcomes than men. Women living closer to cell towers were 3 times more likely than men to suffer headaches, 2.7 times more likely to experience depression, and 83% more likely to suffer visual disturbances. In addition, women living 10 meters or less (approximately 33 feet, which is similar to the setback proposed under 22-01) from a cell tower experienced statistically significant higher rates of adverse

effects than those 300 meters or more.³³ In addition, research has examined adverse effects of electromagnetic fields on pregnant women and their unborn children.³⁴

- d. **Disability.** EMS disabled persons would be disproportionately adversely affected, which would constitute a violation of the ADA.

22-01 creates two violations:

- (i) 22-01 would cause medical harm to tens of thousands of residents; and
- (ii) 22-01 does not contain any provision for advance notice of a deployment so that affected residents can arrange for reasonable accommodation under the ADA. Note that in a similar situation of deploying smart meters on residential properties, Maryland law requires utilities to provide a means for ratepayers to opt out of smart meters as a mechanism for reasonable accommodation for the EMS disabled.

Electromagnetic sensitivity (EMS) has long been recognized as a medical condition and afforded ADA protections.³⁵ The Access Board, a US federal agency that promotes equality for persons with disabilities³⁶, expressly recognized EMS as a disability in a 2002 report. They wrote:

*“The Board recognizes that multiple chemical sensitivities **and electromagnetic sensitivities** may be considered disabilities under the ADA if they so severely impair the neurological, respiratory or other functions of an individual that it substantially limits one or more of the individual’s major life activities. The Board plans to closely examine the needs of this population, and undertake activities that address accessibility issues for these individuals.”*

For more information, see a filing by advocates for the EMS disabled in response to an FCC notice of inquiry *Implementing the Infrastructure Investment and Jobs Act: Prevention and Elimination of Digital Discrimination*.³⁷ It documents, among other aspects, recognition for EMS disability in the United States, Canada, the European Parliament, Australia, France, Spain, and the United Kingdom.

A peer-reviewed study estimated the prevalence of EMS among the general population to be as high as 30% for mild symptoms, with 0.65% of the population suffering symptoms severe enough to restrict their access to work locations due to electromagnetic radiation.³⁸ These data suggest cell towers closer to homes, enabled by 22-01, could result in adverse health outcomes in up to 30% of the population, and cause a constructive eviction in 0.65% of the population – this is approximately 7,000 people in Montgomery County alone being forced to flee their homes. The reality of constructive eviction is not hypothetical – a group of Pittsfield, Massachusetts residents are currently litigating their constructive evictions after a cell tower was erected in their neighborhood.³⁹ The vulnerable population of the EMS disabled is typically already restricted from work environments, public spaces, and in some cases access to medical care, due to high radiofrequency emissions levels. Placing a cell tower 30 feet from the home of an EMS disabled person, which is often their only remaining refuge from public spaces increasingly flooded with high density radiofrequency, is inhumane and a violation of the ADA. I encourage OLO to read the recent administrative filings with FCC on behalf of the EMS disabled.⁴⁰

- e. **Race.** Negative health effects from radiofrequency radiation could worsen health disparities by race and ethnicity in our County. In addition to some of the reasons mentioned in the Statement, here are a few additional to note. Communities of color may have a higher proportion of residents who: (i) are more likely to live in closer proximity to public rights-of-way (see section 3a above), and in turn could experience disproportionate health impacts resulting from radiofrequency radiation; (ii) have less readily available housing alternatives or financial resources than other groups to move to a home in a less urban environment (for example for an EMS disabled person to move to a different home, or parents to move to protect their child); and (iii) experience a worsening of existing health disparities (for example, the Statement cites existing disparities by race in the County in heart disease and breast cancer mortality rates; research continues to emerge studying the effects of radiofrequency radiation as a factor in these conditions⁴¹).

4) **Fact checking certain statements in the health inequities that were either factually inaccurate or misleading**

Note: excerpts below from the Statement shown in italics with comments in plain text.

- a) *“But, **if** the reduced setback requirements for small cell towers authorized under ZTA 22-01 results in negative health outcomes, this in turn could widen health disparities by race and ethnicity.”* [Emphasis added]

The word “if” is inaccurate and misleading in this context, and should be replaced with the word “because”. A more accurate sentence would be:

But because the reduced setback requirements for small cell towers authorized under ZTA 22-01 will result in negative health outcomes for a significant proportion of those living in close proximity to towers, this in turn could widen health disparities by race, ethnicity, age, sex, socioeconomic status, and other characteristics.

See social justice section above and further explanation in section 4b below.

- b) *“There is no consensus among researchers regarding the health and environmental impacts of expanding 5G technology by reducing setbacks.”*

The Statement is asserting a threshold test: in order to estimate impact, there must be a “consensus among researchers”. While this might seem reasonable at first, it’s actually quite a high bar to achieve, particularly in the context of a massive information campaign funded by an industry seeking to avoid regulation. No US government agency has ever determined that cell towers are safe, much less near homes.⁴² An FDA attorney wrote earlier this year that “the Food and Drug Administration (FDA) does not regulate cell towers or cell tower radiation. Therefore, FDA has no studies or information on cell towers.”⁴³ Groups of Montgomery County residents have pointed out issues with the Council’s reliance on inaccurate characterizations of FDA positions.⁴⁴

Industry executives often become political appointees who run agencies such as FCC, HHS, and FDA.⁴⁵ At the same time, these agencies have never conducted the kind of systematic review of

the evidence that could lead to a government consensus statement at the federal level. A systematic review 15 years ago found that 82% of radiofrequency studies that were independently funded or funded by governments found health effects from mobile phones. However only 33% of studies funded by industry found such effects.⁴⁶ Funding poor quality studies to muddy the waters is a well-worn playbook from the tobacco industry – OLO can read further about it in the 2010 book *Merchants of Doubt*.⁴⁷

While the US federal bureaucracy has remained paralyzed and mired in conflicts of interest, the World Health Organization's International Agency for Research on Cancer (IARC) classified radiofrequency emissions as a group 2B carcinogen⁴⁸ (along with DDT and lead⁴⁹), in 2011, over 10 years ago. As was argued in *EHT et al. v. FCC*, if IARC were to conduct its review today, taking into account the evidence of the past 10 years, the currently available evidence meets the criteria to be upgraded to a group 2A carcinogen. In fact, scientists who participated in the IARC 2011 review have since published in the peer-reviewed literature that radiofrequency emissions should be upgraded to a class 1 carcinogen⁵⁰ (the highest possible rating⁵¹). In this context, a number of medical associations, state governments, other countries, and transnational authorities have issued consensus statements recognizing health effects.⁵²

- c) *"The potential health effects of reducing setbacks to expand 5G technology and its probable impact on health inequities remains unknown."*

See Santini study, endnote 27, finding that health effects increase with proximity, as well as a number of additional references below.⁵³ A more accurate sentence would be:

"The magnitude of impact on health inequities resulting from health effects of reduced setbacks, which would increase the number of small cells and radiofrequency emissions density in residential neighborhoods, remains hard to quantify."

- d) *"Various research studies link radiation emitting from cell phone towers to a number of health concerns that include miscarriages, suppressed immune function, and childhood leukemia."*[Emphasis added]

The word "concerns" in this context is misleading, potentially discriminatory, and often used by industry to gaslight persons who are suffering these health effects (as documented by licensed doctors), in an attempt to avoid liability and regulation. "Concerns" should be deleted and replaced with the word "effects".

- e) *"A recent appeals court decision, however finds that the Federal Communications Commission's (FCC) claims about the health and environmental impacts of 5G technology are insufficient."* [Emphasis added]

The word "insufficient" in this context is inaccurate and misleading. This word should be replaced with the word "illegal". The court wrote "we merely conclude that the [FCC]'s cursory analysis of material record evidence was insufficient as a matter of law." In other words, the analysis that the FCC undertook was insufficient to meet the standard required, under the Administrative Procedures Act, in order to draw a conclusion, or a claim. As a result, it is inaccurate to say the "claim" was insufficient; rather, the court ruled that the claim was illegal

because it was based on insufficient analysis, and there was no “reasoned explanation” for FCC's conclusions.

- f) *“If ZTA 22-01 helps to narrow the digital divide in Internet access as noted above, it could expand access to telehealth medicine that in turn could help narrow health disparities by race and ethnicity”.*

I urge you to delete this sentence from the report because, as documented in section 1 above, it is based on industry marketing assertions, and as noted in section 2 above, there is no evidence to suggest the 22-01 will help narrow the digital divide. While the sentence may technically be true, it's akin to saying “if bags of gold were to rain down upon low-income residents, it would expand their access to telehealth medicine.” The premise of the sentence is so unlikely as to make the suggestion of positive impact that follows out of place in an assessment of legislative impact. Hypothetically, even if the predicate were true in certain, limited circumstances, there is no assessment of the relative effect sizes: on the one hand, increased access to telehealth and on the other hand, negative effects from radiofrequency emissions. It's also worth noting that telehealth is readily available over wired broadband connections, which are faster, more stable, more secure, have a lower carbon footprint, and are far more resilient during inclement weather, than wireless.

According to HHS, even during heightened covid restrictions, only about one quarter of medical visits were done via telehealth.⁵⁴ It seems unreasonable to conclude that the benefits of perhaps several telehealth visits per year outweigh the negative impacts of 24/7, involuntary irradiation. By analogy, in considering net impact, no one would argue that in the case of residents living immediately adjacent to the Beltway who inhale higher levels of air pollution 24/7, the net impact of air pollution on these residents is positive because when they develop asthma, COPD, or lung cancer at higher rates, they are able to access the Beltway and drive to the hospital more easily. Instead we require pollution mitigation measures, such as setbacks from the interstate and vehicle emissions limits. That kind of common sense is sorely needed when it comes to the regulation of wireless facilities.

As the scope and impact of OLO's work continues to expand, so too does the scrutiny of such work. No doubt this scrutiny will continue to increase with the coming introduction of climate impact statements. I hope that, in the face of outside pressure, OLO will strive to maintain its independence, as congressional agencies at the federal level, such as CBO and GAO, have done in maintaining their reputations for reliable, nonpartisan, unbiased analysis.

Thank you for your consideration of revisions to the Statement. If you would like additional information or to talk with people with expertise on the topics raised in this letter, please contact me.

Sincerely,

Robert Janku
Montgomery County resident

References

- ¹ <https://www.montgomerycountymd.gov/OLO/Resources/Files/resjis/ZTA/2022/ZTA22-01.pdf>
- ² <https://www.brookings.edu/research/enabling-opportunities-5g-the-internet-of-things-and-communities-of-color/>
- ³ https://www.brookings.edu/wp-content/uploads/2016/11/turner_lee_cv_december-2016.pdf
- ⁴ <http://www.tprcweb.com/past-board-members>
- ⁵ <https://cdn.ca9.uscourts.gov/datastore/opinions/2020/08/12/18-72689.pdf>
- ⁶ https://www.brookings.edu/wp-content/uploads/2022/02/brookings_contributorslist_fy2022.pdf
- ⁷ <https://www.brookings.edu/wp-content/uploads/2020/04/The-Brookings-Institutions-Contributors-List-Fiscal-Year-2020.pdf>
- ⁸ <https://www.fiercewireless.com/operators/google-fi-runs-tv-ads-6-local-markets>
- ⁹ The government of Germany owns approximately 32% of Deutsche Telekom, which in turn owns approximately 65% of T-Mobile USA, which translates to Germany having a beneficial ownership of approximately 21%.
https://en.wikipedia.org/wiki/Deutsche_Telekom
https://en.wikipedia.org/wiki/T-Mobile_US
https://www.brookings.edu/wp-content/uploads/2022/02/brookings_contributorslist_fy2022.pdf
<https://finance.yahoo.com/quote/TMUS/holders?p=TMUS>
- ¹⁰ <https://montgomerycountytfcg.s3.amazonaws.com/Applications/MC2021101591+Application+and+Report.pdf>
- ¹¹ <https://mcatlas.org/zoning/>
- ¹² <https://montgomerycountymd.gov/COUNCIL/Resources/Files/agenda/col/2022/20220118/testimony/item5-SuePresent.pdf>
- ¹³ The Council legislative Attorney wrote: "ZTA 19-07 does not, however, guarantee equitable access. As with all zoning provisions, ZTA 19-07 does not mandate where small cell antennas must be provided."
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/col/2021/20210727/20210727_4D.pdf
- ¹⁴ <https://www.digitalinclusion.org/affiliates/>
- ¹⁵ <https://docs.house.gov/meetings/IF/IF16/20200129/110416/HHRG-116-IF16-Wstate-SieferA-20200129.pdf>
- ¹⁶ <https://thetechtitan.com/cost-of-1gb-of-data-around-the-world/>
<https://www.statista.com/statistics/994913/average-cellular-data-price-per-gigabyte-in-the-us/>
- ¹⁷ <https://www.reviews.org/internet-service/how-much-do-internet-and-wi-fi-cost/>
- ¹⁸ https://openvault.com/wp-content/uploads/2022/03/OVBI_4Q21_Report_FINAL-1.pdf
- ¹⁹ <https://www.fiercewireless.com/regulatory/at-t-settles-ftc-unlimited-data-throttling-lawsuit-for-60m>
- ²⁰ See figure 9
https://openvault.com/wp-content/uploads/2022/03/OVBI_4Q21_Report_FINAL-1.pdf
- ²¹ This article notes " If the recession continues to affect more people, there could be some migration from postpaid to prepaid, out of financial necessity."
<https://www.fiercewireless.com/wireless/lowenstein-what-s-roadmap-for-prepaid-united-states>
- ²² <https://www.washingtonpost.com/transportation/2021/11/18/maryland-beltway-270-toll-rates/>
- ²³ <https://www.racialequitytools.org/glossary>
- ²⁴ <https://www.montgomerycountymd.gov/COUNCIL/Resources/Files/RacialEquity/Bill27-19.pdf>
- ²⁵ https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md/0-0-0-118171
- ²⁶ See page 3, "setback"
https://www.montgomerycountymd.gov/council/Resources/Files/agenda/cm/2021/20210310/20210310_PHED2.pdf
- ²⁷ See Table 1
<https://www.tandfonline.com/doi/abs/10.1081/jbc-120020353>
- ²⁸ <https://ehtrust.org/research-on-childrens-vulnerability-to-cell-phone-radio-frequency-radiation/>
- ²⁹ <https://ehtrust.org/wp-content/uploads/American-Academy-of-Pediatrics-Letters-to-FCC-and-Congress-.pdf>
- ³⁰ <https://ehjournal.biomedcentral.com/articles/10.1186/s12940-021-00768-1>
- ³¹ <https://www.marylandmatters.org/2021/07/23/opinion-children-deserve-safety-assurances-when-it-comes-to-cellphone-radiation/>

³² [https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/\\$file/20-1025-1910111.pdf](https://www.cadc.uscourts.gov/internet/opinions.nsf/FB976465BF00F8BD85258730004EFD7/$file/20-1025-1910111.pdf)

³³ See Table 2
<https://www.tandfonline.com/doi/abs/10.1081/jbc-120020353>

³⁴ Impacts of smartphone radiation on pregnancy: A systematic review
[https://www.cell.com/heliyon/fulltext/S2405-8440\(22\)00203-1#secsectitle0050](https://www.cell.com/heliyon/fulltext/S2405-8440(22)00203-1#secsectitle0050)

³⁵ The ADA definition of a disability is an "impairment that substantially limits one or more major life activities of such individual".
<https://www.law.cornell.edu/uscode/text/42/12102>

³⁶ <https://www.access-board.gov/about/>

³⁷ See PDF page 19 <https://www.fcc.gov/ecfs/search/search-filings/filing/1051759759289>

³⁸ <https://www.omegaonline.org/article-details/The-Prevalence-of-People-With-Restricted-Access-to-Work-in-Man-Made-Electromagnetic-Environments/2402>

³⁹ <https://mdsafetech.org/wp-content/uploads/2022/07/Pittsfield-Civil-Action-Complaint-72822-w-Cover-Sheet-7-28-22.pdf>

⁴⁰ See entire filing for a description of this issue. Beginning on page 26, written testimony of individuals harmed by cell towers being constructed in close proximity to their homes:
<https://www.fcc.gov/ecfs/search/search-filings/filing/1051759759289>
 Additional comments of the EMS disabled:
<https://www.fcc.gov/ecfs/search/search-filings/filing/10701619226145>

⁴¹ Cardiovascular disease: Time to identify emerging environmental risk factors
<https://journals.sagepub.com/doi/full/10.1177/2047487317734898>
 The Association Between Smartphone Use and Breast Cancer Risk Among Taiwanese Women: A Case-Control Study
<https://pubmed.ncbi.nlm.nih.gov/33149685/>
 US National Toxicology Program (NTP, an interagency research program by FDA, CDC, and NIH, located in Montgomery County) found "clear evidence", the highest rating on their 4-point scale, for malignant cancer of the heart in male rats:
<https://ntp.niehs.nih.gov/whatwestudy/topics/cellphones/index.html#studies>

⁴² See summary on page 3:
<https://ehtrust.org/wp-content/uploads/5G-and-Cell-Tower-Radiation-Briefing-1.pdf>

⁴³ https://ehtrust.org/wp-content/uploads/FCC_FDA-Communications-FCC-Lawyer-and-Mother-on-Cell-Tower-Radiation-.pdf

⁴⁴ <https://www.regulations.gov/comment/FDA-2021-P-1347-0732>

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⁴⁹ https://en.wikipedia.org/wiki/IARC_group_2B

⁵⁰ <https://ehtrust.org/world-health-organization-scientists-recommend-wireless-be-upgraded-for-cancer-causing-effects/>

⁵¹ https://wiki.cancer.org.au/policy/IARC_classifications

⁵² <https://ehtrust.org/science/medical-doctors-consensus-statements-recommendations-cell-phoneswireless/>

⁵³ European Parliament:
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https://ehtrust.org/wp-content/uploads/EHT-5G-Health-and-Environment-Open-Letter-3_2021-3.pdf

⁵⁴ <https://aspe.hhs.gov/sites/default/files/documents/4e1853c0b4885112b2994680a58af9ed/telehealth-hps-ib.pdf>