# MAYOR AND COUNCIL

## MEETING NO. 09-20
## Wednesday, March 18, 2020 – 6:00 PM

## AGENDA

Agenda item times are estimates only. Items may be considered at times other than those indicated.

Any person who requires assistance in order to attend a city meeting should call the ADA Coordinator at 240-314-8108.

7:00 PM **1. Convene**

**2. Pledge of Allegiance**

**3. Agenda Review**

7:05 PM **4. City Manager's Report**

7:15 PM **5. Community Forum - Comments by Email or Phone**

**6. Mayor and Council's Response to Community Forum**

7:30 PM **7. Discussion and Instructions to Staff Regarding Zoning Text Amendment Application TXT2019-00251, to Regulate the Installation of Small Cell Antennas; Mayor and Council of Rockville, Applicant**

8:10 PM **8. Emergency Management Briefing on Coronavirus (COVID-19)**

8:40 PM **9. Review and Comment - Mayor and Council Action Report**

**A. Action Report**

**10. Review and Comment - Future Agendas**

**A. Future Agendas**

**11. Old/New Business**

8:50 PM **12. Adjournment**

The Mayor and Council Rules and Procedures and Operating Guidelines establish procedures and practices for Mayor and Council meetings, including public hearing procedures. They are available at: http://www.rockvillemd.gov/mcguidelines.

Mayor & Council Meeting Date: March 18, 2020
Agenda Item Type: Discussion and Instructions
Department: PDS - Zoning Review & Other
Responsible Staff: Deane Mellander

## Subject

Discussion and Instructions to Staff Regarding Zoning Text Amendment Application TXT2019-00251, to Regulate the Installation of Small Cell Antennas; Mayor and Council of Rockville, Applicant

## Recommendation

Discuss the testimony from the September 16, 2019 public hearing and consider options for the proposed text amendment.

## Change in Law or Policy

Zoning Text Amendment TXT2019-00251 will revise the current regulations for wireless facilities to include specific requirements for the installation of small cell wireless antennas outside of the public rights-of-way.

## Discussion

Background

On September 26, 2018, the Federal Communications Commission ("FCC") adopted a declaratory ruling and order (the "FCC Order") broadly interpreting the Telecommunications Act of 1996 ("1996 Act") and severely limiting local government authority on many issues related to the deployment of small cell wireless facilities. Although it is being challenged in the courts by numerous local governments, the FCC Order went into effect on January 14, 2019. The City is a participant in one of the pending lawsuits.

Under the FCC Order, "small wireless facilities" are defined as facilities that: (i) are mounted on structures 50 feet or less in height including their antennas, or (ii) are mounted on structures no more than 10 percent taller than other adjacent structures, or (iii) do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater. Antennas for small wireless facilities can be no more than three cubic feet in volume, and other equipment associated with the facility can be no more than 28 cubic feet in volume.

The FCC Order permits local governments to establish aesthetic requirements for the installation of small cell wireless facilities. However, the aesthetic requirements must be (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; (3) objective; and (4) published in advance.

The FCC Order also established "shot clocks", which are set timeframes within which local governments must act on applications to install small wireless facilities. The FCC Order requires the City to act on an application to install a small wireless facility on an existing structure within sixty (60) days, and to act on an application to install a small wireless facility on a new antenna support structure within ninety (90) days. If the City fails to act on an application within the applicable timeframes, the City could face litigation that could result in allowing the installation to occur as submitted. A summary of the FCC Order is included as Attachment A.

City Zoning Regulations on Wireless Communication Facilities

The Mayor and Council adopted text amendment TXT2001-00191 in August 2001 to provide a comprehensive set of regulations for wireless telecommunications facilities in the City. This language is now incorporated as Section 25.09.08, "Wireless Communication Facility", in the current Zoning Ordinance. The purpose of this section is to regulate the location and installation of macro antenna sites. Typically, these are multi-antenna installations mounted on monopole towers, lattice towers, or on the sides or roofs of buildings. Wireless facilities mounted on a new free-standing structure, i.e., a monopole or lattice tower, are required to obtain a special exception from the Board of Appeals. A facility located on an existing building or structure is a conditional use, subject to compliance with the provisions of Sec. 25.09.08.b.

These macro sites, which usually consist of three large panel antennas facing in different directions for each carrier, generally provide wireless service coverage for a radius of about two (2) to four (4) miles. The spacing between the macro antenna locations is dependent on several factors, including elevation, density of wireless traffic, and intervening trees or structures than can attenuate the signal strength.

In dense urban areas, gaps in service can exist due to the height and density of the built environment. Small cell antennas, which are a new and evolving technology, serve several functions: fill in existing service gaps; provide additional service in high-traffic areas, such as city centers; and support 5G wireless service.

Under the current provisions for wireless communications facilities in Section 25.09.08, panel antennas, which can be up to two (2) feet in width and six (6) feet in height, may be mounted on existing buildings or structures that are at least thirty-five (35) feet in height for nonresidential buildings, and fifty (50) feet in height on a multi-family residential building. An antenna may also be located on a ground-mounted support structure, i.e., a monopole or other antenna support structure if the structure receives approval of a special exception by the Board of Appeals. In addition, if a ground-mounted support structure is proposed to be more than 50

feet tall in a residential zone, or more than 50 feet tall within 500 feet of a residential zone, or more than 199 feet tall in a nonresidential zone, the Mayor and Council must grant a waiver of the height restrictions under Section 25.09.08.e.3.

Proposed Revisions to Zoning Regulations

The intent of this text amendment application (Attachment B) is to revise the City's Zoning Ordinance to comply with the FCC Order, while also allowing the City to regulate the deployment of small cell antennas in a manner that meets the needs of the City. Small cell antennas can be much smaller than the typical tower-mounted cell antennas. Depending on the carrier, the antennas may be either an omni-directional canister antenna, or a cluster of two or three small panel antennas. The text amendment application as submitted proposes to define small cell antennas as being no larger than three (3) cubic feet in size. Cumulative volumetric standards of twenty-eight (28) cubic feet are also proposed for equipment enclosures. These revisions are consistent with the FCC Order.

The definitions for Antenna, Antenna support structure, Colocation, Wireless communication facility, and Wireless communication service have all been revised to reflect the current terminology and to reflect the language in the FCC Order. A new definition for "Wireless communication facility, small" is proposed to be added to specifically address the regulation of small cell facilities in a manner consistent with the FCC Order.

The proposed text amendment also revises the current language to distinguish small cell installation regulations from regulations for other types of antenna installations, such as macro sites and monopoles. The language is revised to be consistent with the terminology in the FCC order. In some cases, the existing language has been reordered for better clarity of intent. The amendment also proposes to increase the allowable height of macro panel antennas from six (6) feet to eight (8) feet, in line with current industry practice.

A new subsection "d" has been added specifically to regulate small cell antennas that are not installed in the City's public rights-of-way. Small cell installations within the City's public rights-of-way are regulated under Chapter 21 of the City Code, Streets and Public Improvements. These regulations have already been promulgated by the Department of Public Works.

For installations outside of public rights-of-way, the regulations can be summarized as follows:

- No antennas can be located on a single-family detached, semi-detached, or townhouse dwelling. No antenna can be located on an accessory building or structure located on the same lot as a dwelling.
- Antennas must be located at least twenty-five (25) feet from a single-family dwelling, and 250 feet from another antenna support structure.
- Installations must be designed and located to minimize visual impacts, including use of stealth technology.

- Support equipment must be enclosed and cannot exceed five (5) feet in height.
- As per the FCC Order, antennas cannot exceed three (3) cubic feet in volume, and support equipment cannot exceed an aggregate total of twenty-eight (28) cubic feet in volume. Note: this equates to a cube that is three feet by three feet by three feet (3'x 3' x 3').
- Antennas cannot extend more than three (3) feet above the existing height of the pole or support structure.
- Where underground utilities are required, any equipment enclosures must be located below grade, unless incorporated into the base of the support structure.
- No installations are permitted on a historic structure or within a historic district where any portion of the installation except the antenna is visible from the ground.
- If the installation is no longer in use, it must be removed by the owner at their expense.
- No hazardous materials can be stored on the site.

The land use tables for the residential, mixed use and industrial zones are proposed to be amended to reflect the revisions in Article 9. Small cell antennas are added as a conditional use, subject to the new provisions. No changes are proposed to the current regulations for wireless facilities in the RMD zones, and small cell antenna facilities would not be permitted. In the Industrial zones, the wireless provisions are proposed to be relocated within the tables from the Assembly and Entertainment section to the Industrial and Service Uses section to better reflect the characteristics of the use.

Under the FCC Order, the City is prohibited from requiring a wireless provider to prove that there is a gap in coverage and that a small wireless facility is needed in a particular location. Further, the FCC Order limits the City's ability to enact unreasonable spacing and underground requirements that could be construed as an effective prohibition on small cell facilities.

Public Process

The Planning Commission reviewed this proposal at their meetings on June 26 and July 24, 2019, and recommended approval. The staff report to the Commission is at Attachment C. The Planning Commission recommendation is at Attachment D.

On September 16, 2019, the Mayor and Council held a public hearing on this text amendment. Following an introduction by staff, four persons spoke on this item. Their testimony is summarized as follows:

> Clyde Douglass questioned whether the new regulations applied to all public structures, and what the real size of the antennas and equipment would be. He also wondered whether these regulations constituted a restraint of trade, and who would manage the installation of the infrastructure. The remainder of his comments focused on opposition to aspects of current regulations.

Tessa Lachman testified that a twenty-five-foot separation between a house and an antenna was not sufficient, and that it should be at least 60 feet, as proposed by Montgomery County in their last session. Updated information on the effects of radio frequency (RF) radiation should be provided.

Sandra Crowe testified that there should be no distribution of 5G service until there is data available on the potential health effects of existing 3G and 4G services. She said a study indicated that exposure to 4G service on beehives stopped honey production. She stated that exposure to RF emissions creates health issues, and there is concern about privacy issues as well.

Nancy Wallace spoke representing the Green Party of Maryland, which opposes the introduction of 5G service. She stated that any new service should be delayed until additional data on potential health effects are available, and that any densification of such service should not be allowed.

Attachment E provides additional written testimony submitted to the record. These submittals reflect opposition to small cell/5G service, based on exposure to RF radiation.

Staff Response to Comments

The 1996 Act gives the FCC sole, exclusive authority over all RF (radiofrequency) radiation standards, including assessing the health effects. Therefore, the City is expressly prohibited from regulating RF in any way upon any basis.

As noted above, the FCC order that went into effect on January 14, 2019 requires local jurisdictions to allow the installation of small cell service. The Mayor and Council adopted an applicable fee schedule prior to that date. Also at that time, the Department of Public Works staff instituted regulations for small cell installations within the City's public rights-of-way. So far, seventeen applications for installation in the City's public rights-of-way have been approved.

Regarding small cell installations outside of the City's public rights-of-way, staff noted at the hearing that without these proposed amendments, presently, small cell antennas can be installed if they comply with current zoning requirements. Current zoning provisions require that antennas be located at least thirty-five (35) feet off the ground on structures that are at least thirty-five (35) feet tall in commercial, mixed-use and industrial areas. Antennas may be installed on multi-family structures that are at least fifty (50) feet tall.

No changes have been proposed to these requirements in the proposed text amendment. If adopted, the text amendment would allow small cell/5G antennas to be located no less than 15 feet from the ground level on both commercial, mixed-use and multi-family buildings. The current regulations prohibit installations on single-unit detached, single-unit attached or semi-

detached dwellings, or related accessory structures, and that prohibition will continue with the small cell text amendment.

The amendment proposes to allow small cell antennas no closer than twenty-five (25) feet from a single-unit detached dwelling. This is partially predicated on the 25-foot minimum front yard setback in the R-60 Zone. Note, however, that the regulations for installations in the public rights-of-way take precedence and are not impacted by the zoning regulations for property outside of right-of-way. In effect, the 25-foot setback would apply primarily where antennas are proposed to be installed on non-residential structures in the residential zones, such as churches, schools, and other institutional uses. As noted, Gaithersburg requires at least 30 feet, while Montgomery County requires sixty (60) feet. The Mayor and Council did receive testimony that this setback distance should be increased, so staff is recommending that the Mayor and Council modify the proposed text amendment to increase the proposed setback from single-unit detached dwellings to 60 feet to be consistent with Montgomery County. Increasing the setback could serve to provide additional separation between small cell facilities located on private properties adjacent to single unit-detached dwellings, thereby reducing adverse visual impacts within or adjacent to single family neighborhoods.

Staff also recommends that additional language be added to Section 25.08.09.d.2.(a) to include a reference to the Planned Development zones. This will clarify that the designated equivalent zones in Article 14 for the various PDs will apply for the relevant types of development within those areas.

While Staff understands the concerns expressed at the hearing and in the written submittals regarding health effects, the City has no authority to address this issue. If an installation complies with existing federal RF standards, the City cannot deny an application based on health concerns. The City can and does require providers to demonstrate compliance with federal RF standards.

One commenter raised an issue that he termed “restraint of trade.” Staff is unclear as to what the commenter meant by that term. For small cell installations on private property, such transactions are a contractual matter between the small cell provider and the private property owner. However, the proposed text amendment requires small cell installations on private property to meet specific development and concealment standards and requires small cell carriers to remove small cell installations on private property if service is terminated.

If the Mayor and Council do not enact these proposed amendments, the existing zoning ordinance will remain as it currently is, without any provisions specifically addressing small cell installations outside of the City’s public rights-of-way (i.e. design standards, location, and setback requirement). As noted above, the City’s current ordinance permits installation of wireless communication facilities, provided that the locational requirements are met. Therefore, in staff’s view, there is no prohibition on such installations, but the ordinance’s current provisions were developed for the earlier versions of cellular service and do not adequately accommodate or address small cell/5G installations.

Neighboring Jurisdictions

Montgomery County adopted a text amendment in 2014 that allowed the installation of small cell antennas in the commercial and industrial areas of the County. The antennas are limited in size to three (3) feet high and two (2) feet wide. Where an antenna is proposed next to a detached residential zone, it must be located at least sixty (60) feet from a dwelling. A text amendment to allow and regulate small cell antennas in the residential zones was pending in the last Council session but did not get adopted and died with the end of the session. The County has deferred further action pending the outcome of their court case.

In the City of Gaithersburg's zoning ordinance, antennas are limited in size to four (4) feet tall by two and a half (2.5) feet wide. Antennas may be mounted on buildings or other support structures. Antenna height must be at least fifteen (15) feet on structures in non-residential and mixed-use areas and twenty (20) feet on multi-family buildings. Small cell facilities must be located at least thirty (30) feet from any single-family detached or attached dwelling. Stealth technology must be used in historic areas.

Recommendation

As previously noted, staff believes that most small cell installations will occur within the City's public rights-of-way, which are already permitted subject to compliance with the promulgated standards. For small cell installations outside of the City's public rights-of-way, installation of small cell antennas is already possible within the limits of the current code requirements, which were developed for the earlier versions of cellular service and do not adequately accommodate or address the service needs for new service such as 5G, which is provided via a small cell network. Approval of the proposed text amendment (Attachment B) gives the City oversight of small cell installations in a consistent manner, allowing for the implementation of the 5G service while also protecting the public interest through design standards and locational requirements.

Should the Mayor and Council wish to consider minor amendments or revisions to the ordinance, the advertisement for the public hearing appears to be general enough to allow them. Such minor revisions may include extending the required setback from residential properties from twenty-five (25) feet to sixty (60) feet as recommended by staff.

In response to the public feedback, staff is recommending that the Mayor and Council consider a change to not allow the installation of small cells in any residential areas which would include any single-unit and residential medium density zoning district or properties in mixed used districts that are used or approved for residential use. We believe that this restriction should still provide adequate opportunity for cellular providers to locate the small cell facilities on non-residential zoned or used property. If the Mayor and Council wish to amend the proposed text amendment language in this manner, then direction should be provided to staff so that an appropriate ordinance may be drafted. Beyond the two revisions mentioned above, any

additional changes to the existing wireless communications regulations may require a new text amendment application to be written and then go back through the amendment process.

## Mayor and Council History

The Mayor and Council authorized the filing of this text amendment application on April 1, 2019. The public hearing was held on September 16, 2019. As noted above, four members of the public spoke at the public hearing in opposition to the text amendment.

## Public Notification and Engagement

Notice of the filing of the text amendment application and the date for Planning Commission recommendation were sent to the homeowner's associations and civic associations via the City's neighborhood listserv. The public hearing was advertised in a local newspaper of general circulation for two weeks prior to the hearing date.

## Boards and Commissions Review

The Planning Commission reviewed this text amendment application at its meetings on June 26 and July 24, 2019, and recommended approval. The recommendation is included as Attachment D.

## Next Steps

Once the Mayor and Council provide instructions and directions to staff, an appropriate ordinance will be drafted for consideration at an upcoming meeting.

## Attachments

| | | |
|---|---|---|
| Attachment 7.a: | FCC Order Summary Highlighted | (PDF) |
| Attachment 7.b: | TXT 251 Application | (PDF) |
| Attachment 7.c: | PC Staff Report 7-24-19 | (PDF) |
| Attachment 7.d: | PC Recommedation TXT251 | (PDF) |
| Attachment 7.e: | Public Testimony | (PDF) |

Rob DiSpirito, City Manager 3/13/2020

# KEY POINTS OF FCC DECLARATORY RULING AND THIRD ORDER ON SMALL CELLS

*Statutory Authority for Order*[1]
47 USC § 332(c)(7)

- Addresses personal wireless services

47 USC § 253(a)

- Addresses any interstate or intrastate telecommunications service

*FCC Order – Key Paragraphs*
Standard

- **Standard:** A state or local requirement constitutes an effective prohibition if it 'materially limits or inhibits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment.' (¶ 35.)
- A state or local legal requirement will have the effect of prohibiting wireless services if it materially inhibits the provision of such services. (¶ 37.)
    - Includes materially inhibiting additional services or improving existing services. (¶ 37.)
- Providers must be able to compete in a "fair and balanced regulatory environment." (¶ 39.)
    - Requirement can function as an effective prohibition either because of a "financial burden" or because of a resulting competitive disparity. (¶ 39.)

Fees

- Only permitted to the extent that they represent a reasonable approximation of the local government's objectively reasonable costs, and are non-discriminatory. (¶ 32.)
- ROW access fees, and fees for the use of government property in the ROW, such as light poles, traffic lights, utility poles, and other similarly situated property suitable for hosting Small Wireless Facilities, as well as application or review fees imposed by a state or local government as part of their regulation of the deployment of Small Wireless Facilities inside and outside the ROW, violate Sections 253 or 332(c)(7) unless these conditions are met: (1) the fees are a reasonable approximation of the state or local government's costs, (2) only objectively reasonable costs are factored into those fees, and (3) the fees are no higher than the fees charged to similarly-situated competitors in similar situations. (¶ 50.)
- States and localities may recover a reasonable approximation of their costs related to deployment of Small Wireless Facilities. (¶ 56.)
- The requirement that compensation be limited to a reasonable approximation of objectively reasonable costs and be non-discriminatory applies to all state and local government fees paid in connection with a provider's use of the ROW to deploy Small Wireless Facilities . . . . (¶ 69.)

[1] The text of the two subsection of the United States Code that are referenced below are contained at the end of this document.



Attachment 7.a: FCC Order Summary Highlighted (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

- This interpretation applies with equal force to any fees reasonably related to the placement, construction, maintenance, repair, movement, modification, upgrade, replacement, or removal of Small Wireless Facilities within the ROW, including, but not limited to, application or permit fees such as siting applications, zoning variance applications, building permits, electrical permits, parking permits, or excavation permits. (¶ 69.)

- Fees not reasonably tethered to costs appear to violate [the Sections]. (¶ 70.)
  - Examples: gross revenue fees (not based on the costs associated with an entity's use of the ROW), unreasonably high costs (such as excessive charges by third party contractors or consultants) may not be passed on through fees even though they are an "actual cost"
- Fair and reasonable compensation: a reasonable approximation of a state or local government's objectively reasonable costs of, respectively, maintaining the ROW, maintaining a structure within the ROW, or processing an application or permit. (¶ 72.)
- Government's incur a variety of direct and actual costs, such as: costs for staff to review the provider's siting application, cost's associated with a provider's use of the ROW, and costs associated with maintaining the ROW itself or structures within the ROW to which Small Wireless Facilities are attached. (¶ 75.)
- When a locality charges both types of recurring fees (access to the ROW and for use or attachment to property in the ROW), the total of the two fees must reflect the total costs involved. (¶ 76.)
  - Fees that cannot ultimately be shown by a state or locality to be a reasonable approximation of its costs, such as high fees designed to subsidize local government costs in another geographic area or accomplish some public policy objective beyond the providers' use of the ROW, are not "fair and reasonable compensation . . . for use of the public rights-of-way."
  - Excessive and arbitrary consulting fees or other costs should not be recoverable as "fair and reasonable compensation" because they are not a function of the provider's "use" of the public ROW.
- Fees that presumptively do not constitute an effective prohibition and are presumed to fair and reasonable: (a) $500 for non-recurring fees, including a single up-front application that includes up to five Small Wireless Facilities, with an additional $100 for each Small Wireless Facility beyond five, or $1,000 for non-recurring fees for a new pole intended to support one or more Small Wireless Facilities; (b) $270 per Small Wireless Facility per year for all recurring fees, including any possible ROW access fee or fee for attachment to municipally-owned structures in the ROW. (¶ 79.)
  - A local government can charge fees above this level by showing that the fees are (1) a reasonable approximation of costs, (2) those costs themselves are reasonable, and (3) are non-discriminatory. (¶ 80.)

<u>Non-Fee Related Provisions that Could Operate as Prohibitions on Service</u>

- Aesthetic requirements are not preempted if they are: (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) objective and published in advance. (¶ 86.)



Attachment 7.a: FCC Order Summary Highlighted (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

- Requirements that are reasonable in that they are technically feasible and reasonably directed to avoiding or remedying the intangible public harm of unsightly or out-of-character deployments are permissible. (¶ 87.)
- Requirements must be objective – *i.e.*, they must incorporate clearly-defined and ascertainable standards, applied in a principled manner – and must be published in advance. (¶ 88.)

- Undergrounding Requirements. (¶ 90.)
  - We believe that a requirement that *all* wireless facilities be deployed underground would amount to an effective prohibition given the propagation characteristics of wireless signals. (¶ 90.)
  - Further, a requirement the materially inhibits wireless service, even if it does not go so far as requiring that all wireless facilities be deployed underground, also would be considered an effective prohibition. (¶ 90.)
- Minimum spacing requirements may be reasonable aesthetic requirements. (¶ 91.)
  - Under the principle that nay such requirements be reasonable and publicly available in advance, it is difficult to envision any circumstances in which a municipality could reasonably promulgate a new minimum spacing requirement that, in effect, prevents a provider from replacing its preexisting facilities or collocating new equipment on a structure already in use. (¶ 91.)

<u>State and Local Governments Act in Their Regulatory Capacity When Authorizing and Setting Terms for Wireless Infrastructure Deployment in Public Rights-of-Way</u>

- The interpretations extend to state and local governments' terms for access to public ROW that they own or control, including areas on, below, or above public roadways, highways, streets, sidewalks, or similar property, as well as their terms of use of or attachment to government-owned property within such ROW, such as new, existing, and replacement light poles, traffic lights, utility poles, and similar property suitable for hosting Small Wireless Facilities. (¶ 92.)
- Section 253(a) is properly construed to suggest that Congress did not intend to permit states and localities to rely solely on their ownership of property within the ROW as a pretext to advance regulatory objectives that prohibit or have the effect of prohibiting the provision of covered services. (¶ 97.)

<u>Shot Clocks/Applications</u>

- New shot clock for small wireless facility deployments (¶ 105.)
  - 60 days for review of an application for collocation of Small Wireless Facilities using a preexisting structure.
  - 90 days for review of an application for attachment of Small Wireless Facilities using a new structure.
- Shot clocks reset in the event that a locality receives a materially incomplete application. (¶ 111.)
- It is likely that providers will submit "batched" applications, which are multiple separate applications filed at the same time, each for one or more sites *or* a single application covering multiple sites. (¶ 113.)
  - We see no reason why the shot clocks for batched applications to deploy Small Wireless Facilities should be longer than those that apply to individual



Attachment 7.a: FCC Order Summary Highlighted (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

applications because, in many cases, the batching of such applications has advantages in terms of administrative efficiency that could actually make review easier. (¶ 114.)

- Section 332 does not allow states and localities to refuse to accept batches of applications to deploy Small Wireless Facilities. (¶ 115.)
- A failure to act amounts to a presumptive prohibition on the provision of personal wireless services within the meaning of [the Section]. (¶ 118.)
- Any request for authorization to place, construct, or modify personal wireless services facilities under [Section 332] means all authorizations necessary for the deployment of personal wireless services infrastructure. (¶ 132.)
    - The text encompasses not only requests to place personal wireless service facilities, e.g., zoning requests, but also requests for authorization to construct or modify personal wireless service facilities. (¶ 133.)
- Attachment of facilities to existing structures constitutes collocation, regardless whether the structure or the location has previously been zoned for wireless facilities. (¶ 140.)
- For Small Wireless Facilities applications, the siting authority has 10 days from the submission of the application to determine whether the application is incomplete. (¶ 143.)
    - The shot clock then resets once the applicant submits the supplemental information requested by the siting authority. (¶ 143.)

*Statutory Authority for Order*

47 USC § 332(c)(7)

**(c)(7)** Preservation of local zoning authority.

**(A)** General authority. Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

**(B)** Limitations.

**(i)** The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

**(I)** shall not unreasonably discriminate among providers of functionally equivalent services; and

**(II)** shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

**(ii)** A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

**(iii)** Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.



Attachment 7.a: FCC Order Summary Highlighted (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

**(iv)** 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.

**(v)** Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

**(C) Definitions. For purposes of this paragraph--**

**(i) the term "personal wireless services" means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;**

**(ii) the term "personal wireless service facilities" means facilities for the provision of personal wireless services; and**

**(iii) the term "unlicensed wireless service" means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) [47 USCS § 303(v)]).**

47 USC § 253(a)-(c)

**(a) In general. No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.**

**(b) State regulatory authority. Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with section 254 [47 USCS § 254], requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers.**

**(c) State and local government authority. Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.**



Attachment 7.a: FCC Order Summary Highlighted (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

Application for
# Text Amendment

TXT
2/09

**City of Rockville**
*Department of Community Planning and Development Services*

111 Maryland Avenue, Rockville, Maryland 20850
**Phone:** 240-314-8200 • **Fax:** 240-314-8210 • **E-mail:** Cpds@rockvillemd.gov • **Web site:** www.rockvillemd.gov

**Application Information:**

Is this an Amendment to Existing Text ? ☑ YES ☐ NO

**Add New Zone Classes:** ☐ YES ☑ NO **Add New Uses:** ☑ YES ☐ NO

Number of new uses: 1 Ordinance # _____

***Please Print Clearly or Type***

Property Address information City-Wide

Project Description Allow installation of small cell wireless antennas

**Applicant Information:**
*Please supply Name, Address, Phone Number and E-mail Address*

Applicant Mayor and Council of Rockville

Property Owner N/A

Architect N/A

Engineer N/A

Attorney N/A

2019 APR -2 PM 2:37

**STAFF USE ONLY**

**Application Acceptance:**
Application # _____
Date Accepted _____
Staff Contact _____

OR

**Application Intake:**
Date Received _____
Reviewed by _____
Date of Checklist Review _____
Deemed Complete: Yes ☐ No ☐

Attachment 7.b: TXT 251 Application (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

Application is hereby made with the Rockville Mayor and Council for Approval of a change in the text of the Zoning and Planning Ordinance of Rockville, Maryland.

Page_____ Article _____ Section _____

**FROM:** Which reads as follows See Attachment

**TO:** Reads as follows See Attachment

By: _____
(Signature of Applicant)

Subscribed and sworn before this _____ day of _____, 20____

My Commission Expires _____
Notary Public

**The following documents are furnished as part of the application:**

☑ A Complete Application

☐ Filing Fee

**Comments on Submittal: (For Staff Use Only)**



Attachment 7.b: TXT 251 Application (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

ATTACHMENT TO APPLICATION
TO THE CITY OF ROCKVILLE FOR A
TEXT AMENDMENT TO THE ZONING ORDINANCE

Applicant: Mayor and Council of Rockville

The applicant proposes to amend the zoning ordinance adopted on December 15, 2008, and with an effective date of March 16, 2009, by inserting and replacing the following text (underlining indicates text to be added; ~~strikethroughs~~ indicate text to be deleted; * * * indicates text not affected by the proposed amendment). Further amendments may be made following citizen input, Planning Commission review and Mayor and Council review.

Amend Article 3, "Definitions; Terms of Measurement and Calculations", as follows:

**Sec. 25.03.02. - Words and terms defined.**

***

*Antenna* means any structure or device used to collect, receive, transmit, or radiate electromagnetic waves, including both directional antennae (such as panels, microwave dishes, satellite earth station antennae over two (2) meters in diameter), or diagonal measurement, and omni-directional antennae (such as whips). This term does not include end-user antennas two (2) meters or less in diameter or diagonal measurement and designed for:

1. End-user over-the-air reception, not transmission, of multi-channel multi-point distribution service;
2. Direct broadcast satellite service;
3. End-user reception of signals from an Internet service provider and end-user transmission of signals to an Internet service provider;
4. Mobile radios; or
5. Antennas permitted by right by 47 C.F.R. Section 1.4000, as amended.

*Antenna support structure* means a structure designed for the primary purpose of supporting one (1) or more antennae (including telescoping mast, tower, monopole, tethered blimp, or other support structure). The term includes structures located on buildings or other structures, ground-mounted, or tethered, and towers, as defined in 47 C.F.R. Section 1.40001(b)(9). Without limitation, the term does not include utility poles or structures, including public structures in the public right-of-way.

***

*Collocation* ~~means the use of a wireless telecommunications facility by more than one (1) wireless service provider~~ has the same meaning as in 47. C.F.R. Section 1.4001(g).





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***

*Equipment enclosure* means, for purposes of a wireless communication facility, a freestanding or mounted structure, shelter, cabinet, or vault used to house and to protect the electronic equipment and associated equipment necessary for processing wireless communication signals. Associated equipment may include air conditioners, back-up power supplies, and emergency generators.

***

*Small wireless communication facility – See Wireless communication facility, small.*

***

*Wireless communication facility* means a facility fixed at a location temporarily or permanently for the transmission and/or reception of wireless communication services, consisting of one (1) or more antennas and the equipment at that location necessary to the provision or reception of wireless communication services, including, but not limited to, transmission cables and related equipment enclosures.

*Wireless communication facility, small* means a wireless communication facility that meets each of the following conditions:

1. The structure on which antenna facilities are mounted:

    (a) is 50 feet or less in height; or

    (b) is no more than ten percent (10%) taller than other adjacent structures; or

    (c) is not extended to a height of more than ten percent (10%) above its preexisting height as a result of the collation of new antenna facilities; and

2. Each antenna, excluding associated antenna equipment, is no more than three (3) cubic feet in volume; and

3. All antenna equipment associated with the small wireless communication facility, excluding antennas, is cumulatively no more than twenty-eight (28) cubic feet in volume; and

4. The small wireless communication facility does not require antenna structure registration; and

5. The small wireless communication facility does not result in human exposure to radiofrequency in excess of the applicable safety standards specified by Federal law.

*Wireless communication service* means those personal wireless services as defined ~~in the same manner as~~ in Title 47, U.S. Code, Section 332(c)(7)(c), ~~as they may be amended from time to time~~ and such other services that consist of the transmission, or transmission, ~~and/~~or transmission and reception of information by electromagnetic wave, digital signals,

broadcast television signals, analog signals, radio frequencies, or other communication signals.

Amend Article 8, "Accessory Uses; Accessory Buildings and Structures; Encroachments; Temporary Uses; Home-Based Business Enterprises; Wireless Communication Facilities", as follows:

**Sec. 25.09.08. - Wireless Communication ~~Facility~~ Facilities.**

a. *Purpose.* The purpose of this section is to provide a uniform and comprehensive set of standards for the development and installation of wireless communication facilities, related structures, and equipment.

1. The regulations and requirements contained herein are intended to:

(a) Regulate the placement, construction, and modification of wireless communication facilities in order to protect the health, safety, and welfare of the public and the aesthetic quality of the City; and

(b) Encourage managed development of wireless communication infrastructure, while at the same time not unreasonably interfering with the development of the competitive wireless communication marketplace in the City.

2. This section is intended to promote the following objectives:

(a) To minimize the total number of wireless communication facilities and antenna support structures throughout the community through siting standards;

(b) To provide for the appropriate location and development of wireless communication facilities and related structures and equipment within the City, and, to the extent possible, minimize potential adverse impacts on the community;

(c) To minimize adverse visual and aesthetic impacts of wireless communication facilities and related structures and equipment through careful design, siting, landscape screening, and innovative camouflaging techniques, such as stealth technology, and utilizing current and future technologies;

(d) To promote and encourage shared use~~/collocation~~ of antenna support structures;

(e) To maintain and preserve the existing residential character of the City and its neighborhoods and promote the creation of a convenient, attractive, and harmonious community;

(f) To promote the safety of citizens and avoid the risk of damage to adjacent properties by ensuring that wireless communication facilities and related structures and equipment are properly designed, constructed, located, modified, maintained, and removed;

(g) To ensure that wireless communication facilities and related structures and equipment are compatible with surrounding land uses;

(h) To encourage: the location of ~~antennas~~ wireless communication facilities on existing buildings or other structures; collocation of new antennas on existing antenna support structures; camouflaged antenna support structures; ~~and~~



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construction of antenna support structures with the ability to locate three (3) or more providers or users; the deployment of wireless communication facilities in a manner that does not require substantial alterations to existing structures that adversely affects the structure's appearance or the neighborhood; and

(i) To maintain and ensure that a non-discriminatory, competitive, and broad range of high quality wireless communication services and high quality wireless communication infrastructure consistent with laws are available to the community.

b. *Wireless Communication Facilities Entirely Within an Existing Building or Attached to Existing Structures.*: Wireless communication facilities attached to the roof or side of a building, or attached to an exsting structure must comply with the following:

1. *Scope.* This subsection applies to wireless communication facilities that (1) do not meet the definition of small wireless communication facility and (2) are entirely within an existing building or attached to an existing structure.

2. *Development Standards.*

1. (a) The building or other structure on which a wireless communication facility to be installed must be at least thirty-five (35) feet in height if used for nonresidential purposes and fifty (50) feet in height if used for multiple unit dwelling purposes. In a mixed-use development, the multiple unit dwelling standard applies. Except as provided in subsection 25.09.08.e, wireless communication facilities are not permitted on any single unit detached dwelling or appurtenant accessory building or structure.

2. (b) The antennas and antenna support structures must be located and designed to minimize visual impacts through various methods, including, but not limited to, the use of stealth technology. Antennas and antenna support structures must be installed according to the order of preference in subsections 25.09.08b.2.(b)(i) through (ii) below, with (ai) being the preferred option. Use of a lower preference location is permitted only if an applicant provides detailed justification as to why higher preference locations are not suitable.

(ai) Antennas must be flush mounted on existing structures, or on either rooftop enclosures or the side of a building, and closely match the color and architectural treatment of the structure, enclosure, or building.

(bii) Antennas must be flush-mounted on expanded rooftop mechanical equipment enclosures, with the enclosures and antennas designed to be consistent with the architectural treatment and color of the building.

(c) The antennas and antenna support structures, regardless of location, must be located and designed to minimize visual impacts through various methods, including, but not limited to, the use of stealth technology.

(i) Antennas must be enclosed with screening that is include shielding or otherwise be placed in an enclosure. The enclosures and shielding must be consistent with the architectural treatment and color of the building or structure.





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(ii) Antennas and support structures must be painted or otherwise treated to minimize their visibility. Any paint used must be non-reflective paint of the same color as the structure.

(iii) No visible lighting is allowed on any wireless facility, except as required by law.

~~3.~~ (c) Antennas and supporting structures are permitted to exceed the height of the building or structure to which they are attached by a maximum of nineteen (19) feet. The height above a building must be measured from the finished roof elevation, and not from the roof of any equipment enclosure.

~~4.~~ (d) Antennas must comply with the following size standards:

(~~a~~i) Whip antennas must be no more than seven (7) inches in diameter; and

(~~b~~ii) Panel antennas must be no more than two (2) feet wide and ~~six (6)~~ eight (8) feet long.

~~5.~~ (e) Equipment enclosures must comply with the requirements of Section 25.09.08.e. An equipment ~~building or cabinet~~ enclosure may be located on the roof of a building provided it and all other roof structures do not occupy, in the aggregate, more than twenty-five (25) percent of the roof area.

~~6.~~ (f) When an antenna is located on a stadium light or utility pole, the total height of the antenna plus the pole or light must not exceed one hundred twenty-five (125) percent of the average height of the lighting system at the stadium or run of poles within five hundred (500) feet of the pole on which the antenna is located.

(g) A wireless communication facility must be designed, installed, and maintained in compliance with all applicable provisions of the City Code including, but not limited to, provisions regulating noise levels, and permit and inspection requirements.

(h) When a wireless communication facility is no longer in use, the wireless communication facility must be removed at the expense of the facility owner. Failure to remove abandoned equipment will result in removal by the City at the expense of the owner.

(i) No hazardous material may be located at the site.

c. *Wireless Communication Facilities* ~~*Located on*~~ *Attached to Ground-Mounted Antenna Support Structures.*

1. *Scope.* This subsection applies to wireless communication facilities that (1) do not meet the definition of small wireless communication facility, and (2) are mounted on ~~free-standing~~ ground-mounted antenna support structures.

(a) *Special exception.* Wireless communication facilities covered by this section require the approval of a special exception in accordance with the applicable provisions of article 15 of this chapter.

(b) *Additional findings required.* The following additional findings must be made for the granting of a special exception:





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(i) The location is selected because ~~is necessary for the public convenience and service and cannot be supplied with equivalent public convenience on a~~ the wireless communication facility cannot be attached to an existing building or structure or collocated on an existing ground-mounted antenna support structure; and

(ii) For new ground-mounted antenna support structures to be located in a residential zone or within five hundred (500) feet of a residential zone, it must be demonstrated that a good faith effort has been made to locate the proposed ground-mounted antenna support structure in a nonresidential zone more than five hundred (500) feet from the residential zone, with adequate coverage and on an isolated site with minimal visual impact.

(c) *Independent consultant.* The City may hire an independent consultant to review evidence submitted by the applicant, and the applicant must reimburse the City for the reasonable cost of hiring and utilizing such a consultant.

2. *Development Standards.*

(a) The maximum height of the facility, including antenna and other attachments, is fifty (50) feet in a residential zone, or within five hundred (500) feet of a residential zone, and one hundred ninety-nine (199) feet in all other locations. Height must be measured vertically from the pre-disturbance ground level at the center of the support structure.

(b) Monopoles are the preferred type of ~~freestanding~~ ground-mounted antenna support structure.

(c) No commercial or promotional signs, banners, or similar devices or materials are permitted on antenna support structures.

(d) The ground-mounted antenna support structure must be located and designed in a manner that is harmonious with surrounding properties, to the extent practicable. Antenna support structures must be designed to blend into the surrounding environment through the use of color and camouflaging architectural treatment. When practicable, available stealth structure design techniques must be used.

(e) Wireless communication facilities must be located on City-owned property, if feasible.

(f) Antenna support structures must be set back one (1) foot for every foot of height of the structure, measured from the base of the structure to each adjoining property line or right-of-way.

(g) Lights are not permitted on antenna support structures unless they are required for aircraft warnings or other safety reasons, or to comply with applicable laws and regulations. If required, minimum lighting requirements must be applied, and strobe lights must be avoided unless specified by the Federal Aviation Administration or the Federal Communications Commission.

(h) Outdoor storage of equipment or items related to the wireless communication facility is prohibited on sites with antenna support structures.



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(i) All antenna support structures erected as part of a wireless communication facility must be designed to accommodate collocation of additional wireless communication carriers. New antenna support structures of a height of one hundred fifty (150) feet or more must be designed to accommodate collocation of a minimum of four (4) additional providers either upon initial construction or through future modification to the antenna support structure. Antenna support structures of less than one hundred fifty (150) feet must be designed to accommodate collocation of a minimum of two (2) additional providers.

(j) Prior to construction, each applicant must provide certification from a registered structural engineer that the structure will meet pertinent design, construction, installation, and operation standards, including but not limited to the applicable standards of the Electronics Industries Association (EIA), the Telecommunications Industry Association (TIA), ANSI, and the BOCA Code in effect at the time of the building permit application.

(k) Upon completion of any sale or sublease of an antenna support structure, the owner of an antenna support structure must provide written notice to the City's Inspection Services Division.

(l) The owner of a ground-mounted antenna support structure, at the owner's expense, must remove antenna support structures when a wireless communication facility is not used for wireless purposes for a period one hundred eighty (180) days in a 12-month period. The owner of a ground-mounted antenna support structure must immediately notify the City, in writing, of nonuse or abandonment of the structure upon its cessation as a wireless communication facility. Failure to remove an abandoned or unused ground-mounted antenna support structure will result in removal of the structure by the City at the expense of the owner.

(m) When a ground-mounted antenna support structure is removed by an owner, said owner must apply for a demolition permit to remove the tower. A condition of the demolition permit is to restore the site to the standards required by the building code in effect at the time, at no expense to the City.

d. *Small Wireless Communication Facilities.*

1. *Scope.* This subsection applies to small wireless communication facilities.

(a) *Small wireless communication facilities in the public rights-of-way.* Small wireless communication facilities located within the public rights-of-way must comply with all requirements, standards, and guidelines set forth in or promulgated under Chapter 21 of the City Code.

(b) *Small wireless communication facilities outside of the public rights-of-way.* Small wireless communication facilities located outside of the public rights-of-way must comply with the development standards set forth in subsection d.2.

2. *Development Standards.*

(a) *Location.*

(i) A small wireless communication facility is prohibited from being attached to any single unit attached dwelling, single unit detached dwelling, semidetached



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dwelling, townhouse dwelling, or on any accessory building or structure located on a lot with such a dwelling.

(ii) Within a single dwelling unit residential zone, a small wireless communication facility must be located at least twenty-five (25) feet from a single unit dwelling and two hundred fifty (250) feet away from the nearest existing antenna support structure.

(iii) Except as otherwise provided in this section, a small wireless facility may be attached to any existing structure that is at least fifteen (15) feet in height, measured from grade. The antenna must be a minimum of fifteen (15) feet above grade.

(iv) A small wireless communication facility may be installed on a new antenna support structure, provided that the antenna must be a minimum of fifteen (15) feet above grade.

(b) *Concealment.*

(i) Small wireless communication facilities must be designed and installed to incorporate specific concealment elements to minimize visual impacts.

(ii) All antenna equipment must be placed in an enclosure.

(iii) Equipment enclosures, whether located on the structure or ground-mounted, and including any pre-existing equipment enclosures on the structure or ground, may not exceed five (5) feet in height.

(iv) Antennas must be shielded or otherwise be placed in an enclosure. If attached to a pole, the shielding or enclosure must be no laarger than the circumference of the pole at the point of attachment and, if attached to the top of the pole, designed to appear like a continuous vertical extension of the pole. Antennas must not extend more than thirty-six (36) inches in length, extending vertically from the base of the antenna, either at the top of the pole or structure, or on the related equipment housing, except that up to six (6) inches in additional height may be permitted for connectors.

(v) For antennas not located at the top of a pole, the antennas must be flush mounted on existing structures and closely match the color and architectural treatment of the structure.

(vi) All wiring and cables must be located inside the structure or, if that is not practical, in a conduit attached flush to the structure and painted with non-reflective paint of the same color as the structure.

(vii) No visible lighting is allowed on any small wireless facility, except as required by law.

(vi) In residential zones where public utilities are located or are required to be located underground, equipment enclosures must be located below the existing grade unless the enclosure is incorporated into the base of the pole.



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(c) A small wireless communication facility may not be located on a historic structure, or in an historic district where any portion of the wireless communication facility, except the antenna, would be visible from the ground.

(d) A small wireless communication facility must be designed, installed, and maintained in compliance with all applicable provisions of the City Code, including, but not limited to, provisions regulating noise levels, and permit and inspection requirements.

(e) When a small wireless communication facility is no longer in use, the small wireless communication facility must be removed at the cost of the facility owner and the properties affected by the facility restored to its prior condition.

(f) No writing, symbol, logo, sign, or other graphic representation which is visible from the public right-of-way is allowed to appear on any exterior surface of the small wireless communication facility; however, the owner of the small wireless communication facility must tag all attachments to structures to allow for ready identification of the owner and type of attachment.

(g) No hazardous materials may be located at the site.

~~d~~e. *Equipment Enclosures* ~~*Located at Ground Level Standards*~~ *for Wireless Facilities Other than Small Wireless Facilities*. Equipment enclosures ~~located at ground level~~ must comply with the following standards:

1. Each equipment enclosure that contains the equipment of a single provider must not exceed five hundred sixty (560) square feet of gross floor area and twelve (12) feet in height; if more than one (1) provider is to be accommodated in an equipment enclosure, a single equipment enclosure must be constructed to accommodate the maximum number of providers that are required to collocate on the antenna support structure, up to a maximum of ~~one thousand five hundred (~~1,500~~)~~ square feet in area and twelve (12) feet in height.

2. The equipment enclosure must conform to the applicable setback standards for main structures in the zone in which the property is located; setback standards for accessory buildings and structures in section 25.09.03 are not applicable to equipment enclosures.

3. The equipment enclosure must be screened to provide year-round screening. This standard may be met by one (1) or a combination of the following: fencing, walls, landscaping, structures or topography which will block the view of the equipment ~~shelter~~ enclosure as much as practicable from any street and/or adjacent properties. In areas of high visibility, fencing may be wrought iron, masonry, or other decorative fencing material.

4. Lighting associated with equipment ~~structures~~ enclosures must be directed so as to minimize any negative impact of such lighting on adjacent properties.

5. When constructed as a freestanding building, the design of the equipment enclosure must be coordinated with the design of the existing main building on the same lot or, if there is no building on the lot, with the buildings on an adjoining lot, to the extent practicable. In addition, the equipment enclosure must be constructed of non-reflective materials.

6. When attached to an existing building, the equipment enclosure must be designed in a manner that is harmonious with the existing building and surrounding properties. Any paint must be non-reflective paint of the same color as the building.

7. The equipment enclosure must be removed at the cost of the owner when the wireless communication facility is no longer being used by a wireless communication provider. Failure to remove abandoned equipment will result in removal by the City at the expense of the owner.

ef. *Waivers permitted.*

1. *Regulated satellite earth station antennas.*

(a) Any person or entity seeking to install or erect a satellite earth station antenna subject to this section, other than an antenna specified in subsection 25.09.08.e.1(a)(ii) below, may apply for a waiver from one (1) or more of the provisions of this section 25.09.08, and the Board of Appeals may grant such a waiver pursuant to applicable procedures and standards if it is shown that:

(i) The provision(s) of section 25.09.08 at issue materially limit or inhibit the transmission or reception of satellite signals at the waiver applicant's property or the provision(s) at issue impose more than a minimal cost on the waiver applicant;

(ii) The waiver, if granted, would not result in any noncompliance with applicable laws, regulations, and codes (including, but not limited to, safety and building codes); and

(iii) The waiver sought is the minimum waiver necessary to permit the reception or transmission of satellite signals at the waiver applicant's property.

(b) The Board of Appeals is authorized to grant a complete or partial waiver to any provision of section 25.09.08. In addition, the Board of Appeals may impose a lesser requirement instead of granting a complete waiver of any provision in this section if a complete waiver is not necessary to permit reception or transmission of amateur service communications at the waiver applicant's property, and the lesser requirement will allow the reception or transmission of satellite signals. The Board of Approval shall not condition a waiver upon an applicant's expenditure of a sum of money, including costs required to screen, pole-mount, or otherwise specially install a satellite earth station antenna, over and above the aggregate purchase or total lease cost of the equipment as normally installed, if such sum would be greater that the aggregate purchase or total lease cost of the equipment as normally installed.

2. *Wireless Communication Facilities for Amateur Service Communications.*

(a) Any person or entity seeking to install or erect a wireless communication facility in the City for the purpose of engaging in amateur radio communications may apply for a waiver from one (1) or more of the provisions of this section 25.09.08. and the Board of Appeals may grant such a waiver pursuant to applicable procedures and standards if it is shown that:



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(i) The provision(s) of section 25.09.08 at issue preclude amateur service communications, do not reasonably accommodate amateur service communications at the waiver applicant's property or do not constitute the minimum practicable regulation to accomplish the City's health, safety, and welfare objectives;

(ii) The waiver, if granted, would not result in any noncompliance with applicable laws, regulations and codes (including, but not limited to, FCC regulations concerning amateur radio transmission and reception); and

(iii) The waiver sought is the minimum waiver necessary to reasonably accommodate amateur service communications at the waiver applicant's property.

(b) The Board of Appeals is authorized to grant a complete or partial waiver to any provision of section 25.09.08. In addition, the Board of Appeals may impose a lesser requirement instead of granting a complete waiver of any provision in this section if a complete waiver is not necessary to permit reception or transmission of amateur service communications at the waiver applicant's property, and the lesser requirement:

(i) Will not preclude amateur service communications; and

(ii) Is the minimum practicable regulation to accomplish the City's health, safety, and aesthetic objectives.

(c) In determining whether to grant a complete or partial waiver of any provision in section 25.09.08 or to impose a lesser requirement, the Board must reasonably accommodate amateur radio communications.

3. *All Other Wireless Communication Facilities.*

(a) The Board of Appeals is authorized to grant a waiver from any and all of the standards of this section 25.09.08, except for the height restrictions for a freestanding antenna support structure in subsection c. of this section, upon showing that compliance with this section would impose an undue hardship or prohibit or have the effect of prohibiting the provision of wireless communication services or would result in unreasonable discrimination among providers of functionally equivalent wireless communication services.

(b) Waiver requests from the height restrictions (subsection 25.09.08.c.2) for a freestanding antenna support structure may be granted by the Mayor and Council upon showing that compliance with this section would impose an undue hardship or prohibit or have the effect of prohibiting the provision of wireless communication services or would result in unreasonable discrimination among providers of functionally equivalent wireless communication services. When requesting a height waiver under this provision, the applicant must submit evidence to the Mayor and Council that the height requested for the freestanding antenna support structure is the minimum height necessary to provide adequate coverage for the area that is being served by the structure. The Mayor and Council, in reviewing any waiver request from this section, must also consider the impact that the increased height of the antenna support structure would have on properties in the



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area surrounding the proposed structure, including, but not limited to, the visibility of the structure from residences and proposed methods of mitigating the visibility of the structure.

(c) This subsection 25.09.08.ef.3. does not apply to antennas and wireless communication facilities specified in subsections 25.09.08.ef.1. and 2.

4. *Procedures for all waivers.*

(a) Unless the Mayor and Council adopt by resolution different procedures for processing waivers from the height restrictions contained in subsection 25.09.08.ef.3., all waivers of this section must be processed in accordance with the procedures applicable to variances contained in section 25.06.03 of this chapter.

(b) A waiver applicant must provide supporting evidence and all information requested by the City. The City may hire an independent consultant to review such evidence, and the applicant must reimburse the City for the reasonable cost of hiring and utilizing such a consultant.

Amend Article 10, "Single Dwelling Unit Residential Zones", as follows:

* * *

**25.10.03 – Land Use Tables**

The uses permitted in the Single Dwelling Unit Residential Zones are shown in the table below. All special exceptions are subject to the requirements of Article 15.



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| | Uses | Zones | | | | | | | Conditional requirements or related regulations |
|---|---|---|---|---|---|---|---|---|---|
| | | Residential Estate Zone (R-400) | Suburban Residential Zone (R-200) | Low Density Residential Zone (R-150) | Single Unit Detached Dwelling, Restricted Residential Zone (R-90) | Single Unit Detached Dwelling, Residential Zone (R-75) | Single Unit Detached Dwelling, Residential Zone (R-60) | Single Unit Semi-detached Dwelling, Residential Zone (R-40) | |
| * * * | | | | | | | | | |
| f. Miscellaneous uses | Small wireless communication facility | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility entirely within an existing building ~~or on the roof or side of a building,~~ or attached to an existing structure | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility ~~not entirely within an existing building or on the roof or side of a building, or~~ attached to ~~an existing structure, including, but not limite to, antennas on a freestanding~~ a ground-mounted antenna support structure | S | S | S | S | S | S | S | Subject to the requirements of Secs. 25.09.08 and 25.15.02.s |

Amend Article 11, "Residential Medium Density Zones", as follows:

* * *





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**25.11.03 – Land Use Tables**

The uses permitted in the Residential Medium Density Zones are shown in the table below. Uses are subject to applicable conditions of site plan approval, and all special exceptions are subject to the requirements of Article 15.

| | Uses | Zones | | | Conditional requirements or related regulations |
|---|---|---|---|---|---|
| | | Residential Medium Density RMD-10 | Residential Medium Density RMD-15 | Residential Medium Density RMD-25 | |
| * * * | | | | | |
| e. Miscellaneous uses | Public utility building and structure | S | S | S | See Sec. 25.15.02.n |
| | Publicly-owned or publicly-operated building and use, excluding sanitary landfill | C | C | C | Conditional use subject to a Level 3 Site Plan (Sec. 25.07.05) |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility ~~not located entirely within an existing building or on the roof or side of a building, or~~ attached to ~~an existing structure, including, but not limited to antennas on a freestanding~~ a ground mounted-antenna support structure | S | S | S | See Secs. 25.09.08 and 25.15.02.s |

Amend Article 12, "Industrial Zones", as follows:

6-6-11

* * *

**25.12.03 – Land Use Tables**





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| | Uses | Zones | | Conditional requirements or related regulations |
|---|---|---|---|---|
| | | Light Industrial I-L | Heavy Industrial I-H | |
| * * * | | | | |
| **f. Assembly and entertainment** | ~~Wireless communication facility entirely within an existing building or on the roof or side of a building, or attached to an existing structure~~ | ~~C~~ | ~~C~~ | ~~Conditional use subject to the requirements of Sec. 25.09.08~~ |
| | ~~Wireless communication freestanding ground mounted antenna support structure~~ | ~~S~~ | ~~S~~ | ~~Subject to the requirements of Sec. 25.09.08 and 25.15.02.s~~ |
| * * * | | | | |
| **g. Industrial and service uses** | Warehouse, self-storage | C | C | Not permitted on a lot within 250 feet of any lot on which a public school is located |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility attached to a ~~freestanding~~ ground-mounted antenna support structure | S | S | Subject to the requirements of Sec. 25.09.08 and 25.15.02.s |

Amend Article 13, "Mixed-Use Zones", as follows:

* * *

**25.13.03 – Land Use Tables**



Attachment 7.b: TXT 251 Application (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

| | Uses | Zones | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Mixed-Use Transit District (MXTD) | Mixed-Use Corridor Distric (MXCD) | Mixed-Use Employment (MXE) | Mixed-Use Business (MXB) | Mixed-Use Corridor Transition (MXCT) | Mixed-Use Neighborhood Commercial (MXNC) | Mixed-Use Commercial (MXC) | Mixed-Use Transition (MXT) | Conditional requirements or related regulations |
| * * * | | | | | | | | | | |
| **f. Miscellaneous Uses** | Publicly-owned or publicly-operated building and use, excluding sanitary landfill | P | P | P | P | P | P | P | P | |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility attached to a ~~freestanding~~ ground-mounted antenna support structure | S | S | S | S | S | S | S | S | See Sec. 25.09.08 and 25.15.02.s |

| | |
|---|---|
| Agenda Item #: | A |
| Meeting Date: | July 24, 2019 |
| Responsible Staff: | Deane Mellander |

**SUBJECT:** Review and Recommendation to the Mayor and Council - Zoning Text Amendment TXT2019-00251 - Small Cell Antennas; Mayor and Council of Rockville, Applicants

**RECOMMENDATION**
(Include change in law or Policy if appropriate in this section): Staff recommends that the Planning Commission recommend approval of the Text Amendment to the Mayor and Council.

## Overview

**Case:** Zoning Text Amendment TXT2019-00251 (Small Cell Antennas)

**Location:** City-Wide

**Staff:** Deane Mellander
Planning and Development Services
240-314-8224
dmellander@rockvillemd.gov

**Applicant:** Mayor and Council of Rockville

**Filing Date:** April 2, 2019

## Discussion

The Planning Commission received a briefing on this Text Amendment at its meeting of June 26, 2019. Please refer to the June 26 staff report for a full discussion of the proposed text amendment (see Attachment 2).

At that meeting the Planning Commission requested some additional information. Included as Attachment 3 is a summary that contains some of the key provisions of the FCC Order. The following is a link to the full FCC Order related to small cell antenna installations:
https://docs.fcc.gov/public/attachments/FCC-18-133A1.pdf

Attachment 4 is a recent article from the magazine *American City and County* recounting potential issues surrounding small cell installations and the FCC Order as it relates to local governments.

As recommended in the June 26th attached report, staff recommends that the Planning Commission consider the additional information and make its recommendation for approval of

Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

the proposed text amendment to the Mayor and Council

## Attachments

Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (PDF)
Attachment 1.A.b: Planning Commission Staff Report, June 26, 2019 (PDF)
Attachment 1.A.c: Summary of FCC Order (PDF)
Attachment 1.A.d: "Smart Cities and Technology" Article from American City and County Magazine (PDF)

Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

# ATTACHMENT TO APPLICATION TO THE CITY OF ROCKVILLE FOR A TEXT AMENDMENT TO THE ZONING ORDINANCE

Applicant: Mayor and Council of Rockville

The applicant proposes to amend the zoning ordinance adopted on December 15, 2008, and with an effective date of March 16, 2009, by inserting and replacing the following text (underlining indicates text to be added; ~~strikethroughs~~ indicate text to be deleted; * * * indicates text not affected by the proposed amendment). Further amendments may be made following citizen input, Planning Commission review and Mayor and Council review.

Amend Article 3, "Definitions; Terms of Measurement and Calculations", as follows:

**Sec. 25.03.02. - Words and terms defined.**

***

*Antenna* means any structure or device used to collect, receive, transmit, or radiate electromagnetic waves, including both directional antennae (such as panels, microwave dishes, satellite earth station antennae over two (2) meters in diameter), or diagonal measurement, and omni-directional antennae (such as whips). This term does not include end-user antennas two (2) meters or less in diameter or diagonal measurement and designed for:

1. End-user over-the-air reception, not transmission, of multi-channel multi-point distribution service;
2. Direct broadcast satellite service;
3. End-user reception of signals from an Internet service provider and end-user transmission of signals to an Internet service provider;
4. Mobile radios; or
5. Antennas permitted by right by 47 C.F.R. Section 1.4000, as amended.

*Antenna support structure* means a structure designed for the primary purpose of supporting one (1) or more antennae (including telescoping mast, tower, monopole, tethered blimp, or other support structure). The term includes structures located on buildings or other structures, ground-mounted, or tethered, and towers, as defined in 47 C.F.R. Section 1.40001(b)(9). Without limitation, the term does not include utility poles or structures, including public structures in the public right-of-way.

***

*Collocation* ~~means the use of a wireless telecommunications facility by more than one (1) wireless service provider~~ has the same meaning as in 47. C.F.R. Section 1.4001(g).



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

***

***Equipment enclosure*** means, for purposes of a wireless communication facility, a freestanding or mounted structure, shelter, cabinet, or vault used to house and to protect the electronic equipment and associated equipment necessary for processing wireless communication signals. Associated equipment may include air conditioners, back-up power supplies, and emergency generators.

***

*Small wireless communication facility – See Wireless communication facility, small.*

***

***Wireless communication facility*** means a facility fixed at a location temporarily or permanently for the transmission and/or reception of wireless communication services, consisting of one (1) or more antennas and the equipment at that location necessary to the provision or reception of wireless communication services, including, but not limited to, transmission cables and related equipment enclosures.

*Wireless communication facility, small* means a wireless communication facility that meets each of the following conditions:

1. The structure on which antenna facilities are mounted:

   (a) is 50 feet or less in height; or

   (b) is no more than ten percent (10%) taller than other adjacent structures; or

   (c) is not extended to a height of more than ten percent (10%) above its preexisting height as a result of the collation of new antenna facilities; and

2. Each antenna, excluding associated antenna equipment, is no more than three (3) cubic feet in volume; and

3. All antenna equipment associated with the small wireless communication facility, excluding antennas, is cumulatively no more than twenty-eight (28) cubic feet in volume; and

4. The small wireless communication facility does not require antenna structure registration; and

5. The small wireless communication facility does not result in human exposure to radiofrequency in excess of the applicable safety standards specified by Federal law.

***Wireless communication service*** means those personal wireless services as defined ~~in the same manner as~~ in Title 47, U.S. Code, Section 332(c)(7)(c), ~~as they may be amended from time to time~~ and such other services that consist of the transmission, or transmission, ~~and/~~or transmission and reception of information by electromagnetic wave, digital signals,

broadcast television signals, analog signals, radio frequencies, or other communication signals.

Amend Article 8, "Accessory Uses; Accessory Buildings and Structures; Encroachments; Temporary Uses; Home-Based Business Enterprises; Wireless Communication Facilities", as follows:

**Sec. 25.09.08. - Wireless Communication ~~Facility~~ Facilities.**

a. *Purpose.* The purpose of this section is to provide a uniform and comprehensive set of standards for the development and installation of wireless communication facilities, related structures, and equipment.

1. The regulations and requirements contained herein are intended to:

(a) Regulate the placement, construction, and modification of wireless communication facilities in order to protect the health, safety, and welfare of the public and the aesthetic quality of the City; and

(b) Encourage managed development of wireless communication infrastructure, while at the same time not unreasonably interfering with the development of the competitive wireless communication marketplace in the City.

2. This section is intended to promote the following objectives:

(a) To minimize the total number of wireless communication facilities and antenna support structures throughout the community through siting standards;

(b) To provide for the appropriate location and development of wireless communication facilities and related structures and equipment within the City, and, to the extent possible, minimize potential adverse impacts on the community;

(c) To minimize adverse visual and aesthetic impacts of wireless communication facilities and related structures and equipment through careful design, siting, landscape screening, and innovative camouflaging techniques, such as stealth technology, and utilizing current and future technologies;

(d) To promote and encourage shared use~~/collocation~~ of antenna support structures;

(e) To maintain and preserve the existing residential character of the City and its neighborhoods and promote the creation of a convenient, attractive, and harmonious community;

(f) To promote the safety of citizens and avoid the risk of damage to adjacent properties by ensuring that wireless communication facilities and related structures and equipment are properly designed, constructed, located, modified, maintained, and removed;

(g) To ensure that wireless communication facilities and related structures and equipment are compatible with surrounding land uses;

(h) To encourage: the location of ~~antennas~~ wireless communication facilities on existing buildings or other structures; collocation of new antennas on existing antenna support structures; camouflaged antenna support structures; ~~and~~



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

construction of antenna support structures with the ability to locate three (3) or more providers or users; the deployment of wireless communication facilities in a manner that does not require substantial alterations to existing structures that adversely affects the structure's appearance or the neighborhood; and

(i) To maintain and ensure that a non-discriminatory, competitive, and broad range of high quality wireless communication services and high quality wireless communication infrastructure consistent with laws are available to the community.

b. ***Wireless Communication Facilities** Entirely Within an Existing Building or **Attached to Existing Structures.*** ~~Wireless communication facilities attached to the roof or side of a building, or attached to an existing structure must comply with the following:~~

1. *Scope.* This subsection applies to wireless communication facilities that (1) do not meet the definition of small wireless communication facility and (2) are entirely within an existing building or attached to an existing structure.

2. *Development Standards.*

~~1.~~ (a) The building or other structure on which a wireless communication facility to be installed must be at least thirty-five (35) feet in height if used for nonresidential purposes and fifty (50) feet in height if used for multiple unit dwelling purposes. In a mixed-use development, the multiple unit dwelling standard applies. Except as provided in subsection 25.09.08.e, wireless communication facilities are not permitted on any single unit detached dwelling or appurtenant accessory building or structure.

~~2.~~ (b) ~~The antennas and antenna support structures must be located and designed to minimize visual impacts through various methods, including, but not limited to, the use of stealth technology.~~ Antennas and antenna support structures must be installed according to the order of preference in subsections 25.09.08b.2.(b)(i) through (ii) below, with (~~a~~i) being the preferred option. Use of a lower preference location is permitted only if an applicant provides detailed justification as to why higher preference locations are not suitable.

(~~a~~i) Antennas must be flush mounted on existing structures, or on either rooftop enclosures or the side of a building, and closely match the color and architectural treatment of the structure, enclosure, or building.

(~~b~~ii) Antennas must be flush-mounted on expanded rooftop mechanical equipment enclosures, with the enclosures and antennas designed to be consistent with the architectural treatment and color of the building.

(c) The antennas and antenna support structures, regardless of location, must be located and designed to minimize visual impacts through various methods, including, but not limited to, the use of stealth technology.

(i) Antennas must ~~be enclosed with screening that is~~ include shielding or otherwise be placed in an enclosure. The enclosures and shielding must be consistent with the architectural treatment and color of the building or structure.



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
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(ii) Antennas and support structures must be painted or otherwise treated to minimize their visibility. Any paint used must be non-reflective paint of the same color as the structure.

(iii) No visible lighting is allowed on any wireless facility, except as required by law.

~~3.~~ (c) Antennas and supporting structures are permitted to exceed the height of the building or structure to which they are attached by a maximum of nineteen (19) feet. The height above a building must be measured from the finished roof elevation, and not from the roof of any equipment enclosure.

~~4.~~ (d) Antennas must comply with the following size standards:

(~~a~~i) Whip antennas must be no more than seven (7) inches in diameter; and

(~~b~~ii) Panel antennas must be no more than two (2) feet wide and ~~six (6)~~ eight (8) feet long.

~~5.~~ (e) Equipment enclosures must comply with the requirements of Section 25.09.08.e. An equipment ~~building or cabinet~~ enclosure may be located on the roof of a building provided it and all other roof structures do not occupy, in the aggregate, more than twenty-five (25) percent of the roof area.

~~6.~~ (f) When an antenna is located on a stadium light or utility pole, the total height of the antenna plus the pole or light must not exceed one hundred twenty-five (125) percent of the average height of the lighting system at the stadium or run of poles within five hundred (500) feet of the pole on which the antenna is located.

(g) A wireless communication facility must be designed, installed, and maintained in compliance with all applicable provisions of the City Code including, but not limited to, provisions regulating noise levels, and permit and inspection requirements.

(h) When a wireless communication facility is no longer in use, the wireless communication facility must be removed at the expense of the facility owner. Failure to remove abandoned equipment will result in removal by the City at the expense of the owner.

(i) No hazardous material may be located at the site.

c. *Wireless Communication Facilities* ~~*Located on*~~ *Attached to Ground-Mounted Antenna Support Structures.*

1. *Scope.* This subsection applies to wireless communication facilities that (1) do not meet the definition of small wireless communication facility, and (2) are mounted on ~~free-standing~~ ground-mounted antenna support structures.

(a) *Special exception.* Wireless communication facilities covered by this section require the approval of a special exception in accordance with the applicable provisions of article 15 of this chapter.

(b) *Additional findings required.* The following additional findings must be made for the granting of a special exception:



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2841 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

(i) The location is selected because ~~is necessary for the public convenience and service and cannot be supplied with equivalent public convenience on a~~ the wireless communication facility cannot be attached to an existing building or structure or collocated on an existing ground-mounted antenna support structure; and

(ii) For new ground-mounted antenna support structures to be located in a residential zone or within five hundred (500) feet of a residential zone, it must be demonstrated that a good faith effort has been made to locate the proposed ground-mounted antenna support structure in a nonresidential zone more than five hundred (500) feet from the residential zone, with adequate coverage and on an isolated site with minimal visual impact.

(c) *Independent consultant.* The City may hire an independent consultant to review evidence submitted by the applicant, and the applicant must reimburse the City for the reasonable cost of hiring and utilizing such a consultant.

2. *Development Standards.*

(a) The maximum height of the facility, including antenna and other attachments, is fifty (50) feet in a residential zone, or within five hundred (500) feet of a residential zone, and one hundred ninety-nine (199) feet in all other locations. Height must be measured vertically from the pre-disturbance ground level at the center of the support structure.

(b) Monopoles are the preferred type of ~~freestanding~~ ground-mounted antenna support structure.

(c) No commercial or promotional signs, banners, or similar devices or materials are permitted on antenna support structures.

(d) The ground-mounted antenna support structure must be located and designed in a manner that is harmonious with surrounding properties, to the extent practicable. Antenna support structures must be designed to blend into the surrounding environment through the use of color and camouflaging architectural treatment. When practicable, available stealth structure design techniques must be used.

(e) Wireless communication facilities must be located on City-owned property, if feasible.

(f) Antenna support structures must be set back one (1) foot for every foot of height of the structure, measured from the base of the structure to each adjoining property line or right-of-way.

(g) Lights are not permitted on antenna support structures unless they are required for aircraft warnings or other safety reasons, or to comply with applicable laws and regulations. If required, minimum lighting requirements must be applied, and strobe lights must be avoided unless specified by the Federal Aviation Administration or the Federal Communications Commission.

(h) Outdoor storage of equipment or items related to the wireless communication facility is prohibited on sites with antenna support structures.



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(i) All antenna support structures erected as part of a wireless communication facility must be designed to accommodate collocation of additional wireless communication carriers. New antenna support structures of a height of one hundred fifty (150) feet or more must be designed to accommodate collocation of a minimum of four (4) additional providers either upon initial construction or through future modification to the antenna support structure. Antenna support structures of less than one hundred fifty (150) feet must be designed to accommodate collocation of a minimum of two (2) additional providers.

(j) Prior to construction, each applicant must provide certification from a registered structural engineer that the structure will meet pertinent design, construction, installation, and operation standards, including but not limited to the applicable standards of the Electronics Industries Association (EIA), the Telecommunications Industry Association (TIA), ANSI, and the BOCA Code in effect at the time of the building permit application.

(k) Upon completion of any sale or sublease of an antenna support structure, the owner of an antenna support structure must provide written notice to the City's Inspection Services Division.

(l) The owner of a ground-mounted antenna support structure, at the owner's expense, must remove antenna support structures when a wireless communication facility is not used for wireless purposes for a period one hundred eighty (180) days in a 12-month period. The owner of a ground-mounted antenna support structure must immediately notify the City, in writing, of nonuse or abandonment of the structure upon its cessation as a wireless communication facility. Failure to remove an abandoned or unused ground-mounted antenna support structure will result in removal of the structure by the City at the expense of the owner.

(m) When a ground-mounted antenna support structure is removed by an owner, said owner must apply for a demolition permit to remove the tower. A condition of the demolition permit is to restore the site to the standards required by the building code in effect at the time, at no expense to the City.

d. *Small Wireless Communication Facilities.*

1. *Scope.* This subsection applies to small wireless communication facilities.

(a) *Small wireless communication facilities in the public rights-of-way.* Small wireless communication facilities located within the public rights-of-way must comply with all requirements, standards, and guidelines set forth in or promulgated under Chapter 21 of the City Code.

(b) *Small wireless communication facilities outside of the public rights-of-way.* Small wireless communication facilities located outside of the public rights-of-way must comply with the development standards set forth in subsection d.2.

2. *Development Standards.*

(a) *Location.*

(i) A small wireless communication facility is prohibited from being attached to any single unit attached dwelling, single unit detached dwelling, semidetached



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dwelling, townhouse dwelling, or on any accessory building or structure located on a lot with such a dwelling.

(ii) Within a single dwelling unit residential zone, a small wireless communication facility must be located at least twenty-five (25) feet from a single unit dwelling and two hundred fifty (250) feet away from the nearest existing antenna support structure.

(iii) Except as otherwise provided in this section, a small wireless facility may be attached to any existing structure that is at least fifteen (15) feet in height, measured from grade. The antenna must be a minimum of fifteen (15) feet above grade.

(iv) A small wireless communication facility may be installed on a new antenna support structure, provided that the antenna must be a minimum of fifteen (15) feet above grade.

(b) *Concealment.*

(i) Small wireless communication facilities must be designed and installed to incorporate specific concealment elements to minimize visual impacts.

(ii) All antenna equipment must be placed in an enclosure.

(iii) Equipment enclosures, whether located on the structure or ground-mounted, and including any pre-existing equipment enclosures on the structure or ground, may not exceed five (5) feet in height.

(iv) Antennas must be shielded or otherwise be placed in an enclosure. If attached to a pole, the shielding or enclosure must be no laarger than the circumference of the pole at the point of attachment and, if attached to the top of the pole, designed to appear like a continuous vertical extension of the pole. Antennas must not extend more than thirty-six (36) inches in length, extending vertically from the base of the antenna, either at the top of the pole or structure, or on the related equipment housing, except that up to six (6) inches in additional height may be permitted for connectors.

(v) For antennas not located at the top of a pole, the antennas must be flush mounted on existing structures and closely match the color and architectural treatment of the structure.

(vi) All wiring and cables must be located inside the structure or, if that is not practical, in a conduit attached flush to the structure and painted with non-reflective paint of the same color as the structure.

(vii) No visible lighting is allowed on any small wireless facility, except as required by law.

(vi) In residential zones where public utilities are located or are required to be located underground, equipment enclosures must be located below the existing grade unless the enclosure is incorporated into the base of the pole.

(c) A small wireless communication facility may not be located on a historic structure, or in an historic district where any portion of the wireless communication facility, except the antenna, would be visible from the ground.

(d) A small wireless communication facility must be designed, installed, and maintained in compliance with all applicable provisions of the City Code, including, but not limited to, provisions regulating noise levels, and permit and inspection requirements.

(e) When a small wireless communication facility is no longer in use, the small wireless communication facility must be removed at the cost of the facility owner and the properties affected by the facility restored to its prior condition.

(f) No writing, symbol, logo, sign, or other graphic representation which is visible from the public right-of-way is allowed to appear on any exterior surface of the small wireless communication facility; however, the owner of the small wireless communication facility must tag all attachments to structures to allow for ready identification of the owner and type of attachment.

(g) No hazardous materials may be located at the site.

~~d~~e. ***Equipment Enclosures*** ~~*Located at Ground Level Standards*~~ *for Wireless Facilities Other than Small Wireless Facilities*. **Equipment enclosures** ~~**located at ground level**~~ **must comply with the following standards:**

1. **Each** equipment **enclosure that contains the equipment of a single provider must not exceed five hundred sixty (560) square feet of gross floor area and twelve (12) feet in height; if more than one (1) provider is to be accommodated in an** equipment **enclosure, a single** equipment **enclosure must be constructed to accommodate the maximum number of providers that are required to collocate on the antenna support structure, up to a maximum of** ~~**one thousand five hundred (**~~**1,500**~~**) square feet in area and twelve (12) feet in height.**

2. **The** equipment **enclosure must conform to the applicable setback standards for main structures in the zone in which the property is located; setback standards for accessory buildings and structures in section 25.09.03 are not applicable to equipment enclosures.**

3. **The** equipment **enclosure must be screened to provide year-round screening. This standard may be met by one (1) or a combination of the following: fencing, walls, landscaping, structures or topography which will block the view of the equipment** ~~**shelter**~~ enclosure **as much as practicable from any street and/or adjacent properties. In areas of high visibility, fencing may be wrought iron, masonry, or other decorative fencing material.**

4. **Lighting associated with equipment** ~~**structures**~~ enclosures **must be directed so as to minimize any negative impact of such lighting on adjacent properties.**

5. **When constructed as a freestanding building, the design of the** equipment **enclosure must be coordinated with the design of the existing main building on the same lot or, if there is no building on the lot, with the buildings on an adjoining lot, to the extent practicable. In addition, the** equipment **enclosure must be constructed of non-reflective materials.**



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6. When attached to an existing building, the equipment enclosure must be designed in a manner that is harmonious with the existing building and surrounding properties. Any paint must be non-reflective paint of the same color as the building.

7. The equipment enclosure must be removed at the cost of the owner when the wireless communication facility is no longer being used by a wireless communication provider. Failure to remove abandoned equipment will result in removal by the City at the expense of the owner.

ef. *Waivers permitted.*

1. *Regulated satellite earth station antennas.*

(a) Any person or entity seeking to install or erect a satellite earth station antenna subject to this section, other than an antenna specified in subsection 25.09.08.e.1(a)(ii) below, may apply for a waiver from one (1) or more of the provisions of this section 25.09.08, and the Board of Appeals may grant such a waiver pursuant to applicable procedures and standards if it is shown that:

(i) The provision(s) of section 25.09.08 at issue materially limit or inhibit the transmission or reception of satellite signals at the waiver applicant's property or the provision(s) at issue impose more than a minimal cost on the waiver applicant;

(ii) The waiver, if granted, would not result in any noncompliance with applicable laws, regulations, and codes (including, but not limited to, safety and building codes); and

(iii) The waiver sought is the minimum waiver necessary to permit the reception or transmission of satellite signals at the waiver applicant's property.

(b) The Board of Appeals is authorized to grant a complete or partial waiver to any provision of section 25.09.08. In addition, the Board of Appeals may impose a lesser requirement instead of granting a complete waiver of any provision in this section if a complete waiver is not necessary to permit reception or transmission of amateur service communications at the waiver applicant's property, and the lesser requirement will allow the reception or transmission of satellite signals. The Board of Approval shall not condition a waiver upon an applicant's expenditure of a sum of money, including costs required to screen, pole-mount, or otherwise specially install a satellite earth station antenna, over and above the aggregate purchase or total lease cost of the equipment as normally installed, if such sum would be greater that the aggregate purchase or total lease cost of the equipment as normally installed.

2. *Wireless Communication Facilities for Amateur Service Communications.*

(a) Any person or entity seeking to install or erect a wireless communication facility in the City for the purpose of engaging in amateur radio communications may apply for a waiver from one (1) or more of the provisions of this section 25.09.08. and the Board of Appeals may grant such a waiver pursuant to applicable procedures and standards if it is shown that:



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(i) The provision(s) of section 25.09.08 at issue preclude amateur service communications, do not reasonably accommodate amateur service communications at the waiver applicant's property or do not constitute the minimum practicable regulation to accomplish the City's health, safety, and welfare objectives;

(ii) The waiver, if granted, would not result in any noncompliance with applicable laws, regulations and codes (including, but not limited to, FCC regulations concerning amateur radio transmission and reception); and

(iii) The waiver sought is the minimum waiver necessary to reasonably accommodate amateur service communications at the waiver applicant's property.

(b) The Board of Appeals is authorized to grant a complete or partial waiver to any provision of section 25.09.08. In addition, the Board of Appeals may impose a lesser requirement instead of granting a complete waiver of any provision in this section if a complete waiver is not necessary to permit reception or transmission of amateur service communications at the waiver applicant's property, and the lesser requirement:

(i) Will not preclude amateur service communications; and

(ii) Is the minimum practicable regulation to accomplish the City's health, safety, and aesthetic objectives.

(c) In determining whether to grant a complete or partial waiver of any provision in section 25.09.08 or to impose a lesser requirement, the Board must reasonably accommodate amateur radio communications.

3. *All Other Wireless Communication Facilities.*

(a) The Board of Appeals is authorized to grant a waiver from any and all of the standards of this section 25.09.08, except for the height restrictions for a freestanding antenna support structure in subsection c. of this section, upon showing that compliance with this section would impose an undue hardship or prohibit or have the effect of prohibiting the provision of wireless communication services or would result in unreasonable discrimination among providers of functionally equivalent wireless communication services.

(b) Waiver requests from the height restrictions (subsection 25.09.08.c.2) for a freestanding antenna support structure may be granted by the Mayor and Council upon showing that compliance with this section would impose an undue hardship or prohibit or have the effect of prohibiting the provision of wireless communication services or would result in unreasonable discrimination among providers of functionally equivalent wireless communication services. When requesting a height waiver under this provision, the applicant must submit evidence to the Mayor and Council that the height requested for the freestanding antenna support structure is the minimum height necessary to provide adequate coverage for the area that is being served by the structure. The Mayor and Council, in reviewing any waiver request from this section, must also consider the impact that the increased height of the antenna support structure would have on properties in the



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

area surrounding the proposed structure, including, but not limited to, the visibility of the structure from residences and proposed methods of mitigating the visibility of the structure.

(c) This subsection 25.09.08.ef.3. does not apply to antennas and wireless communication facilities specified in subsections 25.09.08.ef.1. and 2.

4. *Procedures for all waivers.*

(a) Unless the Mayor and Council adopt by resolution different procedures for processing waivers from the height restrictions contained in subsection 25.09.08.ef.3., all waivers of this section must be processed in accordance with the procedures applicable to variances contained in section 25.06.03 of this chapter.

(b) A waiver applicant must provide supporting evidence and all information requested by the City. The City may hire an independent consultant to review such evidence, and the applicant must reimburse the City for the reasonable cost of hiring and utilizing such a consultant.

Amend Article 10, "Single Dwelling Unit Residential Zones", as follows:

* * *

**25.10.03 – Land Use Tables**

The uses permitted in the Single Dwelling Unit Residential Zones are shown in the table below. All special exceptions are subject to the requirements of Article 15.



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
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| | Uses | Zones | | | | | | | Conditional requirements or related regulations |
|---|---|---|---|---|---|---|---|---|---|
| | | Residential Estate Zone (R-400) | Suburban Residential Zone (R-200) | Low Density Residential Zone (R-150) | Single Unit Detached Dwelling, Restricted Residential Zone (R-90) | Single Unit Detached Dwelling, Residential Zone (R-75) | Single Unit Detached Dwelling, Residential Zone (R-60) | Single Unit Semi-detached Dwelling, Residential Zone (R-40) | |
| * * * | | | | | | | | | |
| f. Miscellaneous uses | Small wireless communication facility | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility entirely within an existing building ~~or on the roof or side of a building,~~ or attached to an existing structure | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility ~~not entirely within an existing building or on the roof or side of a building, or~~ attached to ~~an existing structure, including, but not limite to, antennas on a freestanding~~ a ground-mounted antenna support structure | S | S | S | S | S | S | S | Subject to the requirements of Secs. 25.09.08 and 25.15.02.[illegible] |

Amend Article 11, "Residential Medium Density Zones", as follows:

* * *



Attachment 1.A.c: Final Draft of Text Amendment TXT2019-00251 (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)
Attachment 1.A.a: Zoning Text Amendment TXT2019-00251 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

### 25.11.03 – Land Use Tables

The uses permitted in the Residential Medium Density Zones are shown in the table below. Uses are subject to applicable conditions of site plan approval, and all special exceptions are subject to the requirements of Article 15.

| | Uses | Zones | | | Conditional requirements or related regulations |
|---|---|---|---|---|---|
| | | Residential Medium Density RMD-10 | Residential Medium Density RMD-15 | Residential Medium Density RMD-25 | |
| * * * | | | | | |
| e. Miscellaneous uses | Public utility building and structure | S | S | S | See Sec. 25.15.02.n |
| | Publicly-owned or publicly-operated building and use, excluding sanitary landfill | C | C | C | Conditional use subject to a Level 3 Site Plan (Sec. 25.07.05) |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility ~~not located entirely within an existing building or on the roof or side of a building, or~~ attached to ~~an existing structure, including, but not limited to antennas on a freestanding~~ a ground mounted-antenna support structure | S | S | S | See Secs. 25.09.08 and 25.15.02.s |

Amend Article 12, "Industrial Zones", as follows:

6-6-11

* * *

### 25.12.03 – Land Use Tables



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| | Uses | Zones | | Conditional requirements or related regulations |
|---|---|---|---|---|
| | | Light Industrial I-L | Heavy Industrial I-H | |
| * * * | | | | |
| f. Assembly and entertainment | ~~Wireless communication facility entirely within an existing building or on the roof or side of a building, or attached to an existing structure~~ | ~~C~~ | ~~C~~ | ~~Conditional use subject to the requirements of Sec. 25.09.08~~ |
| | ~~Wireless communication freestanding ground mounted antenna support structure~~ | ~~S~~ | ~~S~~ | ~~Subject to the requirements of Sec. 25.09.08 and 25.15.02.s~~ |
| * * * | | | | |
| g. Industrial and service uses | Warehouse, self-storage | C | C | Not permitted on a lot within 250 feet of any lot on which a public school is located |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility attached to a ~~freestanding~~ ground-mounted antenna support structure | S | S | Subject to the requirements of Sec. 25.09.08 and 25.15.02.s |

Amend Article 13, "Mixed-Use Zones", as follows:

* * *

**25.13.03 – Land Use Tables**



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| | Uses | Zones | | | | | | | | |
|---|---|---|---|---|---|---|---|---|---|---|
| | | Mixed-Use Transit District (MXTD) | Mixed-Use Corridor Distric (MXCD) | Mixed-Use Employment (MXE) | Mixed-Use Business (MXB) | Mixed-Use Corridor Transition (MXCT) | Mixed-Use Neighborhood Commercial (MXNC) | Mixed-Use Commercial (MXC) | Mixed-Use Transition (MXT) | Conditional requirements or related regulations |
| * * * | | | | | | | | | | |
| f. Miscellaneous Uses | Publicly-owned or publicly-operated building and use, excluding sanitary landfill | P | P | P | P | P | P | P | P | |
| | Wireless communication facility entirely within an existing building or ~~on the roof or side of a building, or~~ attached to an existing structure | C | C | C | C | C | C | C | C | Conditional use subject to the requirements of Sec. 25.09.08 |
| | Wireless communication facility attached to a ~~freestanding~~ ground-mounted antenna support structure | S | S | S | S | S | S | S | S | See Sec. 25.09.08 and 25.15.02.s |

| | |
|---|---|
| Agenda Item #: | A |
| Meeting Date: | June 26, 2019 |
| Responsible Staff: | Deane Mellander |

**SUBJECT:** Review and Recommendation to Mayor and Council - Zoning Text Amendment TXT2019-00251 - Small Cell Antennas; Mayor and Council of Rockville, Applicants

**RECOMMENDATION**
(Include change in law or Policy if appropriate in this section): Review the staff report and provide a recommendation on the text amendment to the Mayor and Council for the public hearing on September 9, 2019.

Attachment 1.A.b: Planning Commission Staff Report, June 26, 2019 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

## Overview

**Case:** Zoning Text Amendment TXT2019-00251

**Location:** City-Wide

**Staff:** Deane Mellander
Planning and Development Services
240-314-8224
dmellander@rockvillemd.gov

**Applicant:** Mayor and Council of Rockville

**Filing Date:** April 2, 2019

## Background

The wireless industry got its start in the last quarter of the 20th century. Advances in electronic miniaturization made hand-held portable phones possible, which led to the initial pattern of cellular reception. Initially, the service was provided by what are now termed macro installations – installation of antenna support structures (typically, monopoles) spaced every few miles to provide overlapping service areas. If a user was mobile, the system would switch the carrier signal from one cellular antenna to the next to avoid signal drop.

As these installations proliferated, public pressure to regulate them increased. States and local jurisdictions began passing legislation intended to try and minimize the impact of these installations on the surrounding neighborhoods. In 1996, the Federal Government stepped in and passed the Telecommunications Act of 1996 (the "Act"), which gave the Federal Communications Commission (FCC) general authority to regulate the wireless industry. Under the Act, Federal law prohibits state and local regulations that "prohibit or have the effect of

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prohibiting the ability of an entity to provide ... telecommunications service." The Act applies to, among other things, the deployment of telecommunications infrastructure – including the deployment of small wireless facilities.

When the cellular system was initially designed it was for simple telephone service and there may have been one user per dwelling, and a few users at the place of employment or on the road. The macro sites were generally sufficient for this level of service.

A simple phone call does not use much bandwidth, but the proliferation of "smart" phones and other devices capable of video data streaming and the overall increase in the number of users means that the cell service areas need to be subdivided to maintain and increase the bandwidth service for both normal private user services but also to address future demands for public services such as self-driving vehicles. Today, there may be four or five users per dwelling, and many homes have replaced land line service with wireless. Many employers require most or all of their employees to carry cell phones to facilitate fast contact.

The pending introduction of a new fifth generation ("5G") wireless system will substantially increase the size of the data stream. To accommodate this system, the number of cellular antenna locations will need to be substantially increased. This means that antennas will need to be located within several hundred feet of each other to provide full coverage.

On September 26, 2018, the FCC adopted a declaratory ruling and order (the "FCC Order") broadly interpreting the Act and limiting or pre-empting local government authority on many issues related to the deployment of small cell wireless facilities. Although the FCC Order is being challenged in the courts by numerous local governments from across the United States, it went into effect on January 14, 2019. The City is a participant in one of the pending lawsuits.

Under the FCC Order, "small wireless facilities" are defined as facilities that: (i) are mounted on structures 50 feet or less in height including their antennas, or (ii) are mounted on structures no more than 10 percent taller than other adjacent structures, or (iii) do not extend existing structures on which they are located to a height of more than 50 feet or by more than 10 percent, whichever is greater. Antennas for small wireless facilities can be no more than three cubic feet in volume, and other equipment associated with the facility can be no more than 28 cubic feet in volume.

The FCC Order permits local governments to establish aesthetic requirements for the installation of small wireless facilities. However, the aesthetic requirements must be (1) reasonable; (2) no more burdensome than those applied to other types of infrastructure deployments; and (3) objective and published in advance.

Additionally, the FCC Order also set "shot clocks" which are timeframes in which local governments must act on applications to install small wireless facilities. The FCC Order requires the City to act on an application to install a small wireless facility on an existing structure in sixty days and an application to install a small wireless facility on a new antenna support

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structure in ninety days. If an application is not acted on within the applicable timeframes, the City could face a legal challenge and a court order that would allow the installation to occur as submitted.

City Zoning Regulations on Wireless Communication Facilities

The Mayor and Council adopted Zoning Text Amendment TXT2001-00191 in August 2001 to provide a comprehensive set of regulations for wireless telecommunications facilities in the City. This language is incorporated as Section 25.09.08, "Wireless Communication Facility" in the current Zoning Ordinance. The thrust of this section is to regulate the location and installation of macro antenna sites. These are typical multi-antenna installations mounted on monopole towers, lattice towers, or on the sides or roofs of buildings. Wireless facilities mounted on a new free-standing structure, i.e., a monopole or lattice tower, are required to obtain a special exception from the Board of Appeals. Facilities located on an existing building or structure are a conditional use, subject to compliance with the provisions of Sec. 25.09.08.b.

These macro sites, which usually consist of three large panel antennas facing in different directions for each carrier, generally provide wireless service coverage for a radius of about 2 to 4 miles. The spacing between the macro antenna locations is dependent on several factors, including elevation, density of wireless traffic, and intervening trees or structures than can attenuate the signal strength. In dense urban areas, there can be gaps in service because of the height and density of the built environment. Small cell antennas, which are a relatively new and evolving technology, serve several functions – they can fill in service gaps; provide additional service in high-traffic areas like city centers; and support 5G wireless service.

Under the current provisions for wireless communications facilities in Section 25.09.08, panel antennas, which can be up to two feet in width and six feet in height, may be mounted on existing buildings or structures that are at least 35 feet in height if used for nonresidential purposes, and 50 feet in height on a multi-family residential building. Antennas may also be located on a ground-mounted support structure, i.e., a monopole or other antenna support structure if the structure receives approval of a special exception by the Board of Appeals. In addition, if a ground-mounted support structure is proposed to be more than 50 feet tall in a residential zone or within 500 feet of a residential zone, or more than 199 feet tall in a nonresidential zone, the Mayor and Council must grant a waiver of the height restrictions under Section 25.09.08.e.3.

The proposed regulations cover small cell antennas intended primarily associated with the advent of 5G wireless service. In order to achieve the coverage intended by the FCC, there will need to be a network of antennas spaced perhaps 700 – 1,000 feet apart. The antennas themselves are small – limited to 3 cubic feet – but the support equipment can be larger. Several examples of current and proposed installations are shown in Attachment A. For single installations the equipment can often be mounted on the support structure or within the base of the structure (such as a light pole) if so equipped.

## Analysis

Specific Zoning Ordinance Revisions

It is expected that the majority of small cell installations will be located on existing structures within the public right-of-way. Installations within the public right-of-way are regulated by authority of Chapter 21 of the City Code, "Streets and Public Improvements," not the Zoning Ordinance. These regulations have already been promulgated by the Director of Public Works (see Attachment B).

The intent of the proposed amendment is to revise the City's Zoning Ordinance to be in compliance with the FCC Order while also allowing the City to regulate the deployment of small cell antennas that are not within public right-of-way in a manner that meets the needs of the city. Small cell antennas can be much smaller than the typical tower-mounted cell antennas. Normally, only one omnidirectional antenna is needed.

The text amendment as authorized (see Attachment C) proposes to define small cell antennas as being no larger than three cubic feet in size, which is consistent with the FCC Order. Cumulative volumetric standards of 28 cubic feet are also proposed for equipment enclosures, which is also consistent with the FCC Order.

The definitions for the following terms: Antenna, Antenna support structure, Colocation, Wireless communication facility, and Wireless communication service, have all been revised to reflect the current terminology and to reflect the language in the FCC Order. A new definition for "Wireless communication facility, small" is proposed to be added to specifically address the regulation of small cell facilities in a manner consistent with the FCC Order.

The proposed text amendment revises the current language to essentially separate the regulations between small cell antennas and other types of antenna installations, including macro sites and monopoles. The language has also been revised to be consistent with the terminology contained in the FCC order. In some cases, the existing language has been reordered for better clarity of intent. The amendment also proposes to increase the allowable height of macro panel antennas from six feet to eight feet, in line with current industry practice.

A new subsection d is proposed to be added specifically to regulate the installation of small cell antennas on private or public property, outside of public right-of-way. For those installations outside of public rights-of-way to which the Zoning Ordinance will apply, the regulations can be summarized as follows:

- No small cell antennas can be located on a single family detached, semi-detached, or townhouse dwelling. No small cell antenna can be located on an accessory building or structure located on the same lot as a dwelling.

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- Small cell antennas must be located at least 25 feet from a single-family dwelling, and 250 feet from another antenna support structure.
- Installations must be designed and located to minimize visual impacts, including use of stealth technology.
- Support equipment must be enclosed and cannot exceed 5 feet in height.
- Small cell antennas cannot exceed 3 cubic feet in volume, and support equipment cannot exceed an aggregate total of 28 cubic feet in volume.
- Where underground utilities are required, any equipment enclosures must be located below grade unless incorporated into the base of the support structure.
- No installations permitted on an historic structure or within a designated historic district where any portion of the installation except the antenna is visible from the ground.
- If the installation is no longer in use, it must be removed by the owner at their expense.
- No hazardous materials can be stored on the site.

The land use tables for the residential, mixed use and industrial zones are proposed to be amended to reflect the revisions in Article 9. Small cell antennas are added as a conditional use, subject to the new provisions. The current regulations for wireless facilities are still applicable in the RMD (Residential Medium Density) zones. In the industrial zones, the wireless provisions are proposed to be relocated within the tables from the Assembly and Entertainment section to the Industrial and Service Uses section to better reflect the characteristics of the use.

Under the FCC Order, the City is prohibited from requiring a wireless provider to prove that there is a gap in coverage and that a small wireless facility is needed in a particular location. Further, the FCC Order limits the City's ability to enact spacing and underground requirements.

<u>Surrounding Jurisdictions</u>

The staff notes that both Montgomery County and the City of Gaithersburg have adopted text amendments to regulate small cell antennas in a similar manner to what is proposed. The County has limited small cell antennas to six cubic feet with a maximum length on any side of four feet two inches. Antennas are allowed in the Commercial/Residential, Industrial, and Employment zones as a limited use and must be mounted at least 15 feet off the ground. Such antennas may be mounted on replacement utility poles, streetlight poles or site-plan approved parking lot poles. If located within the right-of-way, the Department of Permitting Services must approve the location for safety purposes. A text amendment to permit them in the residential zones did not pass in the last County Council term.

In Gaithersburg, the size limit is 2.5 feet wide by four feet tall. Gaithersburg also requires that any small cell antenna located on a multi-family building be at least 20 feet off the ground, with the minimum being 15 feet for any non-residential or mixed-use structure.

## Community Outreach

Notice of the filing of the text amendment and Planning Commission meeting date was sent out

to the civic associations and homeowners associations via the City's listserv.

## Recommendation

Within the regulatory framework set forth in the FCC Order, the proposed amendment will provide the City with some regulatory control over the location and design of small cell antennas deployed outside of the public right-of-way, and the regulations will be consistent with those already in place for installations within public rights-of-way and the FCC order. Staff therefore recommends that Zoning Text Amendment TXT2019-00251 be approved.

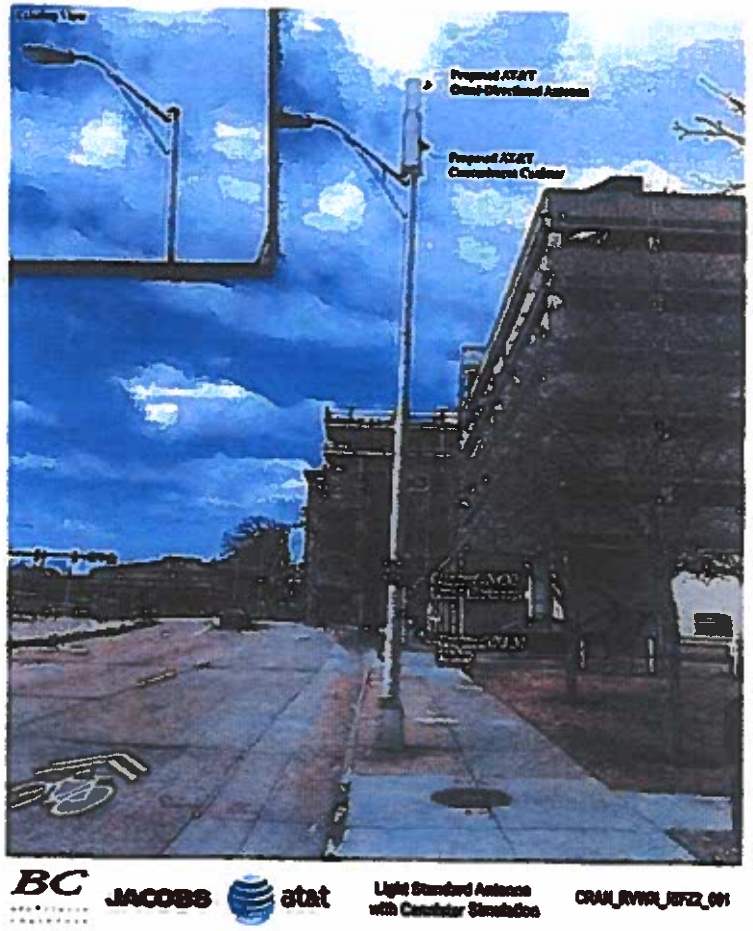
## Attachments

| | | |
|---|---|---|
| Attachment 1.A.a: | Sample small cell installations | (PDF) |
| Attachment 1.A.b: | Standards for Small Cell Installations in the Public Right-of-Way | (PDF) |
| Attachment 1.A.c: | Final Draft of Text Amendment TXT2019-00251 | (PDF) |

Jim Wasilak

Jim Wasilak, Chief of Zoning 6/19/2019

# Examples of the AT&T Small Cell Equipment



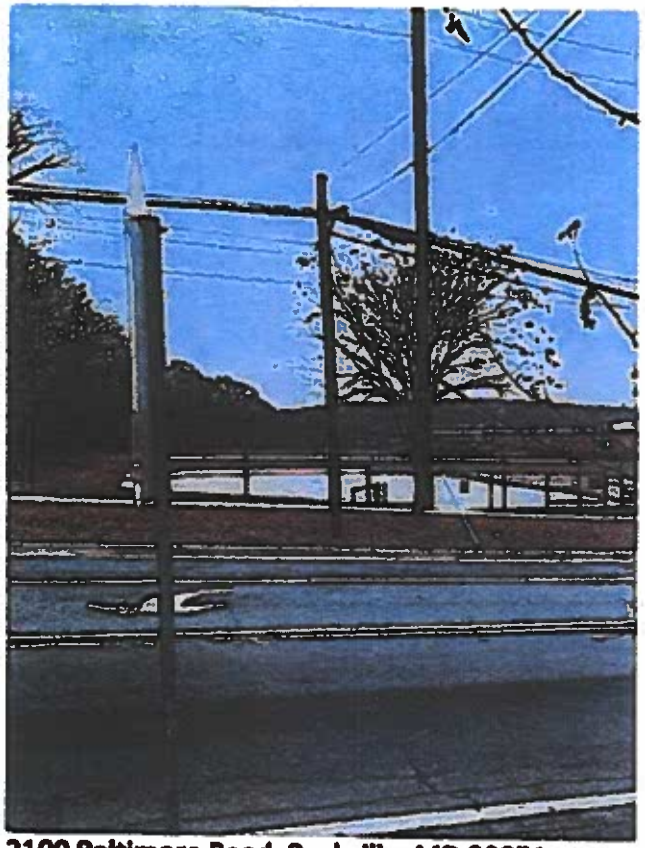

## Small Cell Design – Metal Streetlight

**Attachment 1.A.a: Sample small cell installations (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Antennas)**

**Attachment 1.A.b: Planning Commission Staff Report, June 26, 2019 (2761 : TXT2019-00251 - Small Cell Antennas)**

**Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)**

# Examples of the AT&T Small Cell Equipment

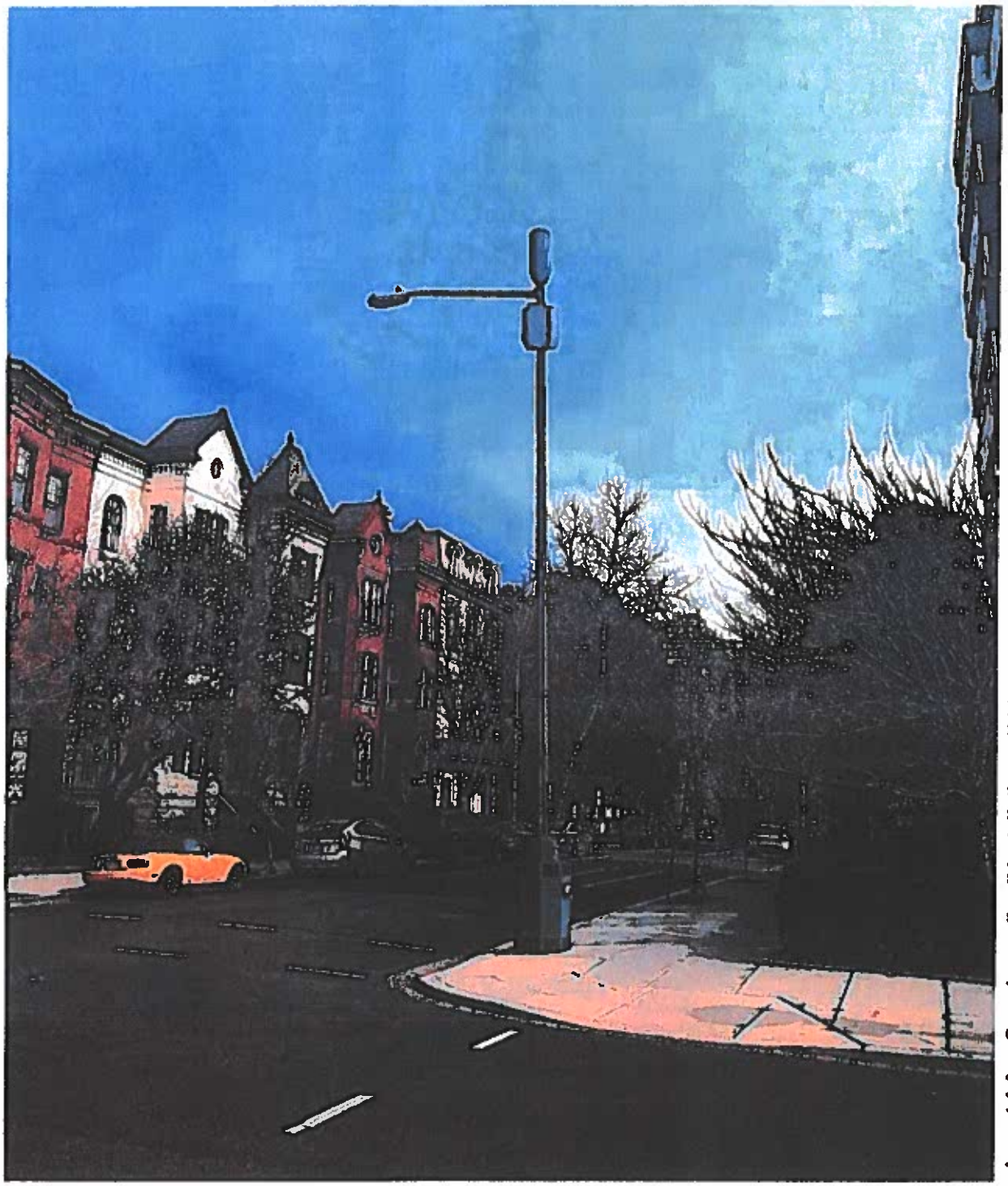


2100 Baltimore Road, Rockville, MD 20851

Wood Utility Pole Example

## Small Cell Design – Wood Utility Pole

**PROPOSED VERIZON SMALL CELL INSTALLATION**



PROPOSED VERIZON SMALL CELL INSTALLATION

# Small Wireless Facilities

## Small Wireless Facility Standards

### *Height Standards*

1. Small wireless facilities may not be mounted on structures greater than 50-feet in height including the antenna.
2. Small wireless facilities may not be mounted on structures more than 10 percent taller than other adjacent structures.
3. Small wireless facilities may not be mounted on existing structures which cause the structure to extend to a height of more than 50-feet or more than 10 percent taller than adjacent structures, whichever is greater.

### *Antenna and Other Small Wireless Equipment Size Standards*

4. Each antenna associated with a small wireless facility can be no greater than 3 cubic feet in volume.
5. All other small wireless equipment associated with the small wireless facility (including any pre-existing equipment on the structure) may not be more than 28 cubic feet in volume.

### *Installation, Placement, and Design Standards*

6. Small wireless facilities must not project over the roadway, pedestrian path or sidewalk and must be placed on a single side of the structure, unless approved by the Director of Public Works.
7. New poles or other structures that support small wireless facilities must maintain a minimum three (3) foot horizontal clearance from existing sidewalks and roadways and a minimum five (5) foot horizontal clearance from the outside edge of driveway aprons and handicapped ramps, unless a lesser clearance is approved by the Director of Public Works.
8. Any exterior attachments to structures (other than cabling), must be a minimum of eight (8) feet above grade, unless approved by the Director of Public Works.
9. Replacement poles must be the same height as the pole being replaced, unless a different height is approved by the Director of Public Works. Any replacement pole, including all required guying, may not intrude on any sidewalk or passageway more than the existing pole, and may not be more than 10 percent larger in circumference than the existing pole, considering the actual dimensions of the pole. Guy wiring must be comparable to that of the pole being replaced.
10. All small wireless equipment installed underground, at ground level, or on a pole must be placed in an enclosure.
11. All small wireless equipment must be consistent with industry standards.
12. Antennas must include shielding or otherwise be placed in an enclosure. If attached to a pole, the shielding or enclosure must be no more than the circumference of the pole at the point of attachment and, if attached to the top of the pole, designed to appear like a continuous vertical extension of the pole. Antennas must not extend more than 36 inches



Attachment 1.A.b: Standards for Small Cell Installations in the Public Right-of-Way (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell Attachment 1.A.b: Planning Commission Staff Report, June 26, 2019 (2761 : TXT2019-00251 - Small Cell Antennas) Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

# Small Wireless Facilities

in length, extending vertically from the base of the antenna, either at the top of the pole or structure, or on the related equipment housing, except that up to six (6) inches in additional height may be permitted for connectors.

13. All wires/cables must be located inside the structure, unless Applicant proves to the City's satisfaction that this is not practical, in which case the wire/cable must be installed in a conduit attached flush to the structure and painted with non-reflective paint of the same color as the structure on which it is installed or otherwise concealed to the extent possible. Whenever possible, the Applicant must utilize existing ducts, conduits, or other facilities for the installation of connecting fiber.
14. All visible small wireless equipment placed on a structure, including antennas, must be painted with non-reflective paint of the same color as the structure on which it is sited so that the installation closely matches the existing paint. The Applicant must work with the structure manufacturer or owner regarding the specifics for the color match, and work with the equipment manufacturer regarding paint specifications as well as the method for cleaning the equipment and applying the paint. Antennas and shrouds must be painted to have the least visual impact possible; colors must be approved by the City as part of the permit. Paints must be lead and chromate free. Resistance to ultra violet light, road salt compounds, industrial chemical fumes, solvents for removal of graffiti off painted surfaces, flame or high temperatures, and corrosion.
15. No writing, symbol, logo or other graphic representation which is visible from the nearby street or sidewalk is allowed to appear on any exterior surface of the small wireless facility unless allowed by agreement with the City, required by law or regulation, or as a City-approved concealment element. Notwithstanding the previous sentence, Applicant must tag all attachments to structures to allow for ready identification of the small wireless facility owner and type of attachment.
16. No visible lighting is allowed on any small wireless facilities, except as required by law or as allowed by the City.
17. Any new pole installed to support a small wireless facility must be consistent and compatible with surrounding poles and structures.
18. Installation of small wireless facilities must not impact existing City street trees.
19. Installation of small wireless facilities must not impact line of sight for vehicle or pedestrian movements.
20. Installation of small wireless facilities must not create any Americans with Disabilities Act violations.
21. Small wireless facilities must not interfere with the function of the pole or structure to which the equipment is attached or interfere with other public facilities, including but not limited to:
    a. Signs
    b. Traffic signals
    c. Street lighting
    d. Bike racks
    e. Benches
    f. Fire hydrants
    g. Water meters
    h. Sewer cleanouts
    i. Stormwater facilities
    j. Other utilities

Attachment 1.A.b: Standards for Small Cell Installations in the Public Right-of-Way (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell
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# Small Wireless Facilities

22. In an area of the city where utilities are underground, all small wireless equipment must also be placed in an underground vault.
23. Small wireless facilities must be placed, as much as possible, in line with other utility features and in a location that minimizes any obstruction, impediment, or hinderance to the usual travel or public safety on a right-of-way.
24. The Applicant must incorporate ambient noise suppression measures, place small wireless equipment in locations less likely to impact adjacent residences or businesses, or both, and must comply with all applicable noise regulations.
25. The City strongly encourages the collocation of small wireless facilities on existing structures. To minimize visual clutter, distractions to vehicular traffic, and the hazard of poles adjacent to roadways, free standing poles must be spaced a minimum of 250 feet apart on each side of a street. An exemption may be granted by the Director of Public Works if the Applicant can demonstrate that this restriction has the effect of prohibiting the provision of wireless services.
26. Small wireless equipment installed at ground level must incorporate concealment elements into the proposed design. Concealment may include, but is not limited to, landscaping and strategic placement in less obtrusive locations.
27. Small wireless equipment installed at ground level must be painted to have the least visual impact possible; colors must be approved by the City as part of the permit. Paints must be lead and chromate free. Resistance to ultra violet light, road salt compounds, industrial chemical fumes, solvents for removal of graffiti off painted surfaces, flame or high temperatures, and corrosion.

## *Small Wireless Facility Conditions*

1. Applicant must be a member of "Miss Utility" and comply with state law regarding marking utilities.
2. Small wireless facilities located in public right-of-way must not cause a safety hazard to the public.
3. A small wireless facility must be removed from the public right-of-way within 90 days of the final Right-of-Way Access/Attachment payment to the City for the small wireless facility.
4. If a City project requires small wireless facilities to be removed or relocated, the Applicant must remove or relocate all equipment within 30 days' notice by the City at the Applicant's sole cost.
5. Applicant must obtain a permit from the City for any maintenance of small wireless facilities following initial installation.
6. Applicants for small wireless facilities may request a right-of-way agreement for multiple installations with the City.

Attachment 1.A.b: Standards for Small Cell Installations in the Public Right-of-Way (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell
Attachment 1.A.b: Planning Commission Staff Report, June 26, 2019 (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

# Small Wireless Facilities

*Submittal requirements*

Applicant is required to submit the following information with the permit application:

1. Documentation certified by a Maryland Professional Engineer that the pole or other structure to which the small wireless equipment is proposed to be attached is structurally adequate to support the small wireless equipment.
2. Applicant must provide certified analysis showing that the proposed Facility satisfies the Federal Communication Commission ("FCC")'s Radio- Frequency (RF) exposure guidelines applicable on an individual basis, and on a cumulative basis (considering all frequencies, and all emitting sources as may be required by FCC regulations).
3. Applicant must provide a completed utility permit application and checklist.
4. Written authorization from the structure owner that demonstrates that the Applicant has the authority to install a small wireless facility on the structure.
5. All other information otherwise required by Chapter 21 of the City Code and for an application for a Utility Permit.

Approved by: _____ Date: 1/11/19
Director of Public Works

*Addendum to City of Rockville Department of Public Works Standards and Details for Construction

Attachment 1.A.b: Standards for Small Cell Installations in the Public Right-of-Way (2641 : Zoning Text Amendment TXT2019-00251 - Small Cell
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# KEY POINTS OF FCC DECLARATORY RULING AND THIRD ORDER ON SMALL CELLS

*Statutory Authority for Order*[1]
47 USC § 332(c)(7)

- Addresses personal wireless services

47 USC § 253(a)

- Addresses any interstate or intrastate telecommunications service

*FCC Order – Key Paragraphs*
Standard

- **Standard:** A state or local requirement constitutes an effective prohibition if it 'materially limits or inhibits the ability of any competitor or potential competitor to compete in a fair and balanced legal and regulatory environment.' (¶ 35.)
- A state or local legal requirement will have the effect of prohibiting wireless services if it materially inhibits the provision of such services. (¶ 37.)
    - Includes materially inhibiting additional services or improving existing services. (¶ 37.)
- Providers must be able to compete in a "fair and balanced regulatory environment." (¶ 39.)
    - Requirement can function as an effective prohibition either because of a "financial burden" or because of a resulting competitive disparity. (¶ 39.)

Fees

- Only permitted to the extent that they represent a reasonable approximation of the local government's objectively reasonable costs, and are non-discriminatory. (¶ 32.)
- ROW access fees, and fees for the use of government property in the ROW, such as light poles, traffic lights, utility poles, and other similarly situated property suitable for hosting Small Wireless Facilities, as well as application or review fees imposed by a state or local government as part of their regulation of the deployment of Small Wireless Facilities inside and outside the ROW, violate Sections 253 or 332(c)(7) unless these conditions are met: (1) the fees are a reasonable approximation of the state or local government's costs, (2) only objectively reasonable costs are factored into those fees, and (3) the fees are no higher than the fees charged to similarly-situated competitors in similar situations. (¶ 50.)
- States and localities may recover a reasonable approximation of their costs related to deployment of Small Wireless Facilities. (¶ 56.)
- The requirement that compensation be limited to a reasonable approximation of objectively reasonable costs and be non-discriminatory applies to all state and local government fees paid in connection with a provider's use of the ROW to deploy Small Wireless Facilities . . . . (¶ 69.)

[1] The text of the two subsection of the United States Code that are referenced below are contained at the end of this document.



Attachment 1.A.c: Summary of FCC Order (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

- This interpretation applies with equal force to any fees reasonably related to the placement, construction, maintenance, repair, movement, modification, upgrade, replacement, or removal of Small Wireless Facilities within the ROW, including, but not limited to, application or permit fees such as siting applications, zoning variance applications, building permits, electrical permits, parking permits, or excavation permits. (¶ 69.)

- Fees not reasonably tethered to costs appear to violate [the Sections]. (¶ 70.)
  - Examples: gross revenue fees (not based on the costs associated with an entity's use of the ROW), unreasonably high costs (such as excessive charges by third party contractors or consultants) may not be passed on through fees even though they are an "actual cost"
- Fair and reasonable compensation: a reasonable approximation of a state or local government's objectively reasonable costs of, respectively, maintaining the ROW, maintaining a structure within the ROW, or processing an application or permit. (¶ 72.)
- Government's incur a variety of direct and actual costs, such as: costs for staff to review the provider's siting application, cost's associated with a provider's use of the ROW, and costs associated with maintaining the ROW itself or structures within the ROW to which Small Wireless Facilities are attached. (¶ 75.)
- When a locality charges both types of recurring fees (access to the ROW and for use or attachment to property in the ROW), the total of the two fees must reflect the total costs involved. (¶ 76.)
  - Fees that cannot ultimately be shown by a state or locality to be a reasonable approximation of its costs, such as high fees designed to subsidize local government costs in another geographic area or accomplish some public policy objective beyond the providers' use of the ROW, are not "fair and reasonable compensation . . . for use of the public rights-of-way."
  - Excessive and arbitrary consulting fees or other costs should not be recoverable as "fair and reasonable compensation" because they are not a function of the provider's "use" of the public ROW.
- Fees that presumptively do not constitute an effective prohibition and are presumed to fair and reasonable: (a) $500 for non-recurring fees, including a single up-front application that includes up to five Small Wireless Facilities, with an additional $100 for each Small Wireless Facility beyond five, or $1,000 for non-recurring fees for a new pole intended to support one or more Small Wireless Facilities; (b) $270 per Small Wireless Facility per year for all recurring fees, including any possible ROW access fee or fee for attachment to municipally-owned structures in the ROW. (¶ 79.)
  - A local government can charge fees above this level by showing that the fees are (1) a reasonable approximation of costs, (2) those costs themselves are reasonable, and (3) are non-discriminatory. (¶ 80.)

<u>Non-Fee Related Provisions that Could Operate as Prohibitions on Service</u>

- Aesthetic requirements are not preempted if they are: (1) reasonable, (2) no more burdensome than those applied to other types of infrastructure deployments, and (3) objective and published in advance. (¶ 86.)



Attachment 1.A.c: Summary of FCC Order (2761 : TXT2019-00251 - Small Cell Antennas)
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- Requirements that are reasonable in that they are technically feasible and reasonably directed to avoiding or remedying the intangible public harm of unsightly or out-of-character deployments are permissible. (¶ 87.)
- Requirements must be objective – *i.e.*, they must incorporate clearly-defined and ascertainable standards, applied in a principled manner – and must be published in advance. (¶ 88.)

- Undergrounding Requirements. (¶ 90.)
  - We believe that a requirement that *all* wireless facilities be deployed underground would amount to an effective prohibition given the propagation characteristics of wireless signals. (¶ 90.)
  - Further, a requirement the materially inhibits wireless service, even if it does not go so far as requiring that all wireless facilities be deployed underground, also would be considered an effective prohibition. (¶ 90.)
- Minimum spacing requirements may be reasonable aesthetic requirements. (¶ 91.)
  - Under the principle that nay such requirements be reasonable and publicly available in advance, it is difficult to envision any circumstances in which a municipality could reasonably promulgate a new minimum spacing requirement that, in effect, prevents a provider from replacing its preexisting facilities or collocating new equipment on a structure already in use. (¶ 91.)

<u>State and Local Governments Act in Their Regulatory Capacity When Authorizing and Setting Terms for Wireless Infrastructure Deployment in Public Rights-of-Way</u>

- The interpretations extend to state and local governments' terms for access to public ROW that they own or control, including areas on, below, or above public roadways, highways, streets, sidewalks, or similar property, as well as their terms of use of or attachment to government-owned property within such ROW, such as new, existing, and replacement light poles, traffic lights, utility poles, and similar property suitable for hosting Small Wireless Facilities. (¶ 92.)
- Section 253(a) is properly construed to suggest that Congress did not intend to permit states and localities to rely solely on their ownership of property within the ROW as a pretext to advance regulatory objectives that prohibit or have the effect of prohibiting the provision of covered services. (¶ 97.)

<u>Shot Clocks/Applications</u>

- New shot clock for small wireless facility deployments (¶ 105.)
  - 60 days for review of an application for collocation of Small Wireless Facilities using a preexisting structure.
  - 90 days for review of an application for attachment of Small Wireless Facilities using a new structure.
- Shot clocks reset in the event that a locality receives a materially incomplete application. (¶ 111.)
- It is likely that providers will submit "batched" applications, which are multiple separate applications filed at the same time, each for one or more sites *or* a single application covering multiple sites. (¶ 113.)
  - We see no reason why the shot clocks for batched applications to deploy Small Wireless Facilities should be longer than those that apply to individual

applications because, in many cases, the batching of such applications has advantages in terms of administrative efficiency that could actually make review easier. (¶ 114.)

- Section 332 does not allow states and localities to refuse to accept batches of applications to deploy Small Wireless Facilities. (¶ 115.)
- A failure to act amounts to a presumptive prohibition on the provision of personal wireless services within the meaning of [the Section]. (¶ 118.)
- Any request for authorization to place, construct, or modify personal wireless services facilities under [Section 332] means all authorizations necessary for the deployment of personal wireless services infrastructure. (¶ 132.)
    - The text encompasses not only requests to place personal wireless service facilities, e.g., zoning requests, but also requests for authorization to construct or modify personal wireless service facilities. (¶ 133.)
- Attachment of facilities to existing structures constitutes collocation, regardless whether the structure or the location has previously been zoned for wireless facilities. (¶ 140.)
- For Small Wireless Facilities applications, the siting authority has 10 days from the submission of the application to determine whether the application is incomplete. (¶ 143.)
    - The shot clock then resets once the applicant submits the supplemental information requested by the siting authority. (¶ 143.)

*Statutory Authority for Order*
47 USC § 332(c)(7)

**(c)(7)** Preservation of local zoning authority.

**(A)** General authority. Except as provided in this paragraph, nothing in this Act shall limit or affect the authority of a State or local government or instrumentality thereof over decisions regarding the placement, construction, and modification of personal wireless service facilities.

**(B)** Limitations.

**(i)** The regulation of the placement, construction, and modification of personal wireless service facilities by any State or local government or instrumentality thereof--

**(I)** shall not unreasonably discriminate among providers of functionally equivalent services; and

**(II)** shall not prohibit or have the effect of prohibiting the provision of personal wireless services.

**(ii)** A State or local government or instrumentality thereof shall act on any request for authorization to place, construct, or modify personal wireless service facilities within a reasonable period of time after the request is duly filed with such government or instrumentality, taking into account the nature and scope of such request.

**(iii)** Any decision by a State or local government or instrumentality thereof to deny a request to place, construct, or modify personal wireless service facilities shall be in writing and supported by substantial evidence contained in a written record.



Attachment 1.A.c: Summary of FCC Order (2761 : TXT2019-00251 - Small Cell Antennas)
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

(iv) 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.

(v) Any person adversely affected by any final action or failure to act by a State or local government or any instrumentality thereof that is inconsistent with this subparagraph may, within 30 days after such action or failure to act, commence an action in any court of competent jurisdiction. The court shall hear and decide such action on an expedited basis. Any person adversely affected by an act or failure to act by a State or local government or any instrumentality thereof that is inconsistent with clause (iv) may petition the Commission for relief.

(C) Definitions. For purposes of this paragraph--

(i) the term "personal wireless services" means commercial mobile services, unlicensed wireless services, and common carrier wireless exchange access services;

(ii) the term "personal wireless service facilities" means facilities for the provision of personal wireless services; and

(iii) the term "unlicensed wireless service" means the offering of telecommunications services using duly authorized devices which do not require individual licenses, but does not mean the provision of direct-to-home satellite services (as defined in section 303(v) [47 USCS § 303(v)]).

47 USC § 253(a)-(c)

**(a) In general**. No State or local statute or regulation, or other State or local legal requirement, may prohibit or have the effect of prohibiting the ability of any entity to provide any interstate or intrastate telecommunications service.

**(b) State regulatory authority.** Nothing in this section shall affect the ability of a State to impose, on a competitively neutral basis and consistent with section 254 [47 USCS § 254], requirements necessary to preserve and advance universal service, protect the public safety and welfare, ensure the continued quality of telecommunications services, and safeguard the rights of consumers.

**(c) State and local government authority.** Nothing in this section affects the authority of a State or local government to manage the public rights-of-way or to require fair and reasonable compensation from telecommunications providers, on a competitively neutral and nondiscriminatory basis, for use of public rights-of-way on a nondiscriminatory basis, if the compensation required is publicly disclosed by such government.



Attachment 1.A.c: Summary of FCC Order (2761 : TXT2019-00251 - Small Cell Antennas)
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Attachment 1.A.d: "Smart Cities and Technology" Article from American City and County Magazine (2761 : TXT2019-00251 - Small Cell
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## SMART CITIES & TECHNOLOGY

(https://www.americancityandcounty.com/type/smart-cities-technology/)

# Small cells, big uncertainties

Small cell wireless systems promise smart city innovation via 5G, but federal intervention into their deployment is costing local officials the ability to govern public property

Written by Jason Axelrod (https://www.americancityandcounty.com/author/jasonaxelrod/) 10th July 2019

Like the turning of a page, Sept. 27, 2018, opened into a new chapter in local telecommunication systems regulation in the U.S.

That day, the Federal Communications Commission (FCC) released an order that drastically altered the way local governments can administer small wireless telecommunication facilities, otherwise known as "small cells," which enable technology such as 5G.

Among other mandates, the rules prevented local governments from establishing certain requirements on small cells. Notably, the order doesn't grandfather in past state and local regulations that are out-of-line with the new order.

The FCC justified the order in stating its intent to remove regulatory hurdles towards implementing 5G-related systems, according to an official news release. This intent comes as part of its "commitment to ensuring that the United States wins the global race to 5G."

Many advocates for local governance, however, have publicly lambasted the order, denouncing its pre-emption of local power.

"The FCC's impractical actions will significantly impede local governments' ability to serve as trustees of public property, safety and well-being. The decision will transfer significant local public resources to private companies, without securing any guarantee of public benefit in return," the National Association of Counties (NACo) and the National League of Cities (NLC) wrote in a joint statement on the FCC's order.

Challenges to the FCC's order are moving through Congress and the U.S. judicial system. However, wireless system companies like Verizon and AT&T have begun deploying small cells to cities across the country. Moreover, the FCC set a deadline of April 15 for local governments to publish updated aesthetic standards for small cells that fall in line with the new order.

"The FCC's approach is a pretty blanket approach. And it may not account for all of the nuances of local government. But at the same time, we've seen the conflict is that the cities need to take this seriously," notes David Witkowski, executive director of civic technology initiatives at Joint Venture Silicon Valley, a nonprofit organization that convenes Silicon Valley leaders across sectors to solve various regional issues together.

Now that the deadline has passed, what can local governments do to manage these systems and their deployment?

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To answer, it helps to know exactly what they're dealing with.

**Issues at hand**

> "The FCC's approach is a pretty blanket approach. And it may not account for all of the nuances of local government. But at the same time, we've seen the conflict is that the cities need to take this seriously."

(https://www.americancityandcounty.com/files/2019/07/Screen-Shot-2019-07-10-at-1.35.47-PM.png)A cell tower is hard to miss if you're around one. Sometimes disguised as trees, the lofty spires send and receive data to and from devices across a wide radius, according to a report from CTIA, an association that represents the U.S. wireless communications industry. Data transmission is naturally strongest near a tower (also called a macro cell) and weakest at its transmission radius' edge.

Small cells predictably are smaller installations of radio equipment —typically about the size of a pizza box — that transmit data in a much tinier radius. In this way, they're effective for densely populated areas like city cores, according to a report from Verizon. They've even been deployed already to enhance 4G LTE coverage.

Over a 5G network, information is transmitted via millimeter waves, which allow more data to be transmitted in less time but cannot travel as far as waves used in 4G networks, according to a NACo report. Small cells enable the transmission of millimeter waves, but many are needed in close vicinity to ensure that devices in transit receive undisrupted coverage.

Given their size, small cells are frequently placed on public property or in local public rights-of-way, the NACo report explains.

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This creates a number of issues. For starters, small cells aren't the prettiest objects. Improperly disguised small cells could look out-of-character for culturally-distinct areas like the French Quarter in New Orleans or in San Francisco's Haight-Ashbury district.

"[There is] the potential for... the creation of blight in otherwise beautiful neighborhoods," says James Kennedy, founder and CEO of Steepsteel, which facilitates the management and consulting of wireless agreements and infrastructure. "That's something that cities... they have great planners and they have these ordinances, aesthetic guidelines for all kinds of things, and then to get caught flat-footed on this, you could see how that could be detrimental."

The relocation of wireless equipment into densely-populated areas has forced cities to rethink how they administer it, Witkowski says. Small cells can't be disguised as trees, and unlike cell towers, they'll need to be placed in residential areas.

"A city that is used to doing a [cell] tower every 10 years probably can do that through real estate or economic development, some other entity," Witkowski explains. "Now, it's falling largely in the bucket of public works. Previously, public works was not really involved in telecom because towers were not in public rights-of-way."

Public works officials, however, most likely don't have telecom expertise. So, another issue develops —a learning curve towards knowledge of telecom. But Witkowski says that knowledge of telecom isn't common among many municipal leaders in general.

"Cities are really good at streets and parks and sidewalks and tree trimming and permits for house additions. They're just not up-to-speed on telecom," he explains. "What we find is that most cities don't have that expertise in-house, and it's also hard to hire."

These issues have been compounded especially by cities now needing to construct rules that are in-line with the FCC's sweeping and restrictive September 2018 order, the Declaratory Ruling and Third Report and Order.

**Rules of the game**

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In its Declaratory Ruling and Third Report and Order, the FCC defines small cells (referred to within as small wireless facilities or SWF) and places a number of restrictions on state and local governments that try to manage the deployment of small cells, according to a document from the National Association of Telecommunications Officers and Advisors (NATOA).

For starters, the order caps all recurring and non-recurring fees related to small cells; the caps can only be raised if local governments can show that the costs are reasonable approximations of reasonable costs levied on the government, the NATOA report states.

"It shifts away all the financial benefit, reduced it by, 80 to 90 percent relative to what it was prior to the passage of this order," Kennedy explains. "But this is very specific. It's for assets that are on city property or the public right-of-way, right? So, it's just going to incentivize carriers and tower companies to put their small cells on government-owned property."

The order pre-empts local governments from establishing certain aesthetic requirements for small cells. Aesthetic requirements are allowed only if they are "reasonable," "objective" and aren't more arduous than requirements put on other infrastructure deployments. The rules must also be published in advance. The order also pre-empts the requirements of all small cells being placed underground or being placed underground in a way that inhibits service.

"Other than safety issues, the rights-of-way are deregulated... [the FCC has] granted [carriers] unfettered and effectively unregulated [access] to the rights of way to install and deploy poles and wireless equipment with minimal at best local oversight," says Rusty Monroe, founder and owner of Monroe Telecom Associates, which assists local governments in their dealings with the wireless industry. "And they're doing great harm."

Lastly, the order establishes "shot clocks" of 60 or 90 days for approvals of small cell deployments. A few actions can pause or stop these shot clocks, but inaction during a shot clock window is considered a violation of the Communications Act.

While the FCC's order is restrictive, it can also be detrimental to local governments in its vagueness.

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"The FCC order uses terms like 'reasonable' and doesn't define those. And ultimately, even on what's considered the most concrete part of the order, where it talks about fees, it doesn't say that those are definitely fee caps or that those fees are definitely acceptable," explains NLC Principal Associate for Technology and Communications Angelina Panettieri.

**Tools of the trade**

Before the FCC's order was passed, the NLC released a report, "Small Cell Wireless Technology in Cities," that explains small cell technology, profiles several cities' small cell-related efforts and presents strategies for city leaders. The first strategy is to become familiar with the technology and its safety considerations.

(https://www.americancityandcounty.com/files/2019/07/image-1.jpg)
Small cells like the ones on this pole, will be deployed throughout the country to build 5G networks.

"These are not simple topics. And so, the challenge I think is, telecom is complex enough that a city really unless they've staffed up...the others would have to hire consultants," Witkowski says.

It is feasible that carriers like Verizon or AT&T could honor aesthetic guidelines that a city passes after April 15, as long as the city provides those guidelines before application discussions begin.

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Witkowski provides the example of a carrier entering a city without aesthetic guidelines in place. If the city were to say that it would provide the guidelines at a specific date within a reasonably quick timeframe, he posits that a carrier would most likely honor that agreement.

"I think carriers don't want a fight. I don't think the industry wants a fight. They're not looking to make enemies," he says. "It would be rational for them to say, 'OK fine, we'll give you that amount of time'."

Panettieri notes that resident involvement was a common theme among the cities profiled in the NLC report. Officials were working with homeowners associations, neighborhood commissions and other groups of residents that were likely to be concerned with small cells. "Proactively working with residents, I think that's a huge one," she says.

The shot clocks are particularly important for this strategy, she says. That's due to the need to keep residents and resident groups abreast of planning processes and to ensure feasible input on placement and designs, as the shot clocks can prevent officials from adequately doing so once time becomes critical.

Monroe believes that the best way to draft up such guidelines is to have a person or team draft them who knows the industry from the inside. He believes that if aesthetics guidelines are drafted up correctly, that they can protect the public in the majority of instances.

"The key is in having well-done regulations by someone who knows what's happening and how to deal with it," he says.

Going it alone can be dangerous — Monroe adds that local officials trying to work with the communications industry as equals is, "an effort in futility without expert assistance. They don't even know what they don't know."

Panettieri however, believes that entering into agreements with carriers is a viable option. "Proactively speaking with providers, if [officials] know that they're a city that's going to see development, it ensures that they at least have some time to think through what they might be able to come to an agreement on."

Two cities in particular so far, have been able to obtain desired outcomes in

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negotiating directly with carriers.

**Working together**

Instead of rallying against the FCC's rules, San Diego officials decided to work with Verizon to accelerate small cells' deployment in the city and improve its technological initiatives.

"We went ahead and took a little bit of a different approach even though we were taken aback a little bit by the FCC rules that came out," says San Diego Assistant Chief Operating Officer Ron Villa. "But we decided to... embrace the potential that is 5G rather than try and fight everything."

Announced on April 8, San Diego's agreement with the city involves the city working with Verizon to streamline its permitting process to lower review times and deploy small cells quicker and more efficiently, according to a news release from the city. San Diego will develop a master permit for digital fiber installation to give more users access to broadband.

"Our development services department that handles all of our permitting... they really came together," Villa says. "They put a core group of folks together that really started looking at what they did and what they could do with regard to reviewing this, and they took the review cycles from months down to weeks, if not days."

In return, Verizon will give 500 smartphones to the San Diego Police Department and 50 tablets to the San Diego Fire-Rescue Department, according to the release. Verizon will also install traffic gathering and sensing technology at five intersections where crashes are common, and it will inventory about 60,000 city light poles to provide wireless capability to residents. The carrier will also deploy fiber and small cells to the light poles.

Villa admits that San Diego embraces technology, but that officials also keep the public's best interest in mind. While concerns about privacy must be addressed, the government has the public trust in them. "San Diego tends to get out in front of some of these things," he says.

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At the end of 2018, Syracuse, N.Y. found itself with a standing small cell-related ordinance that didn't comply with the FCC's new order, Syracuse, N.Y. Chief Data Officer Sam Edelstein says.

Realizing that federal rules governing small cells could change again in the future, Syracuse officials decided to rescind their standing order, Edelstein says. Instead, the city would negotiate directly with each carrier as it entered the city until a larger enterprise agreement could be put into place that would govern the city as a whole, Edelstein says.

One concern that has been raised about 5G and small cells concerns the health effects that the technology and the frequencies it emits would have on the public. An agreement between Syracuse and Verizon has enabled the city to address those concerns while having small cells implemented in its community.

"Because there hasn't been tons of research into the effects of having radio frequencies that 5G provides, it would be good to have regular checks on those antennas," Edelstein says. "But then additionally, we knew that people would be nervous about them... we wanted to ensure that we could check on that to give some more confidence to the public that not just anything can go into facilities that can emit whatever kind of radio frequencies that the carrier wants."

Another critical part of the agreement was ensuring that the city would have an equitable level of connectivity deployed across its area, since certain parts of the city lack internet access, Edelstein says.

The desire to inspect the small cells hadn't been asked of Verizon before, Edelstein says. However, Verizon was confident that health wouldn't be an issue because they do their own testing of the cells. The city is still determining how exactly it will carry out small cell inspections, but officials have thought about it in a similar way to how inspections of other pieces of infrastructure are carried out.

"We are excited about the technology and think it's also our job to find ways to provide access to the right-of-way in a safe and responsible way," Edelstein says. "And so, we feel like we did that with this agreement."

There is much to be excited about as far as 5G is concerned — especially because it will enhance far more than mobile handset connectivity.

Attachment 1.A.d: "Smart Cities and Technology" Article from American City and County Magazine (2761 : TXT2019-00251 - Small Cell
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

**Close to the cutting edge**

The deployment of 5G will certainly carry technological benefits to cities, but it will also yield economic benefits.

(https://www.americancityandcounty.com/files/2019/07/image-2.jpg)
Small cells on a light pole in Minneapolis. Photo by Tony Webster/ CC BY-SA 2.0.

A report from Accenture indicates that U.S. carriers and telecom operators could invest about $275 billion over seven years to deploy small cells and other next-generation wireless technology. This, in turn, is expected to create 3 million jobs and lead to $500 billion in gross domestic product (GDP) growth.

Witkowski explains that 5G is simply the next incremental step in a better performing network — it's not akin to simply flipping a switch on a new technology. However, 5G networks are more flexible in that they don't just offer technological benefits for mobile handsets.

5G will improve fixed wireless, mobile technology, weightless positioning, the Internet of Things (IoT) and more efficient use of spectrum, Witkowski says. The Accenture report states that 5G will allow the high-speed, pervasive connection of more devices and sensors, and it will provide better redundancy and reliability with low power consumption.

Attachment 1.A.d: "Smart Cities and Technology" Article from American City and County Magazine (2761 : TXT2019-00251 - Small Cell
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

An example of improvement for cities lies in GPS efficiency — 5G and small cells will improve that efficiency in dense urban areas where buildings can reflect GPS signals, Witkowski says. This, along with enhanced vehicle-to-vehicle communications via 5G, can improve the use of autonomous vehicles.

However, the 5G that has been launched isn't necessarily up to par with what the technology promises. For example, AT&T has launched what it calls 5G Evolution (5Ge) in 400 markets, but that technology runs on its existing LTE network, according to an AT&T statement.

So, regarding both the launch of 5G and the concrete benefits it will bring to cities, governments may have to play the waiting game for the time being.

"I think it's kind of a wait-and-see situation," Panettieri says. "Because if the technical benefits of 5G include lower latency and higher network load, then potentially, this is going to be most effective for those smart city Internet of Things deployments where you're dealing with a lot of devices on a network over a short distance."

Tags: In-Depth , Smart Cities & Technology , In-Depth , Smart Cities & Technology , Article

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(https://www.americancityandcounty.com/2019/06/03/food-

Attachment 1.A.d: "Smart Cities and Technology" Article from American City and County Magazine (2761 : TXT2019-00251 - Small Cell
Attachment 7.c: PC Staff Report 7-24-19 (2827 : Discussion and Instruction, TXT2019-00251 - Small Cell Antennas)

City of Rockville

# M E M O R A N D U M

July 29, 2019

TO: Mayor and Council

FROM: Planning Commission

SUBJECT: Planning Commission Recommendation on Zoning Text Amendment Application TXT2019-00251

At its meeting on June 26, 2019 the Planning Commission received a briefing and background report by the staff on Text Amendment Application TXT2018-00251, which proposes new regulations for the installation of small cell wireless antennas. At that meeting the Commission requested additional information regarding the text of the Federal Communications Commission's order regarding small cell antenna installations.

On July 24, 2019 the Commission took up consideration of the proposed text amendment for recommendation to the Mayor and Council. The Commission notes that there is still pending litigation in the Federal courts regarding the FCC's order, which severely limits the power to regulation small cell antennas by local jurisdictions. The Commission requests that the Mayor and Council monitor the progress of these court actions in case any outcomes may alter the scale of the proposed text amendment.

Commissioner Hadley believes that based on the nature of the FCC Order that the city needs some regulation in place in order to properly review any applications that may come before the city while legal appeals are pending.

Commissioner Littlefield believes that the city should reflect the regulations that are in effect in Montgomery County, which cover installations in commercial and employment districts. As a consequence he does not support the approval of the amendment as drafted.

After discussion and deliberation on the proposed revisions, the Planning Commission recommends approval of the proposed zoning text amendment as authorized.

Therefore, on a motion by Commissioner Tyner, seconded by Commissioner Hadley, with Commissioners Tyner, Goodman, Sherman, Woods and Hadley voting in favor of the motion,

and with Commissioner Littlefield abstaining from the vote, the Commission recommends approval of Text Amendment TXT2018-00251.

## Sara Taylor-Ferrell

**From:** Ah-Leah Jones Clarke <myvoice@oneclickpolitics.com>
**Sent:** Saturday, August 31, 2019 11:30 PM
**To:** cityclerk
**Subject:** We don't want 5G!

Re: We don't want 5G!

Dear Ms. Taylor-Ferrell,

Dear Representatives Raskin and Kumar,

You are my elected representative. This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

Contamination of my home with 5G may cause damage to my home if it becomes a health risk to me and thus render my home uninhabitable. Irradiating me with wireless non-ionizing electromagnetic radiation against my consent would be an application of force against my person and which causes fear of bodily injury and could be classed as a civil trespass and/or a criminal assault.

Any level of exposure of man-made non-ionizing electromagnetic radiation can be diagnosed by my medical practitioner as an adverse health effect pursuant to the WHO's International Classification of Diseases ICD-10, code W90 thus rendering any safety limit as set by the government safety standards obsolete as to protecting my health. As needed, I may see my doctor for advice on the 5G issue.

If 5G technology is deployed within your constituency, I expect that you as my elected representative will exercise due diligence to certify that all parties deploying 5G technologies have sufficient insurance cover to compensate for damage or harm caused by the emission of wireless non-ionizing electromagnetic radiation. Please note that this could be a problem, since underwriters such as Lloyds of London do not insure for such harm and damage.

I urge you, as my elected official, to act in the public interest by addressing the potential cumulative harms of densification (the crowding of small cells into a limited area to enable 5G) and insisting that public safety regulatory authorities need to prove that such densification of 5G technology is safe and that any deployment of 5G, Artificial Intelligence (AI), and/or the Internet of Things (IoT), is regulated appropriately to ensure that the national security and the safety and privacy of the public and myself is not compromised.

You need to protect the public from other harmful wireless technologies such as Wi-Fi in schools, "smart" meters on dwellings, and the like, and to replace those technologies with safe and efficient wired technologies, such as Ethernet and/or fiber optics, as the end-nodes of internet delivery systems to dwellings, schools and commercial buildings. Forward-thinking cities are already doing this.

I implore you, as my elected official, to act in the public interest by protecting the public and myself from being persecuted by the passing of laws that restrict the Courts, law enforcement agencies, municipal councils and local governments from taking action to protect the public from harm to health and damage, caused by 5G and other wireless technologies.

I am genuinely concerned for your welfare, the general public and mine, and this is a situation of the utmost urgency. I have studied the relevant facts and am thus aware of the danger. As a result I am in fear and I take the risk of harm and damage to me very seriously.

To help bring you up to speed on this extremely important topic, please go to the5Gsummit.com, and listen for free to what 40 highly regarded experts inclusive of scientists, medical practitioners and lawyers from around the world have to say on the 5G subject. Experts who are not censored by the telecommunications industry, nor their captured governments, nor the captured media. Further, to assist with your education, please look at the Bio-initiative Report 2012 (updated 2017) - A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) bioinitiative.org and Physicians for Safe Technology – 5G Mobile Communications mdsafetech.org.

I implore you as my civic leader, and as my elected representative to get educated on this important topic, and show me by your decisions, actions and omissions that you are taking precautionary steps to address the risk of harm to me and all the people within your constituency.

As an elected official I believe you are at risk of being liable if you do not take appropriate action to attempt to abate, or prevent such harm to me or the public.

Your people are rising up and I implore you to take leadership and be a champion for the health and safety of all of us. If you do, many voters, legislators and I will wholeheartedly support and campaign for you.

Sincerely,
A. Shawn Jones Clarke

Sincerely,
Ah-Leah Jones Clarke
ahsjc@aol.com

1025 Gaither Road
Rockville, MD 20850
Constituent

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## Niles Anderegg

**From:** Nicole Roman, RN <myvoice@oneclickpolitics.com>
**Sent:** Wednesday, September 4, 2019 9:29 AM
**To:** cityclerk
**Subject:** Notice regarding wireless "small cell" deployments and surveillance facilities

**Follow Up Flag:** Follow up
**Flag Status:** Flagged

Re: Notice regarding wireless "small cell" deployments and surveillance facilities

Dear Ms. Taylor-Ferrell,

You are my elected representative. This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

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If 5G technology is deployed within your constituency, I expect that you as my elected representative will exercise due diligence to certify that all parties deploying 5G technologies have sufficient insurance cover to compensate for damage or harm caused by the emission of wireless non-ionizing electromagnetic radiation. Please note that this could be a problem, since underwriters such as Lloyds of London do not insure for such harm and damage.

I urge you, as my elected official, to act in the public interest by addressing the potential cumulative harms of densification (the crowding of small cells into a limited area to enable 5G) and insisting that public safety regulatory authorities need to prove that such densification of 5G technology is safe and that any deployment of 5G, Artificial Intelligence (AI), and/or the Internet of Things (IoT), is regulated appropriately to ensure that the national security and the safety and privacy of the public and myself is not compromised.

You need to protect the public from other harmful wireless technologies such as Wi-Fi in schools, "smart" meters on dwellings, and the like, and to replace those technologies with safe and efficient wired technologies, such as Ethernet and/or fiber optics, as the end-nodes of internet delivery systems to dwellings, schools and commercial buildings. Forward-thinking cities are already doing this.

I implore you, as my elected official, to act in the public interest by protecting the public and myself from being persecuted by the passing of laws that restrict the Courts, law enforcement agencies, municipal councils and local governments from taking action to protect the public from harm to health and damage, caused by 5G and other wireless technologies.

## Niles Anderegg

**From:** Tessa Lachman <myvoice@oneclickpolitics.com>
**Sent:** Tuesday, September 3, 2019 9:47 PM
**To:** cityclerk
**Subject:** Notice regarding 5G deployments and liability

**Follow Up Flag:** Flag for follow up
**Flag Status:** Flagged

Re: Notice regarding 5G deployments and liability

Dear Ms. Taylor-Ferrell,

You are my elected representative. This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

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I implore you, as my elected official, to act in the public interest by protecting the public and myself from being persecuted by the passing of laws that restrict the Courts, law enforcement agencies, municipal councils and local governments from taking action to protect the public from harm to health and damage, caused by 5G and other wireless technologies.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

**Niles Anderegg**

**From:** Daniele Jaekel <myvoice@oneclickpolitics.com>
**Sent:** Monday, September 2, 2019 5:57 PM
**To:** cityclerk
**Subject:** Join other local governments & stand against illegal 5G rollouts

Re: Join other local governments & stand against illegal 5G rollouts

Dear Ms. Taylor-Ferrell,

Hello,
You are my elected representative. This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

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I am genuinely concerned for your welfare, the general public and mine, and this is a situation of the utmost urgency. As I have studied the relevant facts and am thus aware of the danger, I experience fear and I take the risk of harm and damage to me, very seriously.

To help bring you up to speed on this extremely important topic, please go to the5Gsummit.com, and listen for free to what 40 highly regarded experts inclusive of scientists, medical practitioners and lawyers from around the world have to



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

say on the 5G subject. Experts who are not censored by the telecommunications industry, nor their captured governments, nor the captured media. Further, to assist with your education, please look at the Bio-initiative Report 2012 (updated 2017) - A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) bioinitiative.org and Physicians for Safe Technology – 5G Mobile Communications mdsafetech.org.

I implore you as my civic leader, and as my elected representative to get educated on this important topic, and show me by your decisions, actions and omissions that you are taking precautionary steps to address the risk of harm to me and all the people within your constituency.

As an elected official I believe you are at risk of being liable if you do not take appropriate action to attempt to abate, or prevent such harm to me or the public.

Your people are rising up and I implore you to take leadership and be a champion for the health and safety of all of us. If you do, many voters, legislators and I will wholeheartedly support and campaign for you.

Sincerely,

Daniele Jaekel

Sincerely,
Daniele Jaekel
daniele072508@gmail.com

802 Cabin John Pkwy
Rockville, MD 20852
Constituent

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## Niles Anderegg

**From:** Kin Szeto <myvoice@oneclickpolitics.com>
**Sent:** Monday, September 2, 2019 5:16 PM
**To:** cityclerk
**Subject:** We don't want 5G!

Re: We don't want 5G!

Dear Ms. Taylor-Ferrell,

You are my elected representative. This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

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I DO NOT WANT OR NEED 5G.

I have family members who became EMF sensitive and very sick after installation of Smartmeters (because President Obama gave power companies billions in incentive to force all constituents to get one). All in the name of saving 3% in electricity, and selling consumer spending habits to 3rd parties and law enforcement?? What about low level radiation sickness == smart meter syndrome from radiation?

Any level of exposure of man-made non-ionizing electromagnetic radiation can be diagnosed by my medical practitioner as an adverse health effect pursuant to the WHO's International Classification of Diseases ICD-10, code W90 thus rendering any safety limit as set by the government safety standards obsolete as to protecting my health. As needed, I may see my doctor for advice on the 5G issue.

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Your people are rising up and I implore you to take leadership and be a champion for the health and safety of all of us. If you do, many voters, legislators and I will wholeheartedly support and campaign for you.

Sincerely,
Kin Szeto
khkszeto@gmail.com

11806 Rocking Horse Rd
Rockville, MD 20852
Constituent

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

**Sara Taylor-Ferrell**

**From:** Jacqueline Apel <myvoice@oneclickpolitics.com>
**Sent:** Friday, September 6, 2019 10:09 PM
**To:** cityclerk
**Subject:** Join other local governments & stand against illegal 5G rollouts

Re: Join other local governments & stand against illegal 5G rollouts

Dear Ms. Taylor-Ferrell,

As my elected representatives, I wanted to inform you of t his summit regarding the dangers to humans of 5G wireless network technology. I have listened to the expert talks regarding the dangers of wireless cellphone radiation, to the brain, as well as the fact it is causing serious health issues to people who are in harms way. Even with wireless routers and cellphones in our home, we are all being exposed to much more radiation from these devices than we realize, and the impacts are being seen in many ways.

I am forwarding this form notice as well, which was part of the talk, but thought it would be helpful for you to listen to some of the talks so that you might know more about how wireless technologies are affecting our lives. There is a real danger even with 3G, and going to the 5G as well as having companies install wireless devices on light posts on every street will cause us all to be overexposed. The companies like Verizon have testifed before Congress and said that there have been no health studies or limits to what they can do. Senator Blumenthal questioned them on what the knew. I would highly recommend listening to some of the talks.

Thank you for your attention to the health hazards of the 5G Wireless network.

"This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

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Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

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As an elected official I believe you are at risk of being liable if you do not take appropriate action to attempt to abate, or prevent such harm to me or the public.

Your people are rising up and I implore you to take leadership and be a champion for the health and safety of all of us. If you do, many voters, legislators and I will wholeheartedly support and campaign for you."

Sincerely,
Jacqueline Apel
jacquiapel@comcast.net

14605 Carrolton Road
Rockville, MD 20853
Constituent

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

**Sara Taylor-Ferrell**

**From:** Sandra Crowe <myvoice@oneclickpolitics.com>
**Sent:** Saturday, September 7, 2019 12:52 AM
**To:** cityclerk
**Subject:** We don't want 5G!

Re: We don't want 5G!

Dear Ms. Taylor-Ferrell,

I am one of your biggest fans and so happy to have you as my representative! I wanted someone in your office to watch this piece of evidence on 5G that impacts all of us in Montgomery County. Please have someone attend to this and 5G is coming quickly as well as the dangers that accompany it.

This legal notice of liability is designed to be used as evidence in court if needed and intends to enlighten you and to protect you from attracting civil and criminal liability in relation to your actions and/or omissions surrounding the deployment of 5G technology within your constituency. 4G/LTE small cells form an integral part of the 5G deployment. This 5G technology will cause me to be exposed to wireless non-ionizing electromagnetic radiation against my consent and in my home.

Contamination of my home with 5G may cause damage to my home if it becomes a health risk to me and thus render my home uninhabitable. Irradiating me with wireless non-ionizing electromagnetic radiation against my consent would be an application of force against my person and which causes fear of bodily injury and could be classed as a civil trespass and/or a criminal assault.

Any level of exposure of man-made non-ionizing electromagnetic radiation can be diagnosed by my medical practitioner as an adverse health effect pursuant to the WHO's International Classification of Diseases ICD-10, code W90 thus rendering any safety limit as set by the government safety standards obsolete as to protecting my health. As needed, I may see my doctor for advice on the 5G issue.

If 5G technology is deployed within your constituency, I expect that you as my elected representative will exercise due diligence to certify that all parties deploying 5G technologies have sufficient insurance cover to compensate for damage or harm caused by the emission of wireless non-ionizing electromagnetic radiation. Please note that this could be a problem, since underwriters such as Lloyds of London do not insure for such harm and damage.

I urge you, as my elected official, to act in the public interest by addressing the potential cumulative harms of densification (the crowding of small cells into a limited area to enable 5G) and insisting that public safety regulatory authorities need to prove that such densification of 5G technology is safe and that any deployment of 5G, Artificial Intelligence (AI), and/or the Internet of Things (IoT), is regulated appropriately to ensure that the national security and the safety and privacy of the public and myself is not compromised.

You need to protect the public from other harmful wireless technologies such as Wi-Fi in schools, "smart" meters on dwellings, and the like, and to replace those technologies with safe and efficient wired technologies, such as Ethernet and/or fiber optics, as the end-nodes of internet delivery systems to dwellings, schools and commercial buildings. Forward-thinking cities are already doing this.

I implore you, as my elected official, to act in the public interest by protecting the public and myself from being persecuted by the passing of laws that restrict the Courts, law enforcement agencies, municipal councils and local



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governments from taking action to protect the public from harm to health and damage, caused by 5G and other wireless technologies.

I am genuinely concerned for your welfare, the general public and mine, and this is a situation of the utmost urgency. I have studied the relevant facts and am thus aware of the danger. As a result I am in fear and I take the risk of harm and damage to me very seriously.

To help bring you up to speed on this extremely important topic, please go to the5Gsummit.com, and listen for free to what 40 highly regarded experts inclusive of scientists, medical practitioners and lawyers from around the world have to say on the 5G subject. Experts who are not censored by the telecommunications industry, nor their captured governments, nor the captured media. Further, to assist with your education, please look at the Bio-initiative Report 2012 (updated 2017) - A Rationale for Biologically-based Public Exposure Standards for Electromagnetic Fields (ELF and RF) bioinitiative.org and Physicians for Safe Technology – 5G Mobile Communications mdsafetech.org.

I implore you as my civic leader, and as my elected representative to get educated on this important topic, and show me by your decisions, actions and omissions that you are taking precautionary steps to address the risk of harm to me and all the people within your constituency.

As an elected official I believe you are at risk of being liable if you do not take appropriate action to attempt to abate, or prevent such harm to me or the public.

Your people are rising up and I implore you to take leadership and be a champion for the health and safety of all of us. If you do, many voters, legislators and I will wholeheartedly support and campaign for you.

Sincerely,
Sandra Crowe
sc@pivpoint.com

882 New Mark Esplanade
Rockville, MD 20850
Constituent

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**Sara Taylor-Ferrell**

**From:** Mehrtash Olson <mehrtash.olson@gmail.com>
**Sent:** Monday, September 16, 2019 4:01 PM
**To:** cityclerk
**Subject:** RE: antennas to accommodate 5G // 2019-09-16 Rockville public hearing

Regarding the installation of antennas to accommodate 5G, it is understandable that Rockville is seeking to comply with the related FCC ruling.

However, I am concerned about the impact of this on public health.

From my reading, it appears there are plenty of independent studies warning about the danger of radio frequency and electro magnetic radiation.

Popular media typically exposes us only to the promised benefits of 5G because this will be profitable and otherwise useful to technology companies and government (military) interests.

Where in Rockville is there a forum to educate citizens about this topic and allow them to advocate for the populace?

Many thanks,

Mehrtash Olson
12 Eton Overlook
Rockville

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**1. Problem: Text Amendment TXT2019-00254 remains exces**
**My 15 July 2019 comments were not incorporated.**
**I do not consent to TXT2019-00254. City Code applies force o**

City Code limits residential buildings thereby people's lives too. You treat and write about person's diversity and differences saying "What makes us different makes us great. We respect all these differences..." Likewise as you amend accessory building city code, exercise an abundance of equity, fairness, and respect differences among buildings. These buildings merely are a reflection and extension of people. Strive for latitude for variation, within a broad equitable system.

**2. Cumulative accessory building footprint limits should be removed from TXT2019-00254 under 25.09.03.a.2.(b).** Cumulative limits are already elsewhere in Code 25.10.05.a Table of Development Standards (Packet page 149), which are reasonable and unchanged.

**UNFAIR AND INEQUITABLE with lot coverage for Landowner B as HALF of Landowner A.**

Comparison of Landowners A and B for a R-60 lot of 9,000 square feet shows TXT2019-00254 is a process administered INequitably*

| | Lot Coverage | Square feet | % | Height (feet) |
|---|---|---|---|---|
| Landowner A | 9000 lot area X 0.35 max coverage = | 3150 | 35 | 35 |
| Landowner B | 1000 main building + 600 accessory building = | 1600 | 18 | 20 and 12 |
| **"Penalty"** | 3150-1600=1550. Equivalent to 1550/3150= **49%** ***"Penalty" is HALF of a lot's buildable area, for the accessory building.*** | | | 35-12= **23** **"Penalty"** |

Excessive. Inequitable*. Discriminatory against persons who start small and persons who want a smaller main building in order to have a moderate accessory building. Contradicts Rockville's Critical Success Factors*, Diversity in housing**.

3. Please reflect on attached Rockville's Critical Success Factors excerpts: Processes that are administered equitably*... Diverse neighborhoods... Diversity in housing**... Housing opportunities for diverse populations. And Diversity, Inclusion and Engagement: Our city includes people of all races, ancestries, languages, gender identities, sexual orientation, ages, abilities and education and income levels. What makes us different makes us great. We respect all these differences and believe they make our city stronger. Rockville celebrates and supports all the people who live here through community support and quality services.

| Public Testimony, Packet Page 113 | |
|---|---|
| Quote | My Adjustments (~~deletions~~, additions) and *Responses (in Italics)* |
| 1. Allow for accessory buildings to have a minimum height of 15 feet and a maximum height of 20 feet with a setback of 3 feet from the property line. | ~~1. Allow for accessory buildings to have a minimum height of 15 feet and a maximum height of 20 feet with a setback of 3 feet from the property line.~~ *While this latitude would be nice, my comments are on packet page 147. Shorter accessory buildings should be allowed (not disallowed).* |
| 2. Allow for a height waiver with no findings, or a maximum height limit set if approved by the Board of Appeals. | 2. Allow for a height waiver ~~with no findings, or a maximum height limit set~~ if ~~approved~~ granted by the Board of Appeals. |
| 3. Eliminate the "cumulative" accessory buildings requirement and reinstate the "singular" accessory building requirement. | **3. Eliminate the "cumulative" accessory buildings footprint requirement. ~~and r~~Reinstate the pre 2009 ordinance 29-09 "singular" accessory building footprint requirement under 25.09.03.a.2.(b). Retain 25.10.05.a. Table of Development Standards.** |

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| | |
|---|---|
| 4. Allow the lot coverage for the main dwelling plus all accessory buildings to equal the total lot coverage allowed on the lot, with no limit on the size of the accessory building lot coverage. | 4. Allow the lot coverage for the main dwelling plus all accessory buildings to equal the total lot coverage ~~allowed on the lot, with no limit on the size of the accessory building lot coverage.~~ Retain 25.10.05.a. Table of Development Standards. |
| 5. Allow for accessory buildings to be equal to or greater in height and/or floor area than the main building for owners who desire the accessory building to be larger than the main dwelling. | *This point is exaggerated. Where this really applies is in rare cases where main building is shorter or smaller footprint than in 25.09.03 accessory building limits.* |
| 6. Allow for the connection of the main dwelling and accessory buildings to continue without limitation, because this is not out of character for Rockville neighborhoods. | 6. Allow for the connection of the main dwelling and accessory buildings to continue ~~without limitation,~~ because this is not out of character for Rockville neighborhoods. |
| The testimony, in summary, could make accessory buildings equal to or larger than the main dwelling, which is not consistent with the intent of the Zoning Ordinance to define accessory buildings as subordinate to the main dwelling. | *This point is exaggerated. An accessory building equal to or larger than the main dwelling would be a rare occurrence for a case where main building is shorter or smaller footprint than in 25.09.03 accessory building limits. I strive to lessen, not eliminate, accessory building footprint limitations under 25.09.03.a.2.(b)., while retaining 25.10.05.a. Table of Development Standards. Greater latitude in proportioning between main and accessory buildings is needed.* |
| Staff met with Mr. Roberson to discuss his concerns.<br>SEE PKT. P.147 | *I appreciate the 26 July 2019 meeting attended by Ms. Nicole Walters, Deane Mellander, and Jim Wasilak who had to step away for another duty. Respectfully, "discuss" is exaggerated. I received some general understanding, and thank you. I did not receive specific responses with associated basis.*<br><br>*I struggle to pull out Rockville's response and associated basis, to my comments.*<br><br>*Paraphrasing Ms. Nicole Walters, from 26 July 2019 meeting: We are not prepared to respond to you today, and our response will be the staff report provided on 12 or 13 Sept.*<br><br>*Ms. Walters mailed it to me on 12 Sept. Thank you. I received it on 13 Sept.*<br><br>*I am happy to meet with Mayor, Councilmembers, Nicole Walters, Deane Mellander, and Jim Wasilak, as applicable to achieve a fair and equitable TXT2019-00254.* |

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**4. I formally request a formal Mayor and Council vote upon the question: is TXT2019-00254 treating Landowner B fairly in comparison with Landowner A?**

**5. Solution: Modify TXT2019-00254 per packet pages 147-148.**

**6. See the papers I handed you and packet pages 147-148. Considering your vote, what is your response to me?**

My markup of packet page 113 is attached. Friday 13 Sep 2019 was my first reading of the report. Indicators of excessive accessory building limitations: public feedback, Board of Appeals approved variances, and breezeways were constructed because Rockville accessory building code is excessive. Breezeways and accessory buildings are not out of character for Rockville neighborhoods. Numerous breezeways are in Rockville. The 2009 Ordinance 29-09 changed from "accessory building" singular to "accessory buildings" plural thereby limiting the sum of all accessory building areas to the small percentages listed, via adding a single letter. Before 29-09, the limit applied to accessory buildings individually, not to the sum for all accessory buildings.

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9 of this Chapter.

b. New accessory buildings in the MXT Zone constructed after [date of adoption] and located within a historic district are subject to the provisions of:
   1. Section 25.09.03.a.2(a); and
   2. Section 25.090.3.02(b), with the applicable cumulative building footprint being based on the zone with the largest minimum lot area that does not exceed the existing lot area of the property where the accessory building is located.

c. Accessory buildings and structures that were constructed in conformance with the standards in effect at the time they were erected are considered conforming and may be modified, repaired or replaced so long as they conform to the standards under which they were built, except they must maintain a minimum setback of three (3) feet from any property line.

THERE ARE MISUNDERSTANDING AND MISINTERPRETATIONS BELOW. SEE MY MARKUPS ON PACKET PP. 147-148. SEE UNCHANGING TABLE AT PACKET P. 149 FOR CONTEXT.

**Public Testimony (See Attachment C)**

The written and oral testimony submitted by Mr. Scott Roberson at the public hearing requests a number of changes be made to the proposed text amendment:

WHILE THIS WOULD BE NICE, MY PRIMARY COMMENT IS ON PACKET PAGE 147. SHORTER ACCESSORY BUILDINGS ARE ALLOWED.

1. ~~Allow for accessory buildings to have a minimum height of 15 feet and a maximum height of 20 feet with a setback of 3 feet from the property line.~~
2. Allow for a height ~~waiver with no findings, or a maximum height limit set~~ if approved by the Board of Appeals. GRANTED
3. Eliminate the "cumulative" accessory building FOOTPRINT requirement ~~and~~ UNDER 25.09.03.a.2.(b). reinstate R PRE 2009 ORDINANCE 29-09 the "singular" accessory building FOOTPRINT requirement, UNDER 25.09.03.a.2.(b). RETAIN 25.10.05.a. TABLE.
4. Allow the lot coverage for the main dwelling plus all accessory buildings to equal the total lot coverage ~~allowed on the lot, with no limit on the size of the accessory building lot coverage.~~ RETAIN 25.10.05.a. TABLE OF DEVELOPMENT STANDARDS.
5. Allow for accessory buildings to be equal to or greater in height and/or floor area than the main building for owners who desire the accessory building to be larger than the main dwelling. THIS POINT IS EXAGGERATED. RARELY IS A MAIN BUILDING SHORTER OR SMALLER FOOTPRINT THAN 25.09.03 ACCESSORY BUILDING LIMITS.
6. Allow for the connection of the main dwelling and accessory buildings to continue ~~without limitation,~~ because this is not out of character for Rockville neighborhoods.

EXAGGERATION. LARGELY I SEEK TO REVERT TO PRE-2009 ORDINANCE 29-09 LIMITS.

The testimony, in summary, could make accessory buildings equal to or larger than the main dwelling, which is not consistent with the intent of the Zoning Ordinance to define accessory buildings as subordinate to the main dwelling.

"DISCUSS" IS EXAGGERATED. I STRUGGLE TO PULL OUT ROCKVILLE'S RESPONCE AND ASSOCIATED BASIS. PARAPHRASING MS. NICOLE WALTERS: WE ARE NOT PREPARED TO RESPOND TO YOU TODAY... OUR RESPONCE WILL BE PROVIDED VIA REPORT ON 12 OR 13 SEPT.

Staff met with Mr. Roberson to discuss his concerns. While staff does not support most of the recommendations provided, staff finds that the Mayor and Council may want to consider the recommendation for additional height of accessory buildings. The current staff text amendment



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# 'Critical Success Factors' to Achieving Mayor and Council Vision

In early 2016, the Mayor and Council set their vision and goals for the term that ends in November 2019. Mayor Bridget Donnell Newton and Councilmembers Beryl L. Feinberg, Virginia D. Onley, Julie Palakovich Carr and Mark Pierzchala reaffirmed, with some revisions, eight "critical success factors," which were first identified in January 2014, representing what the City will look like when the Mayor and Council achieve their shared vision.

## EFFICIENT AND EFFECTIVE CITY SERVICE DELIVERY

Rockville is known for exceptional, personalized service delivery to residents and businesses, characterized by efficient, well documented processes that are administered equitably by a committed workforce of employees with a "can-do" attitude. The Mayor and Council, together with Senior Management, work well together as they govern the community. The City has talented leadership that ensures the City government is moving in the right direction.

## GOOD GOVERNANCE

The Rockville Mayor and Council work well together to make decisions for the betterment of the City, and the City enjoys excellent relationships with Montgomery County, Montgomery College, Montgomery County Public Schools, the State of Maryland and other governmental entities. Rockville residents are engaged with the community, actively volunteer for boards and commissions and turn out the vote in City elections.

## SAFE AND LIVABLE NEIGHBORHOODS

Rockville is a community of safe, diverse neighborhoods with well-kept homes and vital neighborhood centers. This is accomplished by the City's commitment to public and pedestrian safety, diversity in housing, support for high quality education and well-maintained infrastructure and by providing City services that address the needs of all constituencies.

## FISCAL RESPONSIBLE

The City of Rockville has a track record of fiscal stability evidenced by exemplary bond ratings, appropriate reserve planning, and well thought out and researched capital and operating plans.

## PLANNING AND PRESERVATION

Honoring its history, the City strives to protect the integrity of each neighborhood and ensure the quality of life for its residents. Rockville is the epitome of well-planned communities that has constantly reinvented itself and handled increasing density and growth associated with being part of a major metropolitan area. Rockville is known for quality transit-oriented development. The City's illustrious "Rockville Pike" is noted as a best practice application of multi-modal transportation planning and includes retail and housing opportunities for diverse populations.

## INFORMED AND ENGAGED RESIDENTS

Rockville residents are involved with their community and take an active interest in City government by participating in City activities, serving on Boards and Commissions, voting in municipal elections, and engaging in City governance. The City ensures residents have access to information about City services and current issues, and reaches out to all populations through the innovative use of all media.

## ECONOMIC DEVELOPMENT

Rockville has an enviable business climate built on the success of its multi-phased Town Center, Rockville Pike, and Neighborhood Commercial Centers. The community enjoys a balance of commercial and residential development, small and large businesses and is characterized by mixed use development. New investment is encouraged by the City's innovative business incubators and the development community is supported by an efficient development process that balances and respects private and community interests in the process.

## STEWARDSHIP OF INFRASTRUCTURE

Rockville maintains and enhances existing City infrastructure (i.e. roads, bridges, water and sewer systems, buildings, fleet, amenities, etc.), and while planning for future needs, makes fiscally sound decisions for the long term health of the City. The City strives to be an environmentally sustainable community that preserves its green spaces and continually reevaluates ways to reduce its environmental footprint.



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CLYDE DOUGLASS



nments for Rockville City Council Presentation Lg Print

C DOUG 045@GMAIL.

Mr. Chairman and Honorable Members of the Committee/Council, I have a couple of general comments and then a number of specific deficiencies and errors I wish to bring to your attention.

In my many years of experience, this is the least complete agenda item I have ever seen being presented to a Board. In my opinion the staff member or members who put this together erred on two fronts. He or she left this document incomplete and failed to do adequate research to include, much less answer, a number of important concerns regarding this very technical subject. Secondly, it appears to this reader that for the most part, staff has simply plagiarized portions of a similar proposal document from another jurisdiction, but even so, he or she has left out necessary and crucial components for a complete understanding of his/her proposition. I consider this a travesty.

Thirdly, Will you, Mr. Chairman, please make available on your website the original zoning ordinance that is proposed to be modified, which is dated December 15, 2008, so that all reviewers may compare the documents?

In the published 17 page document, I will highlight some of the discrepancies and errors:

a) Have staff list all "public structures" referenced on page 1
b) On page 2, reference is made to a new section for Wireless Communication Facility, small; this paper is incomplete, inconsistent, and in fact, missing.
c) Also on page 2, Staff attempts to coerce competitor compliance by mandating the physical size of an antenna, limiting it to 3 cubic feet; I and others contend that this size likely only works for one of the 5 major competitive companies who can bid this type of work, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

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d) Just is in item c above, Staff attempts to coerce competitor compliance by mandating the physical size of the associated antenna equipment, limiting that to 28 cubic feet; I and others contend that this size likely only works for one of the 5 major competitive companies who can bid this type of work, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as completely ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

e) The requirement to assure that the radiation from such equipment be safe for nearby humans and animals should be required documentation from each of bidding companies before the Council entertains even partial approval of this document.

f) On page 3, Who specifically is going to "manage" the development of the entire infrastructure in Rockville? Are you planning to establish a sub-committee to process the many potential questions which will arise?

g) The first of many references to "stealth" technology appears on page 3. Let me be the first to warn you to avoid such problematic, hazardous, and unsafe technology in your city. Please delete/expunge all such references from the document. To achieve an acceptable appearance or ambiance, alternate language and procedures will be most adequate.

h) Your repeated efforts to encourage "colocation" of equipment are admirable but will never work in my opinion due to a plethora of objections to be raised by the competitors.

As I have limited time, I will quit with that item of my list, and point out to you that I still have approximately forty more important comments and concerns. Do you think that there may have been any conspiracy and malfeasance in preparing this document for the Council? With regard to this, Mr. Chairman, will you please schedule a workshop prior to your next meeting, wherein we may all hear from more concerned citizens as well as hearing my remaining comments.

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i) The standards on page 4 say that one of the high preference locations for antennas should be flush-mounted on the wall of an existing structure such as the outside wall of one's apartment, perhaps the bedroom wall, which would likely be close enough to inflict radiation damage to the occupants and any sensitive devices such as medical equipment.

j) Further, many residents have one or more of a variety of medical devices or equipment in their apartments, all of which can malfunction when in such a strong electromagnetic radiation field; this can lead to equipment disruption, upset, trouble, failure or worse, leaving the patient untreated or non-responsive, and possibly leading to their demise. In these cases the installer must, at the very least, provide "directional" antennas oriented away from the residents.

k) The second of many references to "stealth" technology appears on page 4. Let me again warn you to avoid such problematic, hazardous, and unsafe technology in your city. Please delete/expunge all such references from the document. To achieve an acceptable appearance or ambiance, alternate language and procedures will be most adequate.

l) On page 5, Staff attempts to coerce competitor compliance by mandating the physical height of an antenna, limiting it to 19 feet above a building; I and others contend that this height limit likely only works for one of the 5 major competitive companies who can bid this type of work, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

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m) On page 5, Staff attempts to coerce competitor compliance by mandating the physical diameter limits of a whip antenna, limiting it to 7 inches; I and others contend that this size likely only works for one of the 5 major competitive companies who can bid this type of work, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

n) Also on page 5, Staff attempts to coerce competitor compliance by mandating the physical size of panel antennas, limiting a panel to 2 feet wide by 8 feet long; please note that this is change from the present length of 6 feet; I and others contend that this size likely favors only one of the 5 major competitive companies who can bid this type of work, perhaps giving them unfair advantage over the competitors, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

o) Also on page 5, Staff attempts to coerce competitor compliance by mandating the physical height of an antenna being mounted on a lighting pole, limiting it to 125% of the lighting system height; I and others contend that this size likely only works for one of the 5 major competitive companies who can bid this type of work, and moreover, the underlying premise is unethical, unreasonable, clearly violates the current "Restraint of Trade" laws, and is likely illegal for several other reasons such as ignoring the requirements of the Americans with Disabilities Act (ADA) in this misdirected effort to impose potentially impossible requirements on the other competitors.

p) Also on page 5, Staff has confused the language of ownership by calling out a "facility owner" which in the context could be easily construed to mean the owner of the building on which the antenna and other equipment are mounted. The appropriate language for the owner of this antenna equipment should remain as "wireless communication company".

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q) Also on page 5, Staff has confused the contract language further by referring to all the company construction sites in the document using the undefined term "the site". There are at least two types of sites that need clarity and should be called (1) "any temporary or permanent electro-magnetic transmission or receiving site" and (2) "any associated equipment site".

r) Now, moving on to page 6, Staff attempts to coerce competitor compliance by mandating the maximum physical height of a new antenna including support structure plus attachments to be 199 feet; we presume that you and the committee are well aware that you will have quite a number of these 200 foot towering eyesores in your city.

s) The third of many references to "stealth" technology appears on page 6. Let me again warn you to avoid such problematic, hazardous, and unsafe technology in your city. Please delete/expunge all such references from the document. To achieve an acceptable appearance or ambiance, alternate language and procedures will be most adequate.

t) On the same page, Staff blindly states that the competitors should locate their equipment on City-owned property. It is doubtful that there are an adequate number of city-owned buildings that are dispersed in the appropriate configuration to support the needs of these competitors for satisfactory signal strength. In other words, I don't believe it will work.

u) Still on page 6, Staff only halfway completes their description of sites by naming only one partially – specifically only ones with antenna support structures. Harking back to our earlier comments on this subject, besides (1) "any temporary or permanent electro-magnetic transmission or receiving site" there is also (2) "any associated equipment site". I believe the intent here is to prohibit visible outdoor storage at all sites, not just one.

v) Although admirable to suggest colocation of equipment at antenna sites under 150 feet as well as those exceeding 150 feet, it will never work in my opinion.

w) In residential areas having only single dwelling units, these wireless communication facilities must be at least 25 feet from the main dwelling, so you will likely see these large boxes and antennas in someone's front yard and the antennas must be at least 15 feet in height.

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x) You earned my gratitude and respect for prohibiting any of this type of equipment to be located in a historic district or on any historic or landmark structure.

y) On page 9, Staff has again confused the language of ownership by calling out the term "facility owner" which in the context could be easily construed to mean the owner of the building on which the antenna and other equipment are mounted. The appropriate language for the "owner" of this antenna equipment should remain as "wireless communication company".

z) Also on page 9, Staff has once again confused the contract language as in an earlier location by referring to all the company construction sites in the document using the undefined term "the site". There are at least two types of sites that need clarity and should be called (1) "any temporary or permanent electro-magnetic transmission or receiving site" and (2) "any associated equipment site".

aa) Staff has arbitrarily decided that the associated equipment enclosures must be smaller than 560 sq ft and be 12 feet high except if two or more competitors are going to share the enclosure, and then the size can expand to 1500 sq ft and still maintain 12 ft in height. As you may realize, that is the size of a typical ranch style home. You will likely see more than one of these large "enclosures" or "houses" throughout your city, as each competitor may require similar space to house their proprietary equipment.

bb) These houses are required to be fenced or walled or landscaped to suitably hide the enclosure from the street or adjacent properties. I suggest that You, the committee, may want to insert wording that you get the right to determine the type of materials ultimately used to camouflage, mask, or cloak these enclosures.

cc) Also there is something else that might escape your attention. The proposal calls for the installation of one or more of these giant satellite earth station dishes or (sometimes called) waveguides at the headquarters of each of the competitor companies; and these will be visible in your city, because the document does not require these immense dishes to be fenced or walled or landscaped like the houses we discussed a few moments ago.

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dd) Staff has introduced a new group which, we citizens hope would report to you, but it is left unsaid. In fact, Staff decided to call this new group by a new name; actually they gave this new group two new names, and at the end of the day, you will have to decide which one to call it. They used the terms BOARD OF APPEALS and later BOARD OF APPROVAL. Going forward, someone will need to decide the name.

ee) Not leaving well enough alone, Staff decided to rename a commonly known body we usually call Amateur Radio Operators. It is currently being referred to as Amateur Service Communications, which I consider most confusing. Furthermore, it is likely that at least one or more Amateur Radio Stations will need to be constructed in your city.

ff) Staff introduces the concept of "WAIVERS" which this new BOARD OF APPEALS will presumably Approve or Deny. For most requests for a full waiver or a partial waiver of any of the provisions in this proposal, although this reader wonders if certain global decisions more properly should come before this Committee.

gg) There are other current laws which require that the proffered wireless communication facility be available to everyone, even in underserved areas such as farms and other rural types of businesses or dwellings, however, this requirement is not found in this document in its present configuration.

hh) Staff has included several zoning tables on pages 13-16, but they are incomplete. For instance, to understand the tables one needs to have access to the KEY used for their abbreviations. The KEY is missing.

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

Exhibit No. 11
TXT2019-0051
Small Cell Antennas
Public Hearing September 16, 2



# Is 5G technology the new fracking?

By HEATHER R. MIZEUR BALTIMORE SUN
MAR 04, 2019 | 11:35 AM

We have grown accustomed to trusting the telecommunications industry to advance technology to meet the consumer demand for higher speeds and more innovation without asking any questions about the risks. However, the fifth generation of advancement demands our attention and our concern.

Fracking gave us flammable tap water, miniature earthquakes and livestock kills as a warning sign to reconsider its consequences. Will 5G wireless technologies burn our skin? Decimate important insect populations? Disrupt sleep patterns? Cause severe headaches or even brain cancers? Our 7-year journey in Maryland to ban fracking started with a Baltimore Sun op-ed I wrote in December 2010 calling for a moratorium on drilling permits until we had an opportunity to study whether it would have a negative impact on our health, environment and local economy. Now is the time to sound a similar alarm about efforts to roll out fifth-generation wireless technology across our state.

5G wireless technology is not only hailed for its ability to transfer higher volumes of data more rapidly between our cell phones, tablets, televisions and computers, but it also promises a future of connecting nearly every electronic device and sensor imaginable while giving us the capability of monitoring and controlling them remotely. Whether it is kitchen appliances or home medical equipment, energy systems or vehicles, the future promises to weave everything from an individual's heart monitor to a family pet's biochip into an interconnected web of communication and networking via the internet. Industry jargon calls it the Internet of Things (IoT).

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MIAMI

Super-fast 5G is still miles away from South Florida

FEB 22, 2019 | 4:00 PM

We do not know much about the consumer health and environmental impacts of an IoT world. This 5G wireless broadband technology uses a different type of shorter (millimeter) wavelength known as radio-frequency microwave radiation (RF/MR), and we are woefully uninformed to understand its impacts on humans, insects, animals and the overall environment of our communities where the proliferation of these small cells will be deployed. We have grown accustomed to silently sitting back and trusting the telecommunications industry to advance technology to meet the consumer demand for higher speeds and more innovation without asking any questions about the risks. However, this generation of advancement demands our attention and our concern.

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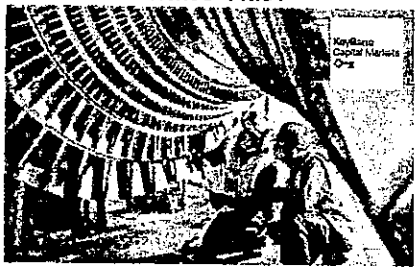
What's This?



What's the Future of Industrial Technology?

A message from KeyBanc Capital Markets

Learn how companies are using advancements in industrial technology to achieve actionable business outcomes. KeyBanc Capital Markets talked to experts at the 2019 Emerging Technology Summit.

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If we think of the data that gets transmitted wirelessly as tiny energetic bullets that pulse through the microwaves that carry the information, we are currently being hit with 700 million to 2.1 billion microwaves per second for our cell

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phones and 2.4 billion to 5.8 billion microwaves for tablets and laptops under 2G, 3G and 4G systems that are operating today. This number is estimated to explode to 24 billion to 90 billion microwaves per second under 5G technology.

- SPRINT CORPORATION

Sprint says it'll bring 5G service to Chicago by May

FEB 25, 2019 | 12:00 PM

The race is on across the country to pass state-based streamlining legislation to allow wireless providers unfettered access to existing electrical lines and other public rights of way at hospitals, schools, fire stations and neighborhood locations to build cell antennas needed to connect these short waves.
Maryland is currently considering such laws. Counties and municipalities are opposed to the legislation because it would usurp local zoning control.
However, the more important questions that need to be raised are about the health and environmental affects of the technology itself.
Maryland should be the first state to institute a moratorium on implementation of 5G technologies until we know more about its risks.
This much we do know: Millimeter wave frequency technology has been weaponized by the military. This level of frequency, used in 5G applications, is currently being advanced by the Department of Defense in their crowd-control guns. It causes severe burning because this wave frequency is able to bypass the skin and absorb into the sweat glands. Are we truly confident we know enough about this new technology to unleash it throughout our communities?

- QUALCOMM INC.

Qualcomm spotlights its big bet on 5G at Mobile World Congress

FEB 25, 2019 | 7:55 PM

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We must especially be concerned about the unknown impacts of around-the-clock pulsations of millimeter wave frequency on vulnerable populations like children, the elderly, pregnant women, people with disabilities and those who are immune-compromised.

Telecommunications companies will say that these small cell antennas are completely safe and fall within federal guidelines overseen by the Federal Communications Commission. The catch? Those guidelines were written in 1996 and have not since been updated to keep pace with the changes in technologies, rendering the FCC compliance meaningless.

[Most read] Beached whale in Ocean City has died, National Aquarium says »

Ultimately, the threat might be worth the risk when weighed against the consumer and economic benefits. However, we do not know that yet because the proper studies have not been done. Just as we did not presume that fracking would ultimately be banned when we began asking the tough questions, we do not know what the final outcome of any 5G inquiry will be. Questions should be asked and answered before we rush to open a box that could cause unintended biological and environmental consequences for humans, animals and plants alike. We need to take the time to make sure we get this one right the first time.

*Heather R. Mizeur (heather@heathermizeur.com) is a former member of the Maryland General Assembly.*

- Heather R. Mizeur

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# Radiation concerns halt Brussels 5G development, for now

Monday, 01 April 2019

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**Plans for a pilot project to provide high-speed 5G wireless internet in Brussels have been halted due to fears for the health of citizens, according to reports. In July, the government concluded an agreement with three telecom operators to relax the strict radiation standards in Brussels. But according to the Region, it is now impossible to estimate the radiation from the antennas required for the service.**

"I cannot welcome such technology if the radiation standards, which must protect the citizen, are not respected, 5G or not," Environment minister Céline Fremault (CDH) told Bruzz. "The people of Brussels are not guinea pigs whose health I can sell at a profit. We cannot leave anything to doubt," she added.

A pilot project is not feasible with the current radiation standards, and Fremault told Bruzz that she does not intend to make an exception.

The Brussels region has particularly strict radiation standards for telecom applications. The standard of 6 volts per metre has already led to problems in the past with providing fast mobile internet via 4G in the capital.

Last week, the various governments in Belgium once again failed to reach agreement on the auctioning of the 5G licences. The file remains stuck on the distribution of the proceeds. It will be up to the next government to handle the proposal, said Telecom Minister Philippe De Backer (Open VLD) last week.

*The Brussels Times*

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# CONCERNS RE: 5G ROLL OUT IN ROCKVILLE

(1.) There are potentially very serious health risks with 5G which are not being addressed in the rush to rollout 5G. I am asking elected officials to use great caution concerning all implementation of the 5G network/technology in Rockville pending much more definitive health risk studies. I am asking that small cell poles be kept as far away from residents as possible. You are recommending 25 ' from single family dwelling, while the Montgomery County Coalition for the Control of Cell Towers informed me that Montgomery County set the limit at 60'. Your 5' tall limit will block sight lines and mar vistas.

(2.) "We have grown accustomed to silently sitting back and trusting the telecommunications industry to advance technology to meet consumer demand for higher speeds and more innovation without asking any questions about the risks."[1]

(3.) The FCC's guidelines according to the EPA, FDA, NIOSH and the U.S. Department of Interior are *flawed* and *inadequate*. They have not been updated since the 1996 and the FCC's guidelines are based on science from the 1980's and the 1990's. The U.S. Department of the Interior stated that the FCC's guidelines "continued to be based on thermal heating, a criterion nearly thirty years out of date" and the EPA concurred in 2002 stating that the FCC guidelines do NOT apply to "**chronic, non-thermal** exposure situations ... or "**long term, non-thermal exposures.**" ( See attachment "A")
The FCC order has not been tested in court and is currently being litigated by 40 jurisdictions.

(4.) Telecommunication technology such as cell phones, smart meters and cell phone towers used during and prior to 2012 were found to do biological harm. Numerous medical doctors, PhD.'s and scientists from around the world in **1800+ peer reviewed independent studies** concluded in the *BIOINITIATIVE 2012* report, "bioeffects are clearly established to occur with very low exposure levels (non-thermal levels) to electromagnetic fields and radiofrequency radiation exposures. "[2] (See also Attachment "B")
There are thousands of additional independent peer reviewed studies documenting that wireless radiation harms humans including an extensive document put out by the NAVAL MEDICAL RESEARCH INSTITUTE.[3]

(5.) Some of that harm includes: "neurotoxicity,...immune system imbalances... carcinogenicity,... genotoxicity and single and double strand DNA damage... loss of DNA repair capacity in human stem cells...effects on offspring behavior... and serious impacts on sperm morphology and function... Essential body processes can eventually be disabled by incessant external stress (from system-wide electrophysiological interference) and lead to pervasive impairment of metabolic and reproductive functions."[4]

(6.) 5G Roll Out plans will not eliminate current technology but will be in addition to, thereby creating another far more powerful and dangerous invisible blanket of electro magnetic and radio frequency radiation. (see [5])

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(17.) On a personal note, I have 2 friends who are already extremely sensitive to the presence of microwave frequencies. One had to abandon her house until a newly installed smart meter was removed. They are the canaries in the coal mine, and we should take heed.

## ENDNOTES


1. Heather R. Mizeur; Is 5G technology the new fracking?; THE BALTIMORE SUN; https://www.baltimoresun.com/news/opinion/oped/bs-ed-op-5g-moratorium-20190304-story.html; March 4, 2019.

2. BioInitiative Report 2012; A Rationale for Biologically-based Exposure Standards for Low-Intensity Electromagnetic Radiation; https://bioinitiative.org/conclusions/

3. NAVAL MEDICAL RESEARCH INSTITUTE; https://www.wirelesseducationaction.org/wp-content/uploads/2018/09/History-US-military-Navy-1971-stdy-2000-studies-Microwave-bioeffects-copy.pdf

4. Ibid.; BioInitiative Report 2012

5. Jeremy Naydler, Ph.D.; 5G: The Big Picture; https://takebackyourpower.net/5g-the-big-picture/

6 Ibid.

7 Ibid.; Is 5G technology the new fracking; March 4, 2019

8. US Senator Blumenthal Raises Concerns on 5G Wireless Technology Health Risks at Senate Hearing; https://www.youtube.com/watch?v=ekNC0J3xx1w

9. "Trials of War Criminals before the Nuremberg Military Tribunals under Control Council Law

No. 10", Vol. 2, pp. 181-182. Washington, D.C.: U.S. Government Printing Office, 1949.] Nuremberg.PDF;

10. Ibid; paragraph 1

11. 5G APPEAL; https://www.jrseco.com/european-union-5g-appeal-scientists-warn-of-potential-serious-health-effects-of-5g/; p. 2

12. https://www.worldhealth.net/news/brussels-first-major-city-halt-5g-due-health-effects/; Apr 05, 2019, 7 p.m.

13. Ty Bollinger; Cities Push Back as FCC Expedites Dangerous 5G Networks; https://thetruthaboutcancer.com/fcc-5g/; March 15, 2019

14. DANVILLE vs. VERIZON 3/5/2019 HIGHLIGHTS; https://www.youtube.com/watch?time_continue=152&v=4VgRLPOcMtA

15. POWER SHIFT IN CALI: California Supreme Court Affirms Local Authority on 5G, 'small cell' and utility infrastructure; https://takebackyourpower.net/california-supreme-court-affirms-local-authority-on-small-cell-sites/; April 4, 2019.

16. Sacha Stone; 5G APOCALYPSE EXTINCTION EVENT; https://www.youtube.com/watch?v=UdsIY5ixxyw


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Exhibit No. 12
TXT2019-0051
Small Cell Antennas
Public Hearing September 16, 201

5G Testimony from Sandra Crowe, MA, PCC

882 New Mark Esplanade Rockville, 20850

Mayor and City Council-

Let me start with gratitude to all of you not only for this hearing, but for all that you do to offer your time and service to this community. Rockville is a great place to live and you help to make it so.

Today, I would like to make the argument first that we should not be allowing 5 G into our community at this point. There are no studies about the health hazards and without them it is too soon to know whether we are in fact being guinea pigs for a technology that has not been vetted. We do however have data from 3 and 4G. In one study done by Dr. Devra Lee Davis, three bee hives were monitored. One hive was exposed to 3G, one to 4G and one had no exposure. The hives exposed to 3 and 4G both lost their ability to make honey, reproduce and to be viable. The one without cell exposure thrived.

The millimeter waves weaken cell membranes not only in bees but in us as well so that toxins can enter us more easily. Evidence of this is that docs often use millimeter radiation to enhance the uptake of chemotherapy. Good when you need it for medicinal purposes, not for when you don't.

Dr. Martin Pall, a scientist in the arena of environmental impact cites at least areas of concern for 5 G:

1-Fires. Turpines in plants are flammable and when 5G activates turpines this not not only makes them more flammable, but spreads the response in other plants. With little to no wind, it increases fire risk.

2-Early onset dementia/alzheimers. Some epiloloigcal studies indicate this. Beta Protein Amyloid increases and thus dementia risks do as well. Two studies with rats support this.

3- Autism/ADHD and all of the neurodegenerative diseases are affected by the excessive intracellular calcium which happens as a result of RFR.

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4- Privacy. Companies and gov. agencies will be able to see everything about you from what websites you look at to when you jaywalked, what you buy, what you say and to whom. It will be big brother in a way even Orwell could not have imagined when he wrote 1984 in 1949.

For conclusive proof that Radio Frequency Radiation from 3,4, and possibly 5 is dangerous, the World Health Organization classified 3G as a 2B carcinogen in 2011 and 4 as a class 2B in 2019. The website www.bioiniative.org supports all the data in their 2019 report. Another group with data that outlines some of the first effects from 5G is Physicians for Safe Technology www.mdsafetech.org that are outlining effects from Switzerland that are arising as they begin to implement 5G in 102 locations. These effects include loud ringing in the ears, intense headaches, earaches, insomnia, chest pains, and fatigue.

We don't know how to measure 5G yet. It hasn't existed so we don't know its' ultimate effects. The thing we do know is that the best defense against millimeter radiation is distance. The more distance between us and cell tower or 5G installation the better. Does anyone here want to live next to a cell tower? To address your question of where to install, I can tell you where I am requesting that you not install is where I live at New Mark Esplanade. We have a beautiful, serene little oasis within Rockville and I would ask that we keep it that way. Please do not put any in or near New Mark or certainly next to my address at 882 New Mark Esplande. I WOULD welcome putting fiber networks or cables anywhere in Rockville so we don't have to be part of an experiment where we don't know all the variables(and would pay more taxes to do so). Other communities such as Mill Valley in CA are saying no to 5G and doing this. Senator James Gaughran (5th district of New York) has requested the FCC study the health effects of 4 and 5G before implementing it in his community (www.ehtrust.org). Let us do the same! Let us ask the FCC to study this before we install anything. Let us be a forerunner for protecting our community from any known or unknown ramifications from 5G. Your job is to represent us and our best interest you have an obligation to protect us to the best of your knowledge. You now have that knowledge.

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# ZTA 19-07

# 5G Cell Towers: Unneeded and Unwanted

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December 8th, 2019

Electronic copy of this paper:
tinyurl.com/rational JAN 9

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

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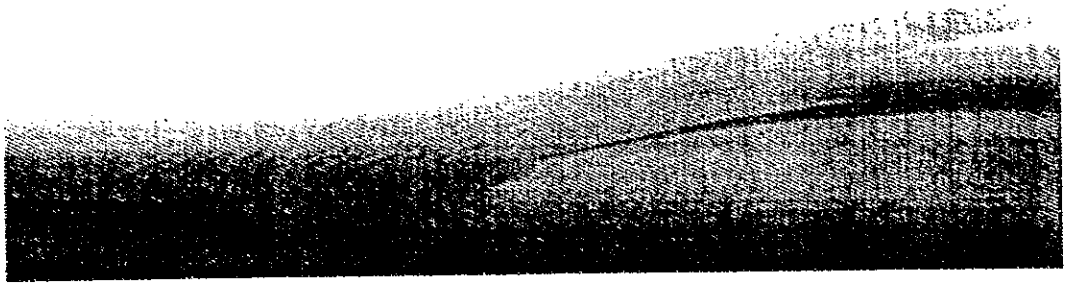

## Overview

There is no longer a need for cell towers in the residential right-of-way. In a CNBC interview, Lowell McAdam former Chairman and former CEO of Verizon said 5G cellular towers could be 2,000 feet from a home. This distance allows cell tower placement in less obtrusive locations than people's front yards.

We need to figure out how to maintain citizen's property values so the current tax rates will generate sufficient County real estate revenue. Even with the cell tower companies paying 10 percent of revenue for cell towers in the utility right-of-way, my back of the envelop calculations shows the county losing somewhere between a half a million dollars to one and a half million in revenue per year on the installation of 61 DAS towers.

The cell towers proposed by several cell tower companies are obsolete. Zoning proposals need to be adjusted to the new reality that 5G cell towers can be 2,000 feet from our homes. Don't allow obsolete cell towers to be placed in residential neighborhood right-of-ways.

This paper is written from the perspective of a Westleigh resident in North Potomac, Montgomery County of Maryland.

## Promises

Who promised me that all my utilities would be underground? Isn't it the council through zoning?

How is the county council living up to their commitment? What's so hard to understand? The proposed cell towers in the right-of-way do not meet aesthetic values in communities with all underground utilities. End of story.

Real estate agents calculate that buyers like myself paid a premium for a neighborhood with all underground utilities. I do not mind. I do not mind paying for clear vistas. I do not mind paying extra for the Internet if I continue to have all underground utilities. I do not want my investment to be devalued which will be much more costly to me than paying a few extra dollars for the Internet.



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## 4th Circuit -- Allows jurisdictions to forbid cell towers in right-of-way

Sheldon L. Pine's City of Gaithersburg presentations

This is my transcript of Sheldon L. Pine's testimony on March 4th, 2019 to the City of Gaithersburg. In summary, he states that the United States Court of Appeals for the Fourth Circuit, Maryland's court, allows jurisdictions to reject cell towers in the utility right-of-way as long as cell towers are allowed in other places.

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



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zoning. It's a quintessential power of local government as the Supreme Court said the power to zone and control land use is undoubtedly broad and it's proper exercise and this is an essential aspect of achieving a satisfactory quality of life in both urban and rural communities. That's a famous zoning case called Mount Schad.

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

https://www.youtube.com/watch?v=xCulOxxwirM&t=27m34s

Here is a copy of written testimony as Sheldon mentioned in his talk.



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

[redacted] **Gaithersburg, MD 20878**
[redacted]
[redacted]

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

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

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

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

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



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

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

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

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

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

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

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

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

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



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

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

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

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

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



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

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

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

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

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

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



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

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

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

Cingular Wireless, 674 F. 3d at 275.

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

**Respectfully submitted,**

**Sheldon L. Pine**



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## A big Change – 5G Antenna Signals Reach 2,000 feet or more

There is no longer a technological need for towers near homes in a residential community.

### 1) Verizon finds Samsung 5G antennas send signals over 2,000 feet

Take the word of Lowell McAdam prior Chairman of Verizon and prior CEO who says the towers can be 2,000 feet from homes. He made this statement in an interview with CNBC's David Faber in May of 2018 after Verizon tested 5G for a year. This is plenty of distance to site the towers in non-intrusive locations.

[5:29] Faber: Can you get through trees? Get through leaves? Can you actually get somewhere where you don't need cell sites every[where]; 25 feet from my house?



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McAdam: Those are what I call the myths of millimeter waves. No one thought that was good. ... [Skipped to 5:53]

When we went out in these eleven [5G test] markets, we tested well over an year, so we could we could see every part of foliage and every storm that went through. We now busted the myth that it [5G frequencies] had to be line of sight. It does not. We busted the myth that foliage would stop it that was in the days that a pine needle would shut it down that does not. And 200 feet from the home? **We are now designing the network for 2,000 feet from transmitter to receiver.**

https://www.youtube.com/watch?v=lYAufhIgkpI#t=5m29s



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Youtube author "What Is5G" shows Jason L's, Verizon Field Engineer, demonstration. Taken May/June 2018.

It's [Verizon 5G] really high frequency so everybody thinks it doesn't go very far, but it's a really big pipe, so that's what allows you to gain the super fast speed. We are here on top of this parking garage. We are 3000 feet away from our radio node. The cool thing about this is that we did not move the radio node. It's pointing down to serve the customers in that area. But here even three thousand feet away we're still getting gig [1gig] speeds.

So, we've driven about a 1/3-mile [1,760 feet] away from the radio node. It's located over there behind the trees. We're still getting very good speeds [800 megabits in back of SUV with hatch open] even though we have foliage in between.

https://www.youtube.com/watch?v=FwAsr1pC13Q&feature=youtu.be&t=0m34s

## 2) FCC plans to fee up mid range bands for 5G with longer range

Using mid range bands the antennas will not need to be in people's front yards.

*"Mid-band:* Mid-band spectrum has become a target for 5G buildout given its balanced coverage and capacity characteristics. With our work on the 2.5 GHz, 3.5 GHz, and 3.7-4.2 GHz bands, we could make up to 844 megahertz available for 5G deployments."

https://www.fcc.gov/5G



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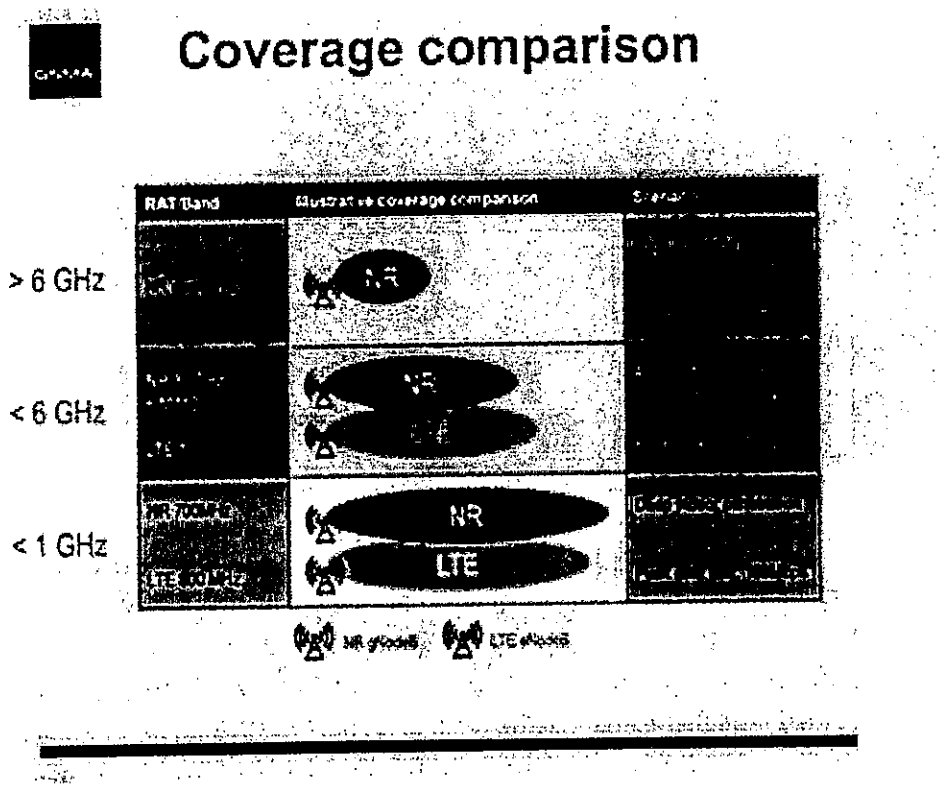


https://www.digitaltrends.com/mobile/what-is-5g/

Notice the red 5G has comparable coverage to LTE at the mid and low range bands. This means for the most part cell tower companies can place low and mid range one the same polls as the current LTE poles.

Conclusion:

The LEAST INTRUSIVE MEANS to close a significant Gap in Coverage is for Wireless companies to place the antennas on existing poles on arterial roads.



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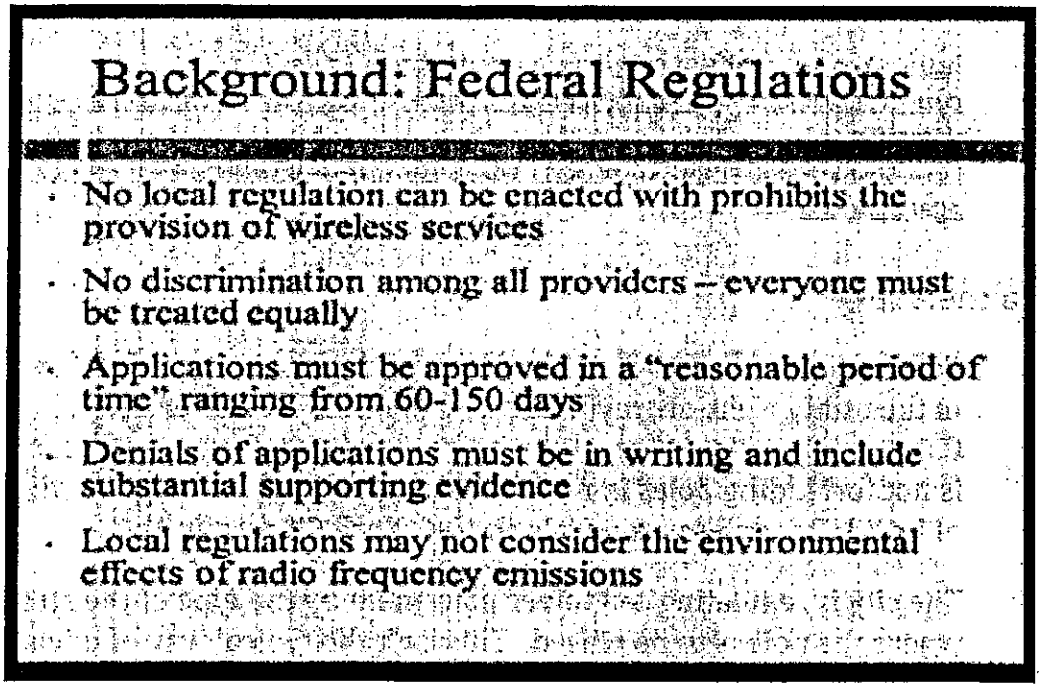
## Ad rem FCC Rules




This slide was shown at the Gaithersburg city council meeting.

https://www.youtube.com/watch?v=ic2KLPMcJRw&t=101m13s

## All for Curtailed or Banned Cell Towers

City of Gaithersburg has banned cell towers in the utility right-of-way in residential neighborhoods with underground utilities. Ocean City was able to reach an agreement with Crown Castle not to put cell towers in residential neighborhoods with beach views. New York City hasn't allowed poles in Manhattan for the last hundred years. Rancho Palos Verdes, California has gotten Crown Castle to move towers and rejected towers on a case-by-case base in residential neighborhoods. San Francisco has regulations about cell towers in utility right-of-way.

### Encinitas, California

> Amendments the council unanimously agreed to Wednesday include barring 5G antennas from being installed in residential zones, park



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lands and "very high" fire hazard areas. They also cannot be installed within 500 feet of a day care center, a school or a residence that is not in a residential zone.

https://www.sandiegouniontribune.com/communities/north-county/story/2019-10-31/encinitas-to-ban-5g-wireless-antennas-near-schools-daycares-residences?fbclid=IwAR135VUcv_liwDNnotKU3N4FQPGIFNS1aMP0xKeL23tAh8SgaIgUBF-PGA0

## Gaithersburg

Follow City of Gaithersburg lead in rejecting the siting of cell towers in the utility right-of-way in areas with underground utilities. Gaithersburg allows "stealth" towers on homes. Thus, Gaithersburg is not forbidding poles in residential areas. Gaithersburg based some of its 2017 wireless proposals on New York City's statutes.

The city is regulating cell tower placement by the type of the street where the pole is to be placed. This isn't the typical way of devising zoning rules. Cell towers are allowed on arterial roads but not residential streets.

Aaron Rosenzweig <aaron a t chatnbike.com> explains Gaithersburg zoning.

I would not say that Gaithersburg is planning to "ban" cell towers because that is currently illegal. They are attempting to be creative to make it difficult to place them in residential areas. Here are the ideas Gaithersburg are trying:

a) Major vs Minor arteries - like the human heart there are major and minor roads. Roads that connect communities are generally larger so the city is calling them "major" arteries. The draft legislation makes the wireless industry justify why a cell tower must be put on a minor road when a major road is possible. The idea is to green light the big roads and make it hard to put it on small roads. In this way, we are not "banning" a 5G rollout.

b) Roof antennas - the city is explicitly allowing the wireless industry to approach individual homeowners and put an antenna on their roof. Again, the idea is not "ban" anything anywhere but putting the



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onus on the wireless industry to convince individual citizens. I have asked the council to add additional protections making it possible to break out of a lease at any time and have the tower removed from your roof when you want to sell your home. If they are going to make a law to allow roof towers they need to protect citizens from predatory practices. Many people will also be upset if their next-door neighbors build an antenna, as the pole will still be close to their own home.

c) No towers in the right-of-way where utilities are underground. In communities that have no overhead wires, they want to preserve that clean feel. The city says they'll make it illegal to put towers on the streets here but there still is the possibility of roof mounted towers.

## New York, New York

New York City hasn't allowed poles or towers in Manhattan for the last hundred years. [ Page 7 ] New York City "supports the comments filed by the NLC and its statements that Commission attempts to regulate right-of-way management and zoning matters is both unnecessary and violative of the Telecommunications Act of 1996." [ Page 8 ] [ FYI: this is old. 2011 ]

https://www1.nyc.gov/assets/doitt/downloads/pdf/nyc_reply_comments_acceleration_broadband.pdf

Crown Castle lawyer at City of Gaithersburg hearing, indicates that they do not agree with NYC regulations, but lawyer gave no indication that Crown Castle is suing.

https://www.youtube.com/watch?v=ic2KLPMcJRw&t=128m49s

## Ocean City

"Crown Castle has submitted a letter that confirms they will not pursue any installations in R-1 districts or MH districts at this time," in Ocean City, Maryland.



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https://mdcoastdispatch.com/2017/01/12/ocean-city-company-reach-compromise-to-keep-cell-towers-out-of-residential-districts/

Crown Castle promise didn't last too long.

https://mdcoastdispatch.com/2019/02/14/city-council-approves-nine-more-small-cell-towers-in-residential-communities/

## Rancho Palos Verdes, California

Crown Castle has been cooperating with our City (i.e. complying with our municipal aesthetic requirements and moving proposed locations out of neighborhoods and away from homes) ... (in our city at least) they corrected nearly all of the really problematic practices that I had documented. ... ensure these sites were deployed on our terms rather that what was cheap and easy for Crown Castle. We have a pretty good working relationship with them now ...

... note that the reason we were successful is that we have a very strong and detailed ordinance for cell towers in the public right of way. Everything is documented and closely followed so the applicant can't claim we are acting arbitrarily:

Our ordinance has four key components; if these are met the site will almost certainly be approved:

- Minimal antenna size with screening
- All accessory equipment underground (everything except the antenna)
- Combining sites with existing vertical infrastructure (streetlights, traffic signals, etc.)
- Strict location restrictions, no sites on local, residential streets without an exception granted

If they don't comply with these, then the applicant must demonstrate the site is required to fill a significant gap and there is no less intrusive alternative to receive an exception. This is not simply checking a box (i.e. the applicant just claiming these conditions exist) but has to be demonstrated to our planning commission via engineering analysis. Fortunately our PC is quite tech savvy now as



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we have been through about 30 applications. Crown has usually found it's easier to comply than to convince our PC an exemption is required.

Here's a link to our ordinance:

https://library.municode.com/ca/rancho_palos_verdes/codes/code_of_ordinances?nodeId=TIT12STSIPUPL_CH12.18WITEFAPURI-W

As reported by Jeff Calvagna, resident of Palos Vardes, California

## San Francisco, California

'"However, the City [ San Francisco ] needs to regulate placement of such facilities in order to prevent telecommunications providers from installing wireless antennas and associated equipment in the city's public rights-of-way either in manners or in locations that will diminish the city's beauty."

http://www.fiercewireless.com/wireless/tensions-rise-as-officials-struggle-to-address-small-cell-deployment-challenges

## Spokane, Washington

"Spokane's cell tower moratorium ends with stricter rules."

"Councilman Mike Allen, who helped lead negotiations among city staff, telecommunication company representatives and neighborhood advocates, thanked nearly everyone in the council chambers for working toward an agreeable consensus."

http://www.spokesman.com/stories/2015/nov/06/spokanes-cell-tower-moratorium-ends-with-stricter-/

## Westminster, Maryland

The City of Westminster established a public-private partnership to develop a fiber network at 1 Gigabit per second speed! The city owns the fiber while Ting, a private company, manages the network. The



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city declined cell tower companies requests to put up cell towers in the right of way.

http://www.westminstermd.gov/419/Westminster-Fiber-Network

## Zoning by USA cities on controlling "Small" Cell Tower

"From coast to coast local governments are taking action to protect their communities from the unfettered deployment of 4G and 5G "small cell" wireless facilities. Several cities are passing ordinances that strictly limit the buildout."

https://tinyurl.com/y88tytmw

## Archaic Antenna Technology

Antennas and boxes shown in Crown Castle simulations appear to be much bulkier than shown by Verizon videos and on manufactures web sites. The county should require the use of the latest equipment.

1) The City of Gaithersburg cell pole simulation by Crown Castle

The right picture shows a simulation of a proposed cell tower by Crown Castle for placement in Westleigh neighborhood in the City of Gaithersburg. The Westleigh neighborhood is divided between the City of Gaithersburg land and Montgomery County land.



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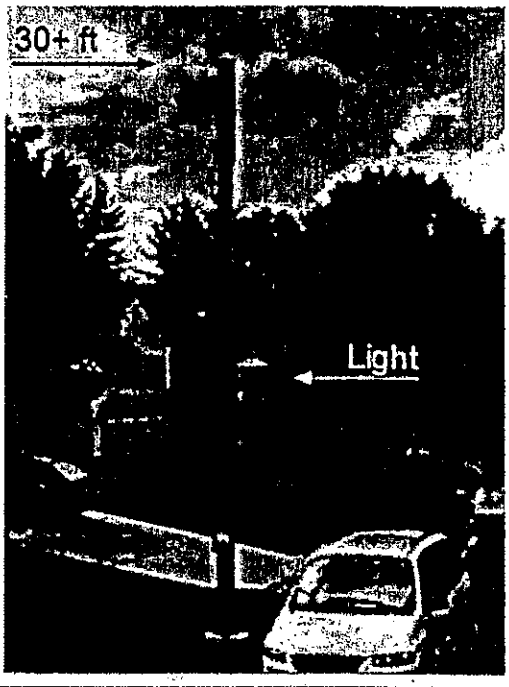
| Before | Crown Castle Simulation |
| --- | --- |
| |   |



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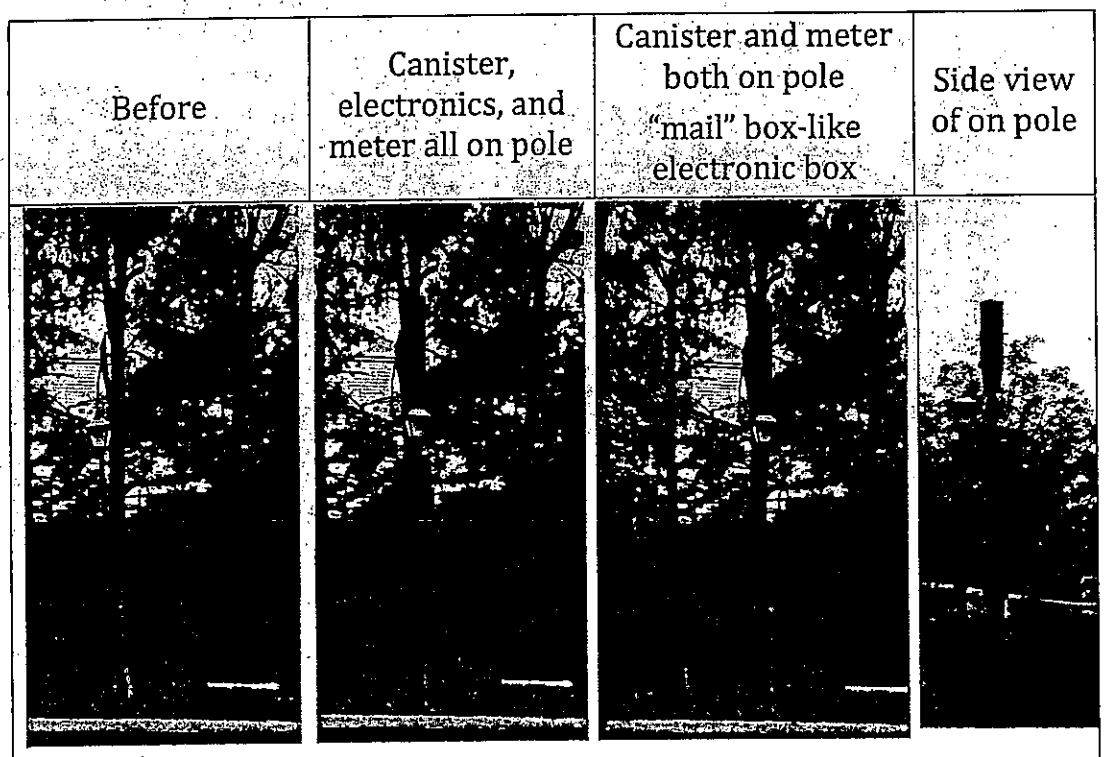
2) Montgomery County cell tower simulation

The following pictures were shown in the "Small Antenna & Microtower ZTA Community Meeting" slides.




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

Page 15 on
http://www.montgomerycountymd.gov/cable/Resources/Files/Towers/documents/ZTA%20Community%20Meeting%20Sept%2019%202017%20v4.pdf

A. Note: Existing poles in Westleigh are about 10 to 12 feet not 14 to 16 feet as stated in the caption.
B. The pictures are deceptive because no house is directly behind the pole and the background of trees with visible tree trunks results in the cell tower pole being lost in the tree trunk clutter.



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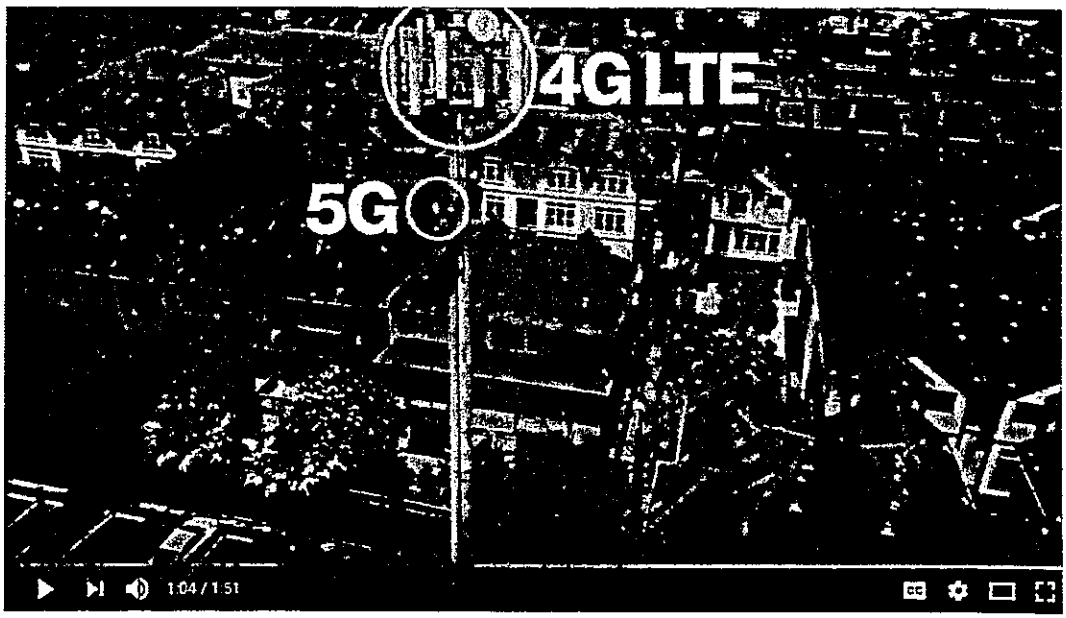
C. I visited many of the proposed cell sites in Dufief, Flints Grove and Westleigh. The poles on the corner lots would be in direct view from the house.
D. There are woods around Dufief, Flints Grove and Westleigh. As suggested by the pictures, place the poles in the woods we have.

## Avant-Garde Antenna Technology

Better antenna technology than envisioned by several cell tower companies is available.

5G antenna shown by Jason L., Verizon Field Engineer




Notice the reduction in size of the circled 5g antenna verses the circled 4g LTE antennas. This isn't the size being shown by the local tower companies, which are considerably larger, then these 4G antennas.

https://www.youtube.com/watch?v=FwAsr1pC13Q&feature=youtu.beom#t=1m4s



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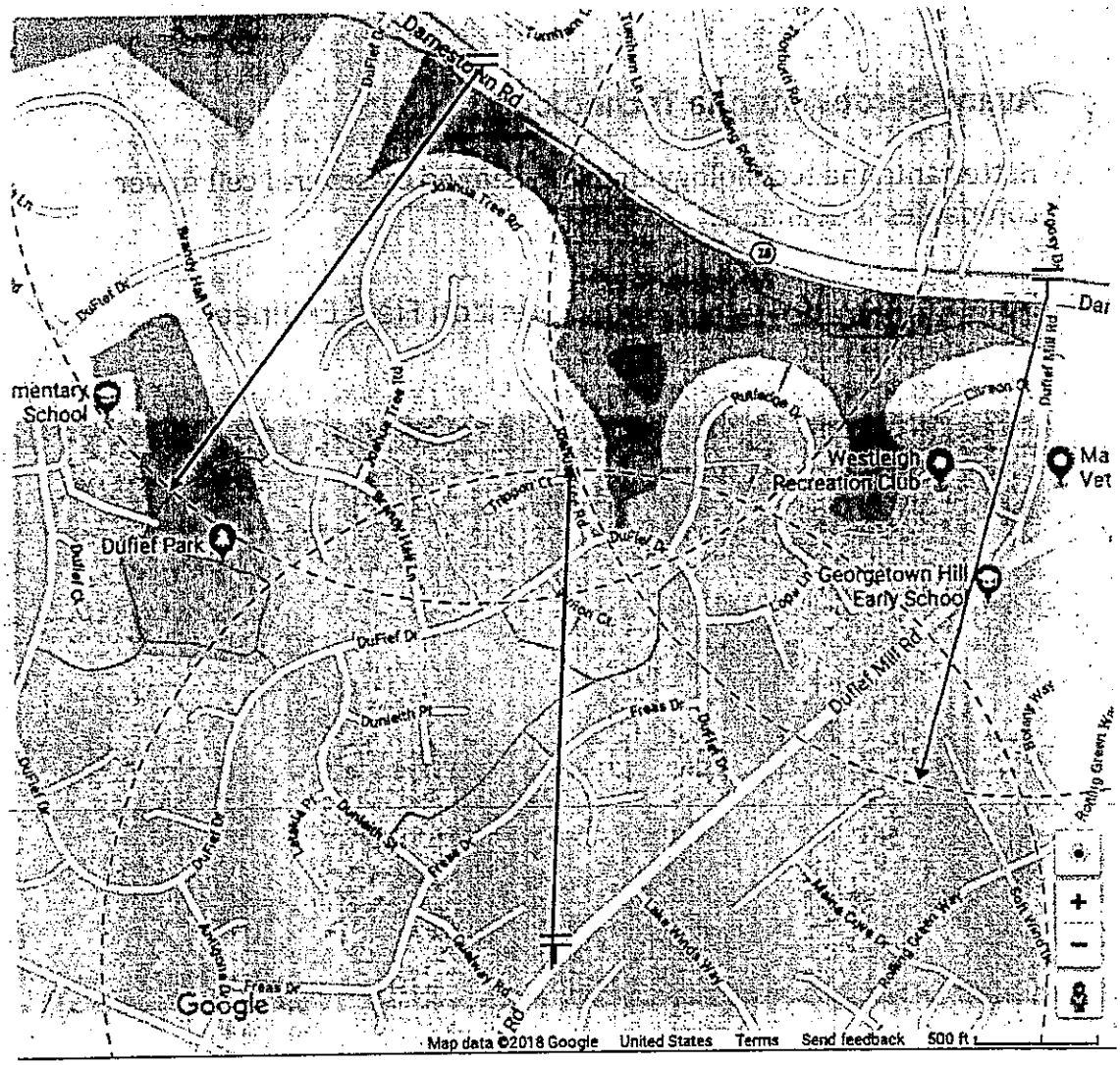
With a Google map, I plotted out 4,000 diameter circles to map out the signals from modern Verizon 5G antennas on utility poles along Darnestown Rd and Dufief Mill Rd. I found all homes in Westleigh are within range of antennas on existing utility poles.



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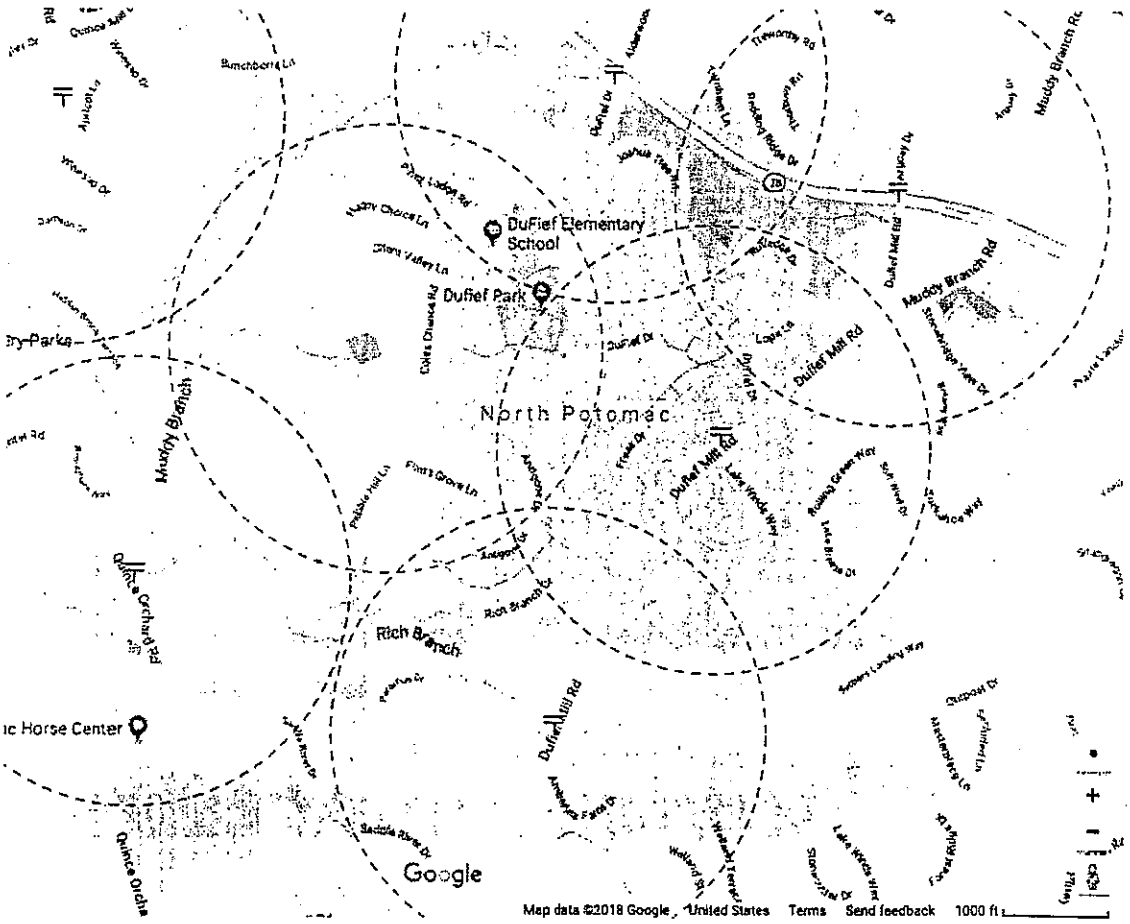
For Dufief, Falls Grove and Westleigh only one modern 5G antenna would be need to be placed on a tower in the woods somewhere. I show this tower's signal range in red. Another option would be to put in more 4G antennas along arterial roads to take up the slack.




## FCC commissioner

I was told that a FCC Commissioner told the Montgomery County delegation to the FCC that 5G technologies would be the size of a pizza box. Governments should take up this offer. 😜

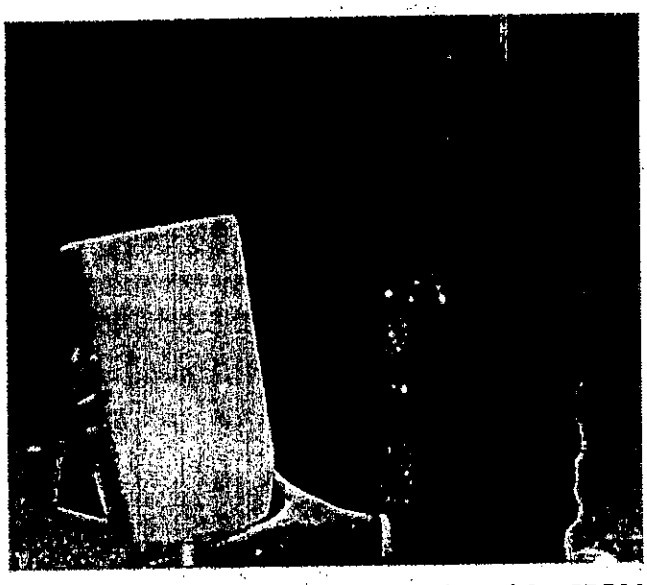


Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## Reasonable sized 5G Antennas

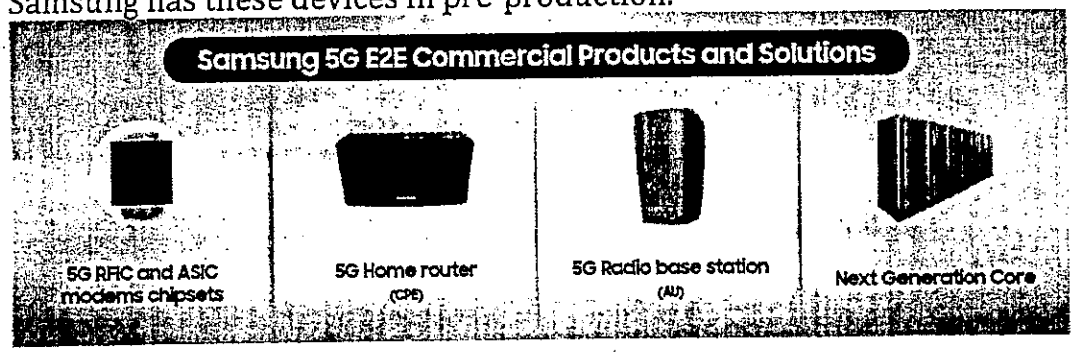
Examples of small size antennas:

A. John Godfrey, Samsung Electronics America Inc, shows the 5G antenna Verizon will be using. The Antenna is the backpack-size white box on the left. All Verizon will have to do is provide a data connection and a power converter.



https://www.youtube.com/watch?v=SDRMsg_r_Ss#t=44m21s

B. Samsung has these devices in pre-production.

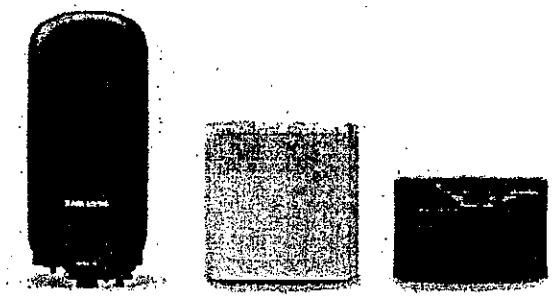



https://news.samsung.com/us/samsung-announces-complete-portfolio-commercial-5g-products-solutions/

C. Micro cell LTE 4g antenna from Samsung.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

| | |
|---|---|
| <br>Outdoor base station |  <br>Outdoor base station on left with two indoor base stations |

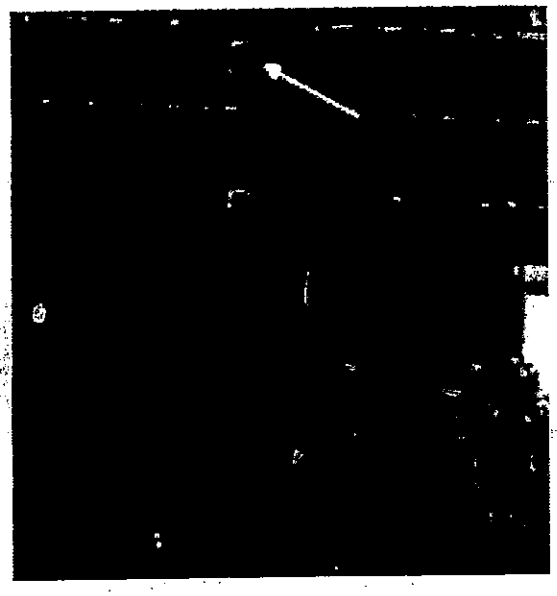
https://www.samsung.com/global/business/networks/small-cells/outdoor-small-cells/

https://www.samsung.com/global/business/networks/small-cells/small-cells-detail/



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

D. Ericsson Outdoor cell antennas



https://preview.tinyurl.com/y739wo57

https://www.ericsson.com/en/networks/cases/5g-live-in-korea



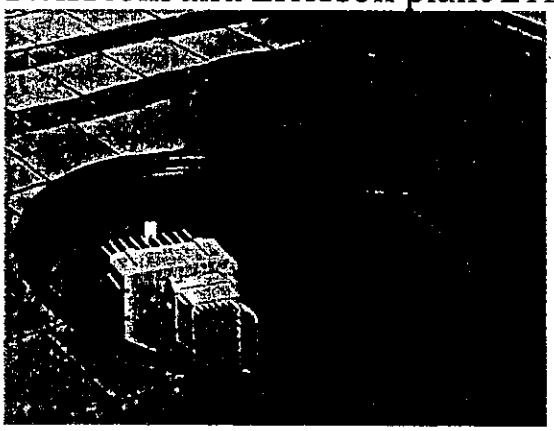
Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

Lightpole Site Slim

https://preview.tinyurl.com/y8mkvy5x

Underground 5G Antennas

1) Swisscom and Ericsson plant LTE small cells underground



Swisscom and Ericsson have proved that city manholes can be used worldwide to improve capacity with small cells – even below street level – using the Ericsson Vault Remote Radio Unit and Kathrein's Street Connect, an in-ground microcell antenna system. The use of existing street manholes where fiber and power already exists lowers total cost of ownership by 50 percent.

https://www.ericsson.com/en/news/2016/3/swisscom-and-ericsson-plant-lte-small-cells-underground



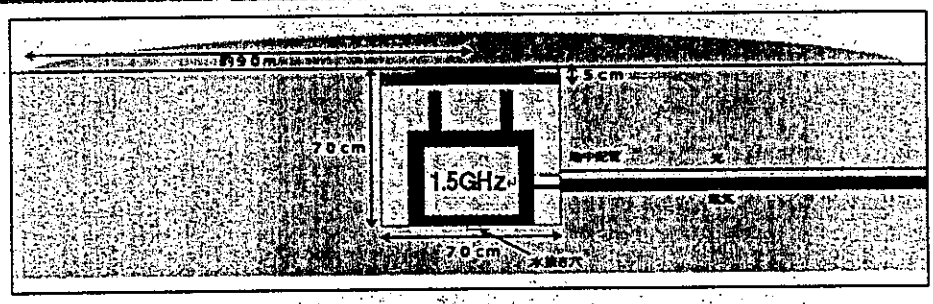
Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

Short video entitled: Invisible sites: Underground vault sites with Swisscom.

https://www.youtube.com/watch?v=X0IttiqQIdk

## 2) NTT DoCoMo

NTT DoCoMo shows "first demonstration of manhole base station in Kyushu" Conducts a "demonstration experiment of manhole type base station (hereinafter, this experiment) for establishing service area began in Nanjo City, Okinawa Prefecture on July 17, 2018 (Tue) in 2018."




https://www.nttdocomo.co.jp/info/notice/kyushu/page/180724_00.html

[ Use Google Chrome to translate from Japanese to English. ]

## Construct a layered zoning system.

Construct multiple legal protections for residential areas with all underground utilities in case of legal loses



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

1) Prohibit cell towers in the right-of-way. Allow stealth towers on residential roofs as the City of Gaithersburg has done.
2) Add 4G or 5G antennas on power and light poles on arterial roads and on commercial buildings.
3) Verified need for each cell tower
4) Better siting of cell towers: backyards, walkways or parks. Certainly, there are better places for the towers than people's front yard.
5) Include a backup set of rules for "small" cell towers in residential neighborhoods such as pole height, pole setback and size of electronics.

## Data Antenna Towers

The tower companies have been evasive when asked about the purpose of the towers, but when looking into the filings for the towers, it is clear they are using 4G technology signal bands. If the tower companies are really putting in 4g with a new name, there is no need for the towers in my neighborhood since 4G signal are capable of reception over longer distances and we should be able to block neighborhood towers.

Why do they need to be so close to homes?

## Data Technology – It's speed not technology

The means of sending and receiving data is irrelevant. All technologies are a data pipe. Data antenna towers in people's front yards are redundant. Technologies are transit. When a newer technology comes along like satellite, technology types and the FCC will abandon their fascination with putting towers in residential neighborhoods.

### 1) Fios

We have Fios. It's fast and reliable. It doesn't disfigure the aesthetics of my neighborhood.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## 2) Satellite

Eleven companies are working on low Earth orbit satellites to provide Internet service. These include Boeing, OneWeb, Samsung and SpaceX. Source P. Cooper's Senate testimony.

https://www.youtube.com/watch?v=irgaSHOuJZU&t=5m05s

OneWeb and SpaceX are designing for 1gig data communications to homes.

"The **OneWeb** satellite constellation—formerly known as WorldVu—is a proposed constellation of approximately 720 satellites expected to provide global Internet broadband service to individual consumers as early as 2019."

https://en.wikipedia.org/wiki/OneWeb_satellite_constellation

**SpaceX** has "Initial plans as of January 2015 are for the constellation to be made up of approximately 4000 cross-linked satellites, more than twice as many operational satellites as are in orbit in January 2015." Ground station will be a pizza size antenna.

https://en.wikipedia.org/wiki/SpaceX_satellite_constellation

## 3) Arterial roads

The cell phone companies could put in more 4G towers and add modern 5G antennas along the arterial roads instead of the invasive DAS towers in residential neighborhoods with underground utilities. This is the City of Gaithersburg plan.

Additional 4G antennas have been put along arterial roads Travilah and Potomac thus sparing all but one resident from cell towers in their front yard.

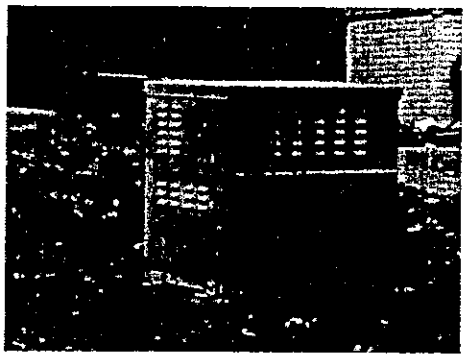
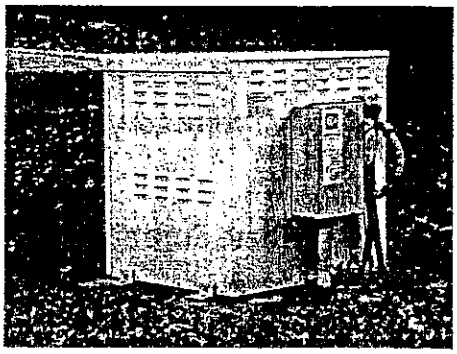
## Eliminate Pepco power meters

Somehow it appears that Comcast gets electrical power to a box of theirs without having a visible power meter. When a power outage occurs, a Comcast employee comes out and attaches a generator to a metal box on



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

Joshua Tree Road. There is a breaker box attached to the cabinet. I conclude the cabinet is using electricity. However, there is no Pepco meter on the cabinet. I assume there is a plan to pay for electricity at some calculated rate. It may be possible for cell tower companies to eliminate the power meter on their equipment.

| Facing street | Facing house |
|---|---|
|  |  |

## Environment -- Legal

### Rye, New York

City of Rye, New York wins two suits by Crown Castle to place cell towers in right-of-way.

- A win in Federal Court

  On Friday December 8, 2017, Federal Judge Briccetti, S.D.N.Y., granted the City [of Rye,NY] motion to dismiss Crown Castle's complaint finding that the City did not violate the Telecommunications Act ("TCA")when it rendered a Positive Declaration under the State Environmental Quality Review Act. According to Mayor Joseph A. Sack, "This Order recognizes the importance of a diligent review process that includes a review of the potential environmental impacts of installation of small cells.The City considered varying points of view and to have Judge Briccetti affirm that we have acted in accordance with federal law is gratifying." Also, Mayor



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Joseph A. Sack ousted the prior mayor over ineffective cell tower resistance.

Crown Castle raised about every complaint they could against the City of Rye. Their lawyer wrote over 200 paragraphs of supposed violations of FCC rules and the law.

To win this law suit, City of Rye employed outside counsel Joseph Van Eaton of Best, Best & Krieger who is also the City of Gaithersburg outside counsel for cell towers. Thinking for the future, it would be advantageous for MC to switch to Joseph as their outside counsel.

More info:

https://www.ryeny.gov/Home/ShowDocument?id=9864

- A win in NY State Supreme Court

  "In April 2017, Rye lawmakers voted to deny Crown Castle's application to build and required the company to conduct studies on possible noise, sight and health impacts from the proposed equipment.

  "A second lawsuit filed by wireless provider Crown Castle against Rye City over the company's stalled proposal to place small cell boxes throughout the city was dismissed this week by a State Supreme Court judge this week."

  "The dismissal confirms that Crown Castle has no rights under the Right of Way Use Agreement, thereby leaving Rye free to protect the interests of its residents in accordance with applicable law," said Rye City Mayor Joshua Cohn.

  https://www.lohud.com/story/news/local/westchester/2018/08/23/wireless-company-lawsuit-against-rye-dismissed-again/1072682002/

  A second win by Joseph Van Eaton.

## United Keetoowah Band of Cherokee Indians in Oklahoma v. FCC

Petitioners challenged one of the FCC's orders paring some regulatory requirements for the construction of wireless facilities. The Order exempted most small cell construction from two kinds of previously



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

required review: historic-preservation review under the National Historic Preservation Act (NHPA) and environmental review under the National Environmental Policy Act (NEPA). Furthermore, the Order effectively reduced Tribes' role in reviewing proposed construction of macrocell towers and other wireless facilities that remain subject to cultural and environmental review.

The DC Circuit granted the petitions in part because the Order did not justify the Commission's determination that it was not in the public interest to require review of small cell deployments. In this case, the Commission did not adequately address possible harms of deregulation and benefits of environmental and historic-preservation review pursuant to its public interest authority under 47 U.S.C. 319(d). Therefore, the Order's deregulation of small cells was arbitrary and capricious. The court denied the petitions for review on the remaining claims.
https://law.justia.com/cases/federal/appellate-courts/cadc/18-1129/18-1129-2019-08-09.html

Court Order
https://www.cadc.uscourts.gov/internet/opinions.nsf/4001BED4E8A6A29685258451005085C7/$file/18-1129-1801375.pdf

## Equity and Fairness

The selection of the areas for "small" towers focuses on middle-class areas that can afford generous cell phone service but is unlikely to collect enough money to pay for lawyers to sue.

This is my evidence that the cellular companies didn't put in adequate 4G cell antennas in the Dufief, Flints Grove and Westleigh area, so I suppose there would be a better case for cell towers in people's front yards. See the "Signals" section on page 62 for evidence.

The three maps below use these settings:



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

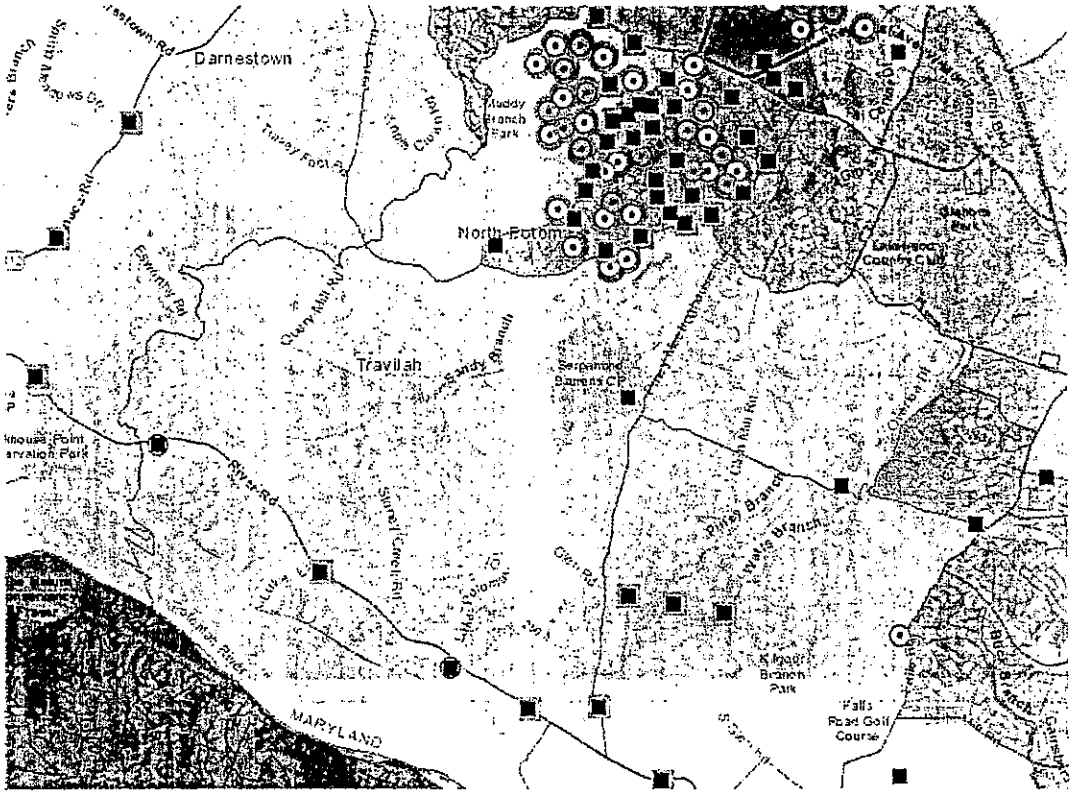
| Selected options | Symbol | Meaning |
|---|---|---|
| Current Facilities | Box | ■ Verizon -- red box<br>□ Crown Castle -- green border around Verizon red box<br>Includes approved, built & tabled towers |
| Proposed Facilities | Circle | ⦿ Verizon -- red circle<br>○ Crown Castle -- green border around red Verizon circle |
| Population Density (tracts 2012) | Shades of pink | Persons Per Sq. Mi. (2012 ACS)<br>64.86 - 2952.11<br>2952.12 - 6325.00<br>6325.01 - 11309.09<br>11309.10 - 18900.00<br>18900.01 - 28742.86 |
| Gaithersburg, Rockville, Takoma. | Shades of brown | FYI: Montgomery County database does not include cell towers in these towns. |

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



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

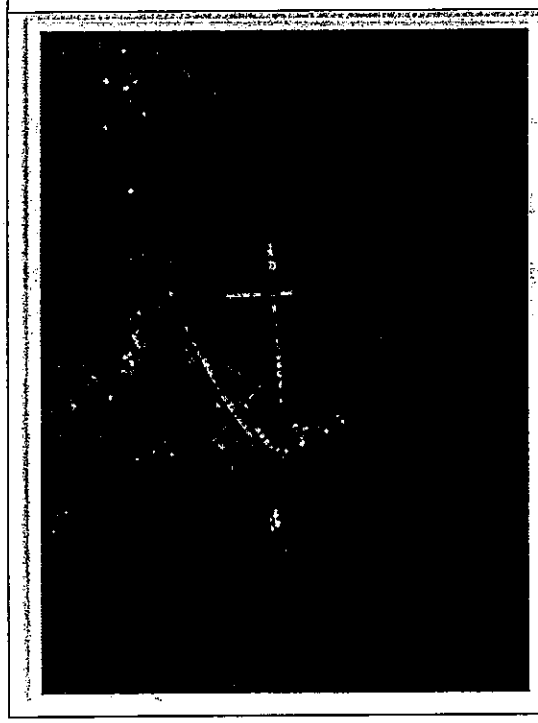
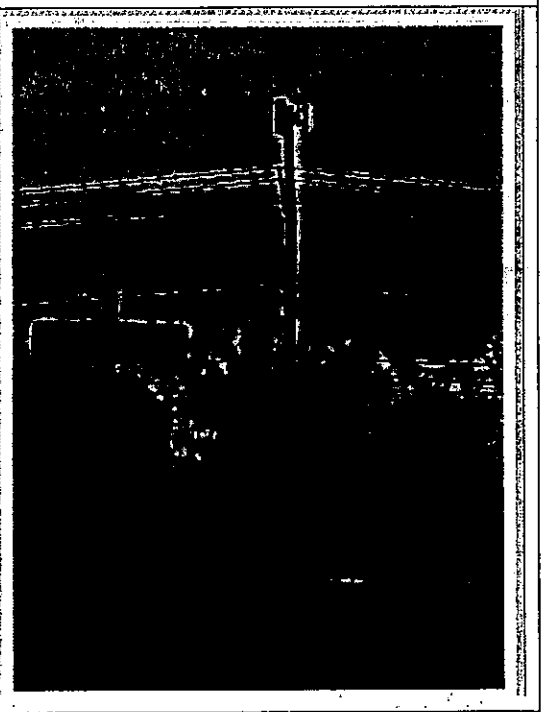
1) Comparison of Travilah and Potomac versus North Potomac. In 2014 Travilah and Potomac received additional cell towers along the arterial roads, Seneca Road and River Road as shown by the red box with a green border. However, two years later cell towers were proposed in North Potomac for placement in people's front yards.






Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

The Crown Castle poles in Travilah use a different style antenna than along Dufief Mill Road.

| 14700 Seneca Road<br>Travilah | 14737 Dufief Mill Road<br>North Potomac |
|---|---|
|  |  |

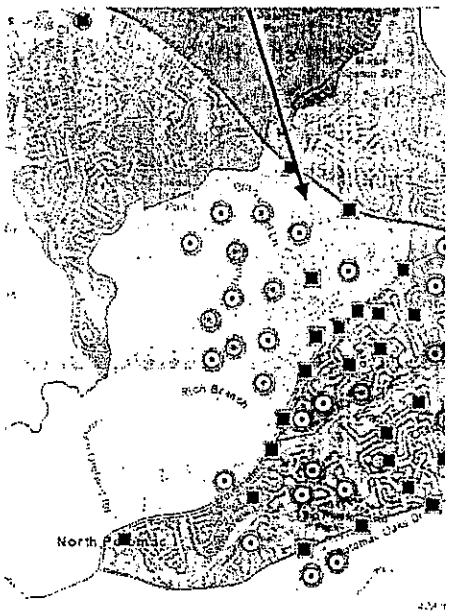
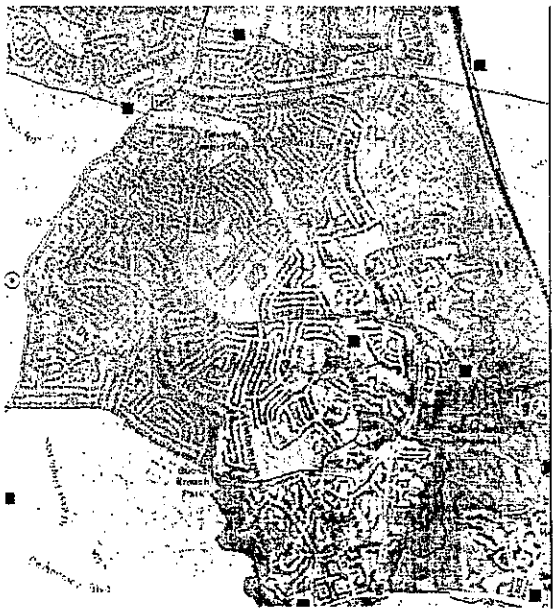


Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

2) Comparing Population density

The location of small cell towers in Dufief, Flints Grove and Westleigh doesn't seem to be based on population density. It's arbitrary. It means we are getting cell towers when areas such as North Bethesda and Potomac are not.

The North Potomac area contains two different population densities. The population density in Dufief, Flints Grove and Westleigh is in light grey/tan, which means it's less dense than in North Bethesda in light pink and parts of Potomac in light pink.

| Dufief, Flints Grove, Stonebridge and Westleigh in North Potomac | North Bethesda and Potomac |
|---|---|
|  |  |

## Health

Any health effects translate directly into decreased real estate value of our homes. I believe the county council is allowed to be concerned about decreased property values under the FCC rules.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## 1) DNA Damage found in NTP Study

"The peer-reviewed scientific study "Evaluation of the genotoxicity of cell phone radiofrequency radiation in male and female rats and mice following subchronic exposure" was published in Environmental and Molecular Mutagenesis by National Toxicology Program (NTP) scientists of the National Institutes of Environmental Health Sciences."

https://ehtrust.org/cell-phone-radiation-is-associated-with-dna-damage-in-peer-reviewed-analysis-of-ntp-study/

Abstract

https://www.ncbi.nlm.nih.gov/pubmed/31633839

## 2) Ramazzini Institute Study

Fiorella Belpoggi Ph.D., Ramazzini Institute

"Our findings of cancerous tumors in rats exposed to environmental levels of RF are consistent with and reinforce the results of the US NTP studies on cell phone radiation, as both reported increases in the same types of tumors of the brain and heart in Sprague-Dawley rats. Together, these studies provide sufficient evidence to call for the International Agency for Research on Cancer (IARC) to re-evaluate and re-classify their conclusions regarding the carcinogenic potential of RFR in humans,"

https://ehtrust.org/worlds-largest-animal-study-on-cell-tower-radiation-confirms-cancer-link/

"I believer irresponsible to implement any new wireless technologies in neighborhoods where people would be continuously exposed before thorough evaluations are made of potential adverse health effects."
Ron Melnick, Ph.D.
https://www.youtube.com/watch?v=N9LLfFxJTVg&t=15m7s

## 3) National Toxicology Program (NTP)

"Scientific panel advises there is evidence for an association between both heart and brain cancers and cell phone radiation in large-scale animal study (Triangle Park, NC)." "Scientists concluded there is "clear evidence" linking cell phone radiation to the development of cancers in rats. The U.S.



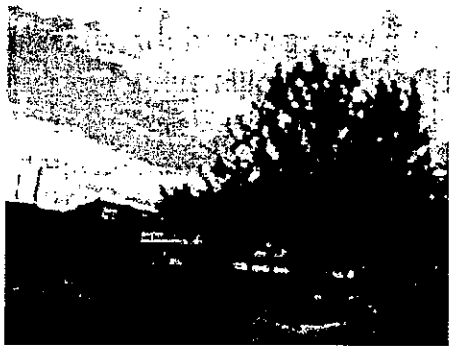
Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

government invited an expert panel to make a majority-rules declaration in response to the $25 million U.S. government National Toxicology Program (NTP) study of cell phone radiation in animals. After a three-day review of the study data, they voted to strengthen the conclusions that cell phone radiation caused health effects in the cell phone radiation exposed rats and mice."

https://ehtrust.org/clear-evidence-of-cancer-concludes-the-expert-panel-to-the-us-national-toxicology-program-on-cell-phone-radiation-study-findings/

## 4) Stunted Trees

Radiofrequency radiation injures trees around mobile phone base stations



Damage only on one side: The tree shows damage only on one side. The damage can be recognized with the naked eye.

Full text report

http://media.withtank.com/cf9ae35027/waldmann-selsam_2016_scitotenv572p554-569_rf_trees.pdf

Summary

http://scientists4wiredtech.com/oakland/radiofrequency-radiation-injures-trees-around-mobile-phone-base-stations/

Since we cannot worry about the growing evidence of a health risk to humans, maybe we can worry about the damage to trees.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

## 5) More Health Studies

This site contains many links to health studies showing the negative effects of cellular signals

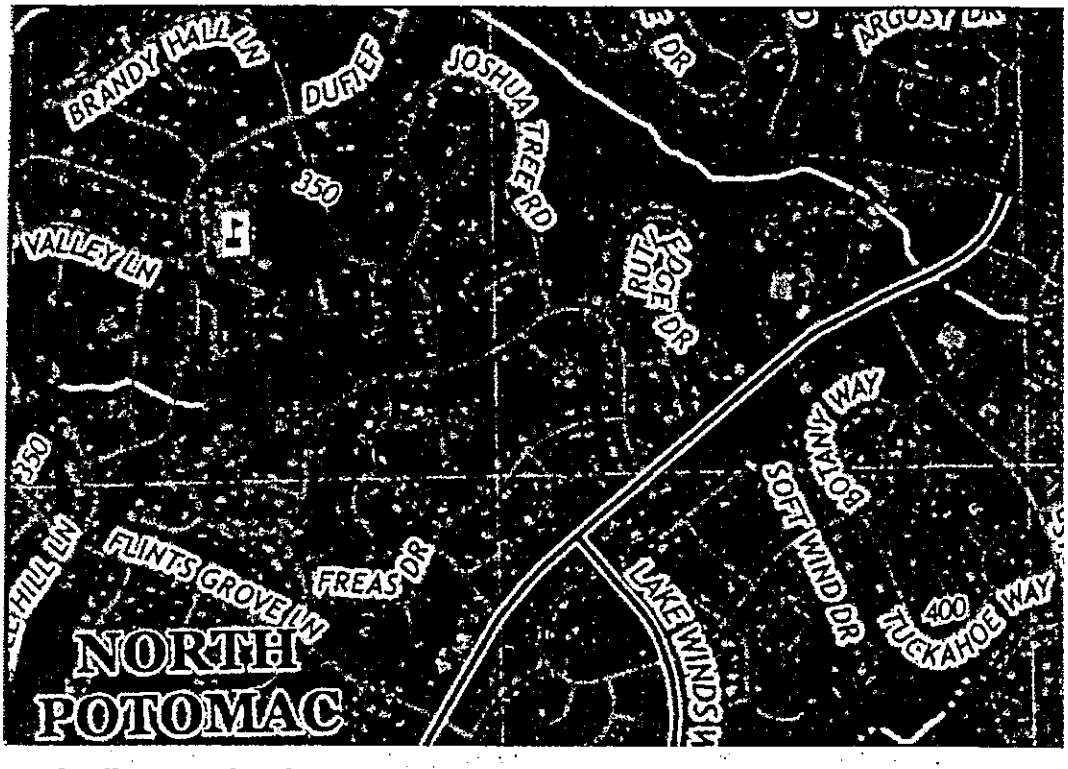
https://www.telecompowergrab.org/science.html

## Land topography and terrain in Westleigh – Do not block cellular signals

The terrain of Dufief, Falls Grove and Westleigh in Montgomery County is on a hillside. Dufief Mill Road is at the top of the hill at 410 feet. The low point is farthest away from Dufief Mill road at 350 feet. This means that antennas on top of the power poles along Dufief Mill Road have an excellent view.

Crown Castle representative at Germantown meeting stated that terrain features blocked signals. However, I didn't find my signals being blocked. I get a constant 3 bars on my iPhone 4, which uses 3g when I visited 15 of 15 the proposed cell tower sites in Dufief, Falls Grove and Westleigh. I got 2 bars at proposed pole site, but 3 bars five fee away. See Signals section below on page 62.

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)




Rockville, Maryland

https://prd-tnm.s3.amazonaws.com/StagedProducts/Maps/USTopo/1/20780/7237124.pdf

## Live poles. No zombies.

a) Require that all pole antennas be activated within 60 days of installation.

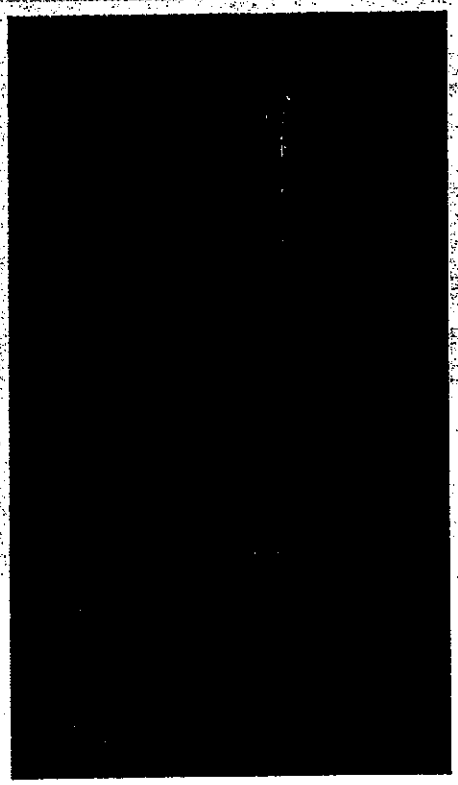
b) Collect a deposit on poles so that the county has money to take down unused poles.

As far as I can tell, these poles have not been activated on Dufief Mill Road. With a Verizon phone, we ran the Android Cell Map app in February, 2018 to observe cell tower locations.

https://sites.google.com/site/montgomeryclearvistas/snooping-apps



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

| 14914-14936 Dufief Mill Road, North Potomac | 14737 Dufief Mill Road, North Potomac |
|---|---|
|  | |

Why are these apparently unused antennas still here after two year?

## Prioritize 911 calls

Give calls to 911 a higher priority than regular calls. This will take action by FCC and cell phone companies.

Cell phone calls are already prioritize. Senior government official have the ability to prioritize their calls.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

https://www.cnet.com/news/why-obamas-cell-phone-calls-will-always-go-through/

Emergency response personal can prioritize their official calls.

https://www.fcc.gov/general/wireless-priority-service-wps

## More Nonsense – Self-Driving Cars

The reason for 5G in a car is so the "driver" can watch TV.

Montgomery County tower committee gave an unsupported justification for 5G, as it would be required for self-driving cars. "The first truly autonomous cars appeared in the 1980s, with Carnegie Mellon University's Navlab and ALV projects funded by the United States' Defense Advanced Research Projects Agency (DARPA) starting in 1984 and Mercedes-Benz and Bundeswehr University Munich's EUREKA Prometheus Project in 1987." https://en.wikipedia.org/wiki/Self-driving_car No 5G was around in the '80s. Google, GM, Ford, Toyota and everyone else have been testing autonomous cars for almost ten years without 5G being on the market.

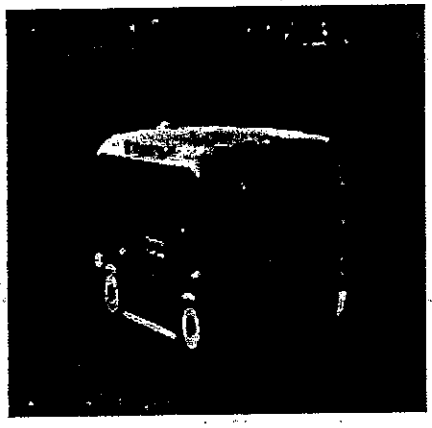
My dentist experienced a five-day power outage as the result of the March 2017 windstorm. The cell tower poles shown in the Montgomery Cell Tower simulation shows power meters. All such 5G towers would be without power. Requiring 5G for autonomous cars would make an area without power a drive-less zone. We will not be covering America's dirt roads with 5G. Cars last longer than any cellular technology has. It's nonsense that autonomous cars will require 5G.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

This urban legend has been mostly generated by the cellular industry as far as I can tell.

## 1) Montgomery County Self-driving shuttle

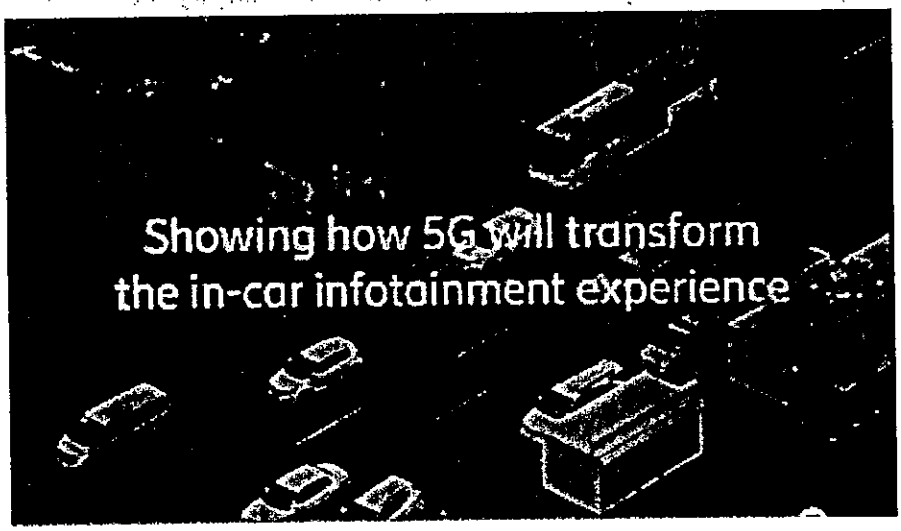


As of November 19, 2019, a self-driving electric shuttle is on the roads of Montgomery County in Clarksburg. "Both Local Motor's Olli [ as shown ] shuttle and Pratt Miller's shuttle are equipped with Robotic Research's [ a Montgomery County company ] AutoDrive™ autonomous driving appliqué and nSight™ data collection and analysis suite."

https://wtop.com/montgomery-county/2019/11/self-driving-shuttle-debuts-in-montgomery-county/

## 2) Ericsson, Intel and Korea Telecom

"In February 2018 Ericsson and Korea Telecom together with Intel conducted a 5G trial connecting a car to a live 5G network." The reason for 5G in a car was stated to be for entertainment purposes.






Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

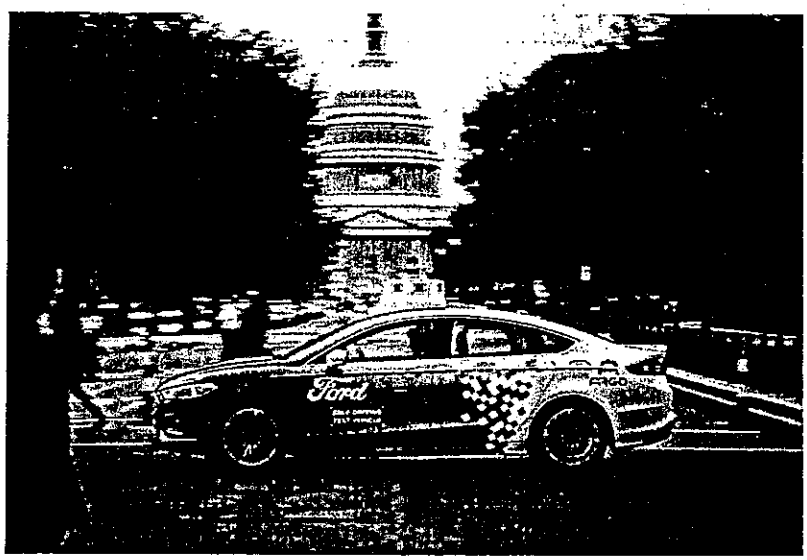
https://www.ericsson.com/en/networks/cases/5g-live-in-korea

## 3) Ford

In early 2019, "Ford will test self-driving cars in Washington, DC, with an emphasis on 'equity'."

https://www.theverge.com/2018/10/22/18008980/ford-self-driving-car-test-washington-dc-av

No 5G is in place in DC.

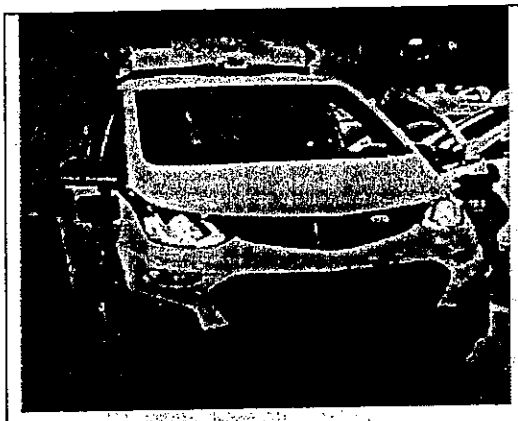
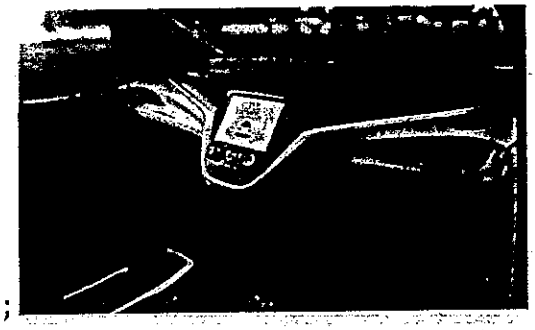





Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

4) GM

In 2019, GM plans of using its own autonomous cars its own taxi fleet.

| | |
|---|---|
|  |  |
| https://media.gm.com/media/us/en/gm/bcportal.html/currentVideoId/5468422845001/currentChannelId/Most Recent.gsaOff.html | https://venturebeat.com/2018/01/12/gm-debuts-fully-autonomous-vehicle-with-no-wheel-or-pedals-as-it-plans-2019-launch/ |

## Property Values

The person concerned about the health effects of cellular radiation will be reluctant to buy a home or refuse to buy a home with cell towers in front of their new home. This will translate into lower home values for the neighborhood.

Is this what the council wants for 61 more houses in Montgomery County? A count of 61 small cell towers is what we got.

1) Appeal Board Lowers Tax Assessment

Property Tax Assessment Appeal Board for Montgomery County reduced property tax in part because of cell tower.



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

STATE OF MARYLAND

PROPERTY TAX ASSESSMENT APPEAL BOARD FOR MONTGOMERY COUNTY

Tel. No. 301-279-8333 51 MONROE PL # 201, Rockville, MD 20850 FAX # 301-279-1910

TO:
[redacted]
SILVER SPRING MD 20903 - 1336

COPY TO:
DEPT OF ASSESSMENT
AND TAXATION
30 W GUDE DR # 400
ROCKVILLE MD 20850

COPY TO:
DEPT OF FINANCE
MONTGOMERY CO GOV
255 Rockville Pike # 1115
ROCKVILLE MD 20850

PTAAB APPEAL Number: [redacted] (Tax Year 2010)
Date of Hearing: [redacted] MARCH 2011
Property ACCOUNT Number: [redacted]
Property under appeal: [redacted]

ORDER Date: [redacted] APRIL 2011

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

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

Adjusted New Market Value
Land:
Improvements:
Total [redacted]

VShyamsundar
Shyamsundar Viswanatha (or 'SAM')
CLERK TO THE BOARD

https://www.scribd.com/document/64222439/Probability-of-neighboring-cell-tower-also-affects-value-negatively

## 2) Studies

Cell Phone Towers Lower Property Values: Documentation And Research on Cellular Base Stations Near Homes

Research indicates that over 90% of homebuyers and renters are less interested in properties near cell towers and would pay less for a property in close vicinity to cellular antennas. Documentation of a price drop up to 20% is found in multiple surveys and published



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articles as listed below. The US Department of Housing and Urban Development (HUD) considers cell towers as 'Hazards and Nuisances.'

https://ehtrust.org/cell-phone-towers-lower-property-values-documentation-research/

The following peer-reviewed study published in the Appraisal Journal, Summer 2005, said homes near cell phone towers are devalued 20% to 25%.

The Impact of Cell Phone Towers on House Prices in Residential Neighborhoods

by Sandy Bond, PhD, and Ko-Kang Wang

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

This site lists articles, videos and studies showing declining property values around cell tower installations

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

Summary and a reference to numbers articles documenting a reduction in home values with the introduction of cell towers.

https://ehtrust.org/cell-phone-towers-lower-property-values-documentation-research/

"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%."

http://nyrej.com/examining-invisible-urban-pollution-and-its-effect-on-real-estate-value-in-new-york-city-by-william-gati

Property Values. We need to halt this ill-advised Wireless-only project and enter into a public process that delivers the least intrusive means to get the fastest, most reliable and energy-efficient Internet access (Wireline fiber-optic service to our homes — without data caps) and to put any new Wireless antennas much farther away



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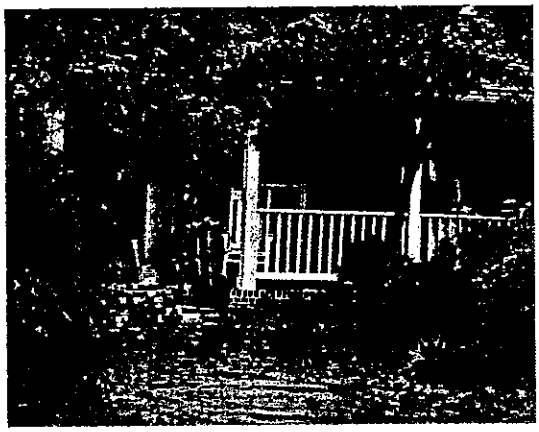
from our homes. Cell phone towers installed close to homes significantly reduces property values.

http://mystreetmychoice.com/index.html

Left Cell Tower House Right



In this famous case where a 68-foot tower was built in this person's front yard in Potomac is there any doubt the property value went down? The owner seems to have lost pride in owning the house. The house is now an eyesore. You can see the house to the left and right look ready to sell but not the cell tower house. No need to maintain it because the value has been so reduced that there isn't a need to keep the yard clean.



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## Removal.

Require poles to be removed when a less obtrusive technology becomes a viable in a few years. For instance, the FCC commissioner's pizza box antenna.

Shawn Soper reports that Ocean City regulations require that "Crown Castle will have to submit a bond to cover the cost of removing the towers if and when they reach the end of their useful lives."

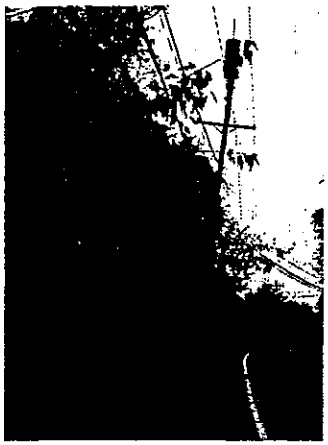
https://mdcoastdispatch.com/2017/01/12/ocean-city-company-reach-compromise-to-keep-cell-towers-out-of-residential-districts/

## Safety

We need a defined set of safety standards for cell towers. Need to verify after construction that the standards were followed. Rancho Palos Verdes, California citizens report that towers were not constructed according to paperwork filed at zoning office.

### 1) 14700 Seneca Road

This power pole struck me as I was driving by as leaning precariously into the road. I realize a cell tower company doesn't own the pole, but you would think when installing their equipment on the pole the company would report a problem.



Pole leaning towards the road more so than other poles along Seneca Road.



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Wires & Wires

There are a lot of boxes and wires on this pole that some kid could climb up. Someone could strangle themselves in the wires. Boxes extend down to climbing height.



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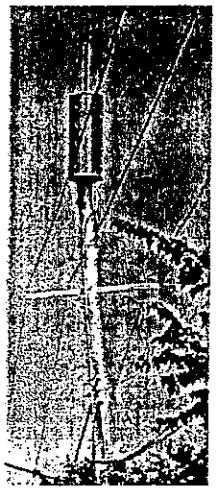

Canister is leaning in such a manner to compensate for the leaning of the pole. Run an imaginary line down the center of the wooden pole. Notice the line doesn't split the canister into equal parts.

I could hear a fan when standing near this pole on Nov 5, 2017.

## 2) High Gables Drive and Great Seneca Highway

Unfortunately, safety doesn't seem to have been a concern for the designers of the cell tower near High Gables Drive and Great Seneca Highway.

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What is this road guard protecting? Would spear a car jumping the curve.

This is a second view of the guardrail. Would seem that placing barrels of sand in front of the pole and electrical structure would be better than this short guardrail.

Where do these wires on the ground go?

One could trip over the wires.



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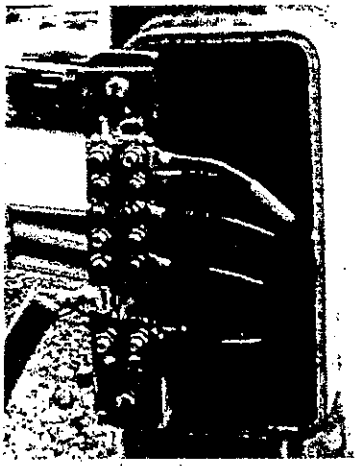
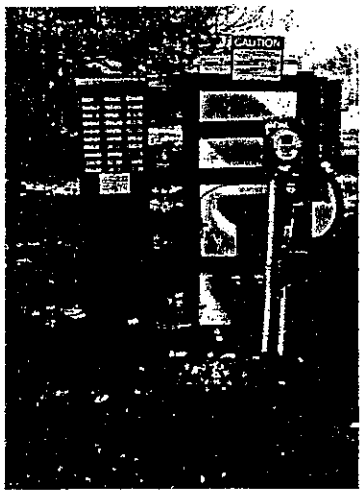
Unprotected wires



Someone could stick his or her hand inside the pole.




Regular wood. Doesn't look like pressure treated wood.



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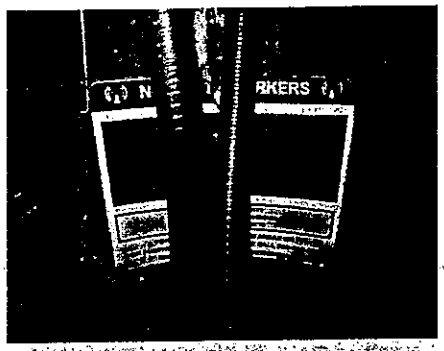

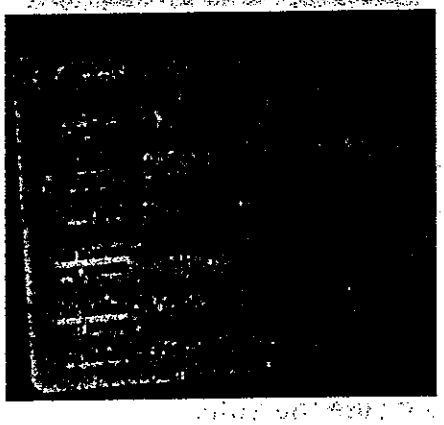

Safe approach distance seems to be 5 feet, but there is no fence around site. After Repairs or upgrades, sign ended up detached, bottom of pole and partially hidden.

## Signals

I drove around Dufief, Flints Grove and Westleigh with my Sprint 3g iPhone 4 to gauge the signal quality. I found 3 bars at each of the proposed tower locations but one. This one if you walked five feet away improved to 3 bars.

CDMA coverage, 3G, is satisfactory in the Dufief, Flints Grove and Westleigh area.

In an email exchange with a radio frequency engineer, the engineer said a 4G LTE signal would travel about the same distance as a CDMA signal. That means my iPhone 4 gives an accurate representation of 4G LTE signal coverage. The 4G antennas need to be placed on the same poles where the 3g Sprint antennas are placed. To improve coverage for Dufief, Flints Grove and Westleigh install more 4G LTE antennas on the utility poles along Darnestown Road and Dufief Mill Road.



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| Street address | Sprint 3g Signal Strength |
|---|---|
| 14604 Antigone Drive | 3 Bars |
| 11301 Brandy Hall Lane | 3 Bars |
| 11500 Brandy Hall Lane | 3 Bars |
| 14612 Dehaven Court | 3 Bars |
| 14828 Dufief Drive | 3 Bars |
| 14924 Dufief Drive | 3 Bars |
| 14971 Dufief Drive | 3 Bars |
| 15000 Dufief Drive | 3 Bars |
| 23 Flints Grove Drive | 2 Bars |
| 15043 Joshua Tree Road | 3 Bars |
| 15077 Joshua Tree Road | 3 Bars |
| 14704 Pebble Hill Lane | 3 Bars |
| 11612 Piney Lodge Road | 3 Bars |
| 14436 Rich Branch Drive | 3 Bars |
| 11705 Silent Valley Lane | 3 Bars |

## Speculation

Cell tower companies are speculating that the general case of increasing cellular data traffic means the traffic will go up in my neighborhood. Cell tower companies are speculating that more capacity will be needed in my neighborhood. Make them provide that each DAS cell tower is needed. It is my understanding that the FCC does allow the rejection of a cell tower when there isn't a need. To not let the cell tower company get away with the generality that cellular traffic is increasing therefore we need to put towers in my neighborhood.



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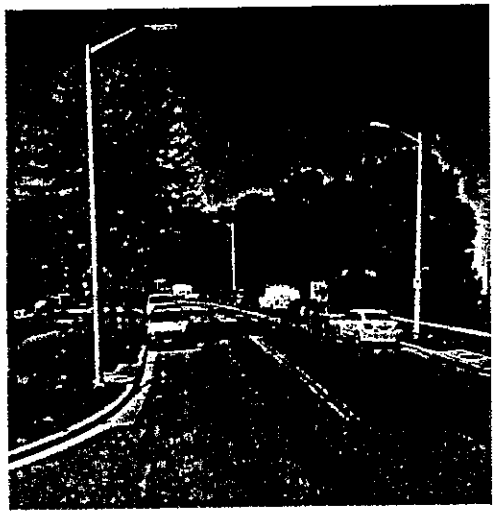
## Squatting

Cell tower companies, telecommunication companies that build cell towers to rent out to major carriers, could be putting up the poles to squat on the real estate.

A Crown Castle lawyer at a Gaithersburg October 2nd council meeting said, "for the kind of wireless facilities that we need to build for this new generation of wireless service." This new technology doesn't exist. So, I conclude that existing technology is being put on the poles. Existing technology has a range of tens of miles. Technology will change. It's certain electronics will shrink in size. We can wait for that "pizza box" which would fit nicely on our current light poles.

Look at the frequencies use by a pole in Germantown area.



This is found on the cell tower application form.

**Antenna Height AGL: 22'-10" RAD Center**

**Frequency bands to be used: AWS: 2120-2140 MHz DL, 1720-1740 MHz UL**
**PCS: 1975-1990 MHz DL, 1895-1910 MHz UL**



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Look up what the stated frequency to find its usage:
https://www.signalbooster.com/pages/what-are-the-cellular-frequencies-of-cell-phone-carriers-in-usa-canada

| | |
|---|---|
| **Verizon Wireless** | 4G : 700 MHz Block C, Band 13 (LTE). 1900 MHz PCS, Band 1 (1xRTT/ EV-DO/ eHRPD). 1900 MHz PCS, Band 2 (LTE). 1700/ 2100 MHz AWS, Band 4 (LTE). |

The proposed cell towers for are to be 4G.

## Tax revenue decrease from real estate tax

As home prices fall in areas with cell towers in the underground right-of-way, Montgomery County will gather less real estate tax revenue.

Values used in calculating revenue impact.

- "Montgomery County Property Tax Rates. The median home value in Montgomery County is $448,700. The average effective property tax rate in the county is **0.93%**, and the median total of real estate taxes paid per household in Montgomery County is $4,193"

  https://smartasset.com/taxes/montgomery-county-maryland-property-tax-calculator

- Counted 61 cell towers in front of homes
- Assume 30 homes near to tower
- Current tax revenue would be 4,193 tax * 61cell towers * 30 near by homes = $7,673,190
- There are nearly 376,000 homes in Montgomery County according to the 2008-2012 American Community Survey. Less than half, or 48.5% are single-family detached homes.

  https://ggwash.org/view/34103/single-family-homes-are-the-minority-in-montgomery-county

- 91,180 estimated homes have underground utilities = 376,000 homes * 48.5% single family * 50% estimate percentage with underground utilities



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The maximum loss would occur at a lesser percentage than 100% as people adjust to cell towers.

## Revenue from 61 cellular tower

. Here is the calculation:

| | |
|---|---|
| 61 | cell towers |
| 30 | homes per tower |
| 1,830 | total homes |
| 100 | cost of cell phone per month |
| 40 | percent phone bill to tower |
| 10 | rent at percent revenue |
| 7,320 | Montgomery County revenue per month |
| 87,840 | Montgomery County revenue per year |

## Tax revenue decrease caused by 61 DAS cell Towers

| 61 towers | 7% reduction in property value | 20% reduction in property value |
|---|---|---|
| lost real estate revenue | $537,123 | $1,534,638 |
| cellular income | $87,840 | $87,840 |
| lost revenue per year | $449,283 | $1,446,798 |



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**Tax revenue from 40 percent cellular tower coverage. If the FCC gets its way there will not be any revenue from DAS towers.**

. Here is the calculation:

| | |
|---|---|
| 91,180 | estimated homes having underground utilities |
| 36,472 | 40 percent homes near a cell towers |
| 1,216 | new cell towers |
| 30 | homes per tower |
| 100 | cost of cell phone per month |
| 40 | percent phones bill to tower |
| 10 | rent at percent revenue |
| 145,888 | Montgomery County revenue per month |
| 1,750,656 | Montgomery County revenue per year |

**Total tax revenue decrease caused by 40 percent of residential homes with underground utilities covered by DAS cell Towers**

| 40 percent towers | 7% reduction in property value | 20% reduction in property value |
|---|---|---|
| lost real estate revenue | $10,707,238 | $30,592,126 |
| cellular income | $1,750,656 | $1,750,656 |
| lost revenue per year | $8,956,582 | $28,841,470 |



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## "Trust but verify" Ronald Reagan

Cell towers in neighborhoods may be speculative on part of the cell tower companies. We need to grill cell tower companies on exactly what they are doing and why. We need to verify that they are doing something new not just renaming an existing technology so they have a better chance of putting towers in residential neighborhoods.

### 1) Before installation

Have a Montgomery county employee or contractor verify the need for each pole by checking for a significant lack of signal strength to justify a new pole. New poles may be rejected when the coverage is OK.

### 2) After installation

After installation of a cell tower in a neighborhood, have a Montgomery county employee or contractor verify that the tower is using 5G technology or more accurately that the tower isn't using 4G technology. There is speculation that some cell tower companies will put 4G technology on a neighborhood cell tower. If it is 4G, force a cell tower company to remove tower or just remove the tower.

http://scientists4wiredtech.com/what-are-4g-5g/

### 3) Yearly there after

Require the tower company to have third party verify radio frequency meets FFC requirements yearly. Verizon declined to install towers in one New York town when faced with this requirement.

## Underground

Require cell tower equipment boxes to be placed underground. Contrary to cell tower companies implied assertions, it is technically possible to place



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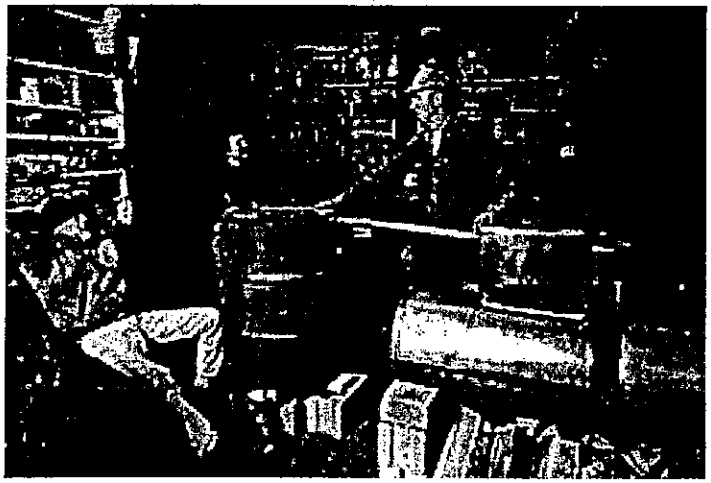
the electronics underground. What I conclude it means is that you cannot use the same equipment as used in New Mexico and Southern California.

## Rebuttal:

These moonshiners figured out how to cool their hooch. You would think cell tower company engineers could figure out how to cool electronics underground.



Former West Virginia moonshiner John Bowman explains the workings of a still. November 1996. American Folklife Center

https://en.wikipedia.org/wiki/Moonshine

## 1) Cities both with Snow and Underground Ancillary Cell Boxes

| City | Rain 39" | Snow 26" |
|---|---|---|
| Denver, CO | 16" | 55" |
| Gaithersburg, Md | 42" | 24" |
| Hempstead, NY | 48" | 29" |
| Mason, Ohio | 42" | 14" |
| Rey, NY | 48" | 29" |

**Mason, Ohio -- suburb of Cincinnati**

*1133.144 SMALL CELL FACILITY.*



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(Ord. 2016-69, passed 9–12-2016)

http://library.amlegal.com/nxt/gateway.dll/?f=templates&fn=default.htm

*1188.08 SMALL CELL FACILITIES.*

*(3) A small cell facility shall not be located within a residential zoning district, a residential subdivision, or within 100 feet of a property that contains a residential use. However, a small cell facility may be located either on the property or in the right-of-way adjacent to a valid conforming non-residential use that is located in a residential zoning district provided that the use is also located on an arterial or collector street as identified on the City of Mason Thoroughfare Plan.*

*(c) Quantity. No small cell facilities may be located within 2,000 linear feet from another small cell facility or cellular or wireless communication tower, unless such facility is co-located as defined in this chapter.*

*(3) All related equipment, including, but not limited to, electrical boxes, conduit, wiring, and mounting equipment shall be placed underground or be wholly contained within an enclosure so as not to be visible. Further, all electrical and communications connections shall run underground to the facility.*

*(Ord. 2016-69, passed 9-12-2016)*

http://library.amlegal.com/nxt/gateway.dll/?f=templates&fn=default.htm

How to search Mason, Ohio legislative documents:
do a string search via typing in the upper right corner box.
https://www.imaginemason.org/city-government/city-council/agendas-and-minutes/

**Rye, NY**

*In Underground Areas, the equipment cabinets shall be located underground with any above ground intrusion minimized.*

H(4)C Page 58 January 9th, 2019

https://ryeny.swagit.com/play/01092019-1373

*Best Best & Krieger LLP Partner Joseph Van Eaton and co-counsel Kristen Wilson, city attorney for Rye, New York, filed a successful motion for the City*



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*of Rye that resulted in a dismissal of a lawsuit challenging local authority to control placement of small cells in public rights of way.*

https://www.jdsupra.com/legalnews/lawsuit-challenging-local-authority-81373/

**Village of Hempstead, Nassau County, NY**

*Design standards. PWSFs should meet the following design standards. These standards are directory, not mandatory.*

*(1)Color. All PWSFs should be painted or complementary with natural tones (including trees and sky).*

*(2)Size. The silhouette of the PWSF should be reduced to the minimum visual impact.*

*(3)PWSFs near residences should either:*

*(a)Provide underground vaults for equipment shelters; or*

*(b)Place equipment shelters within enclosed structures approved by the Village of Hempstead.*

https://ecode360.com/search/HE0909?query=underground&guids=7219471

2) Existing Underground Electrical Boxes

a) Crown Castle put underground boxes in Arizona and Southern California. Solved the heat problem. It rains in these states too.

b) Crown Castle spokes person doesn't say underground boxes would be impossible at all. He made it sound like that, but put in a bunch of qualifiers to say it was possible.
https://www.youtube.com/watch?v=1oGeRZiXhmU&feature=youtu.be&t=96m03s

c) Pepco put under ground power transforms in my neighborhood in the 1970's.

d) Verizon put in Fios in my neighborhood in the 2000's. My observation was the Fios included running of power cables along with the fiber cables. I assume the power cables are there to power underground electronics of some sort.

e) People run electronics such as computers in their basements.



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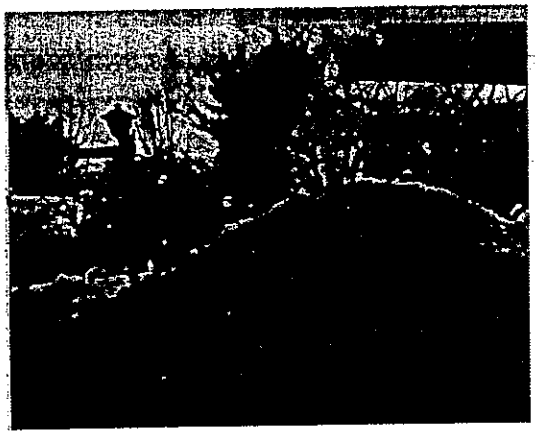
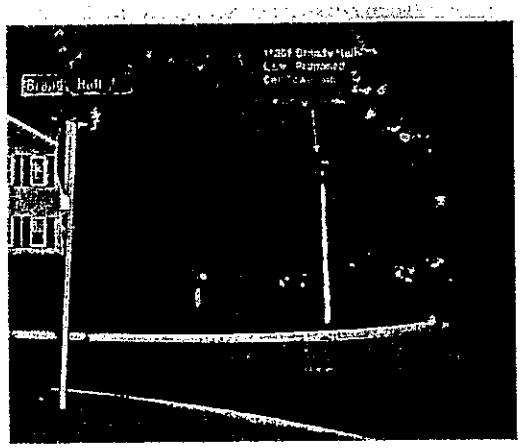
## 3) Plowed snow piles

Both an above ground "mail" box and a below ground electronic box will have to deal with snow. Cell tower company's "mail" boxes near intersections will get covered in snow in the winter. "Mail" box electronics will have to survive a month or more covered in snow.

Several of the cell towers in Dufief, Flints Grove and Westleigh are replacements for a light pool at an intersection. Here is another Westleigh intersection in the winter along with a proposed site.





## 4) GeoExchange Heating and Cooling System

The soil is 55 degrees a few feet underground which makes an excellent heat sink. The cell tower company could run some cooper or plastic pipe underground. Run the pipe through the electronics. Have a pump circulate antifreeze through the pipes. Now, you have cooled your electronics.



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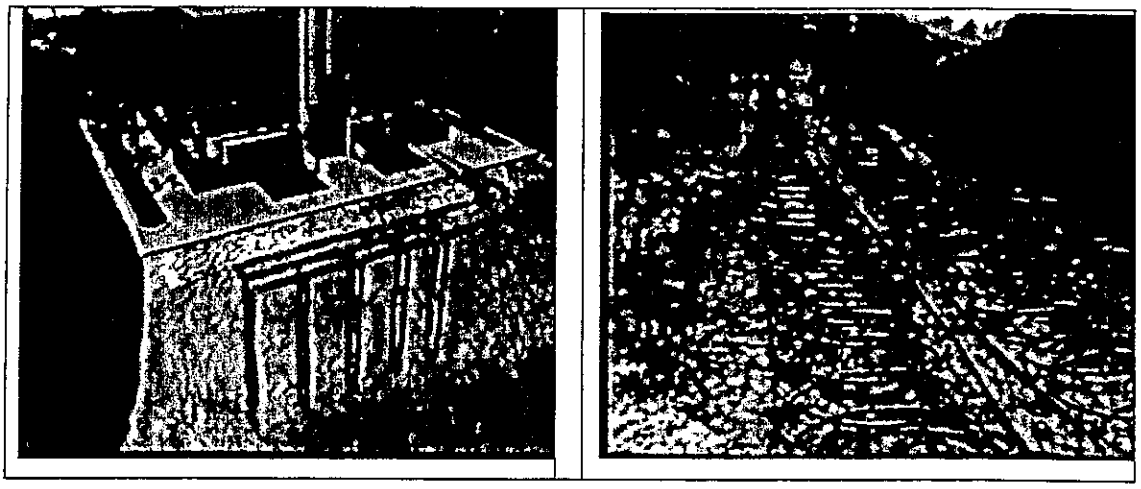

"Geothermal HVAC systems have been used for more than 60 years in the U.S. and beyond."
https://www.nationalgeographic.com/environment/great-energy-challenge/2013/10-myths-about-geothermal-heating-and-cooling/

Video explanation:
https://www.youtube.com/watch?v=NiNPhFqxODU

Downhole heat exchanger

https://en.wikipedia.org/wiki/Downhole_heat_exchanger

Ground-coupled heat exchanger

https://en.wikipedia.org/wiki/Ground-coupled_heat_exchanger

## Underground Equipment Enclosures -- DIY

Utilize marine water-cooled refrigeration technology. Dig a well like hole. Please cooling loop in hole. Circulate via water pump. Place the electronics in a marine refrigerator that is water-cooled. Attach cooling line to refrigerator. My two refrigerators are over thirty years old. This equipment would be very reliable.



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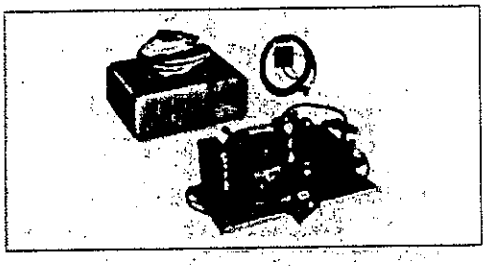
**Water-cooled – MAGNUM**

- Fridge or Freezer use
- 12/24 V Danfoss/Secop compressor
- Universal kit AC/DC optional for a complete power supply compatibility (12/24 V, 230/115 V and 50/60 Hz)
- Self-priming sea water pump to ensure extra high efficiency for tropical applications
- Variable speed water pump according to the temperature of the water circulating inside the condenser



## Wait

Wait until companies propose using the latest technology and to be leaders in residential quality.

## Way Out of the box

### 1) All for Wi-Fi

Have the county sponsor community Wi-Fi. In any community with small cell towers installed or proposed, have the community vote on if they want to pay a special tax for Wi-Fi to be installed in their neighborhood.

A Wi-Fi box would fit nicely on top of an existing streetlight. You can get a common outdoor Wi-Fi router with a range of 300 feet, which would mean towers every 500 feet to allow a little fudge. The outdoor Engenius High Power "N" router has a stated range of over 1,000 feet, which would let the poles be 2,000 feet apart [ in theory ]. Thus, allowing the poles to be further apart than the off stated distance of 500 for the proposed DAS towers.



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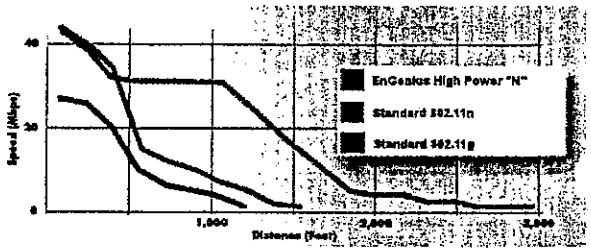
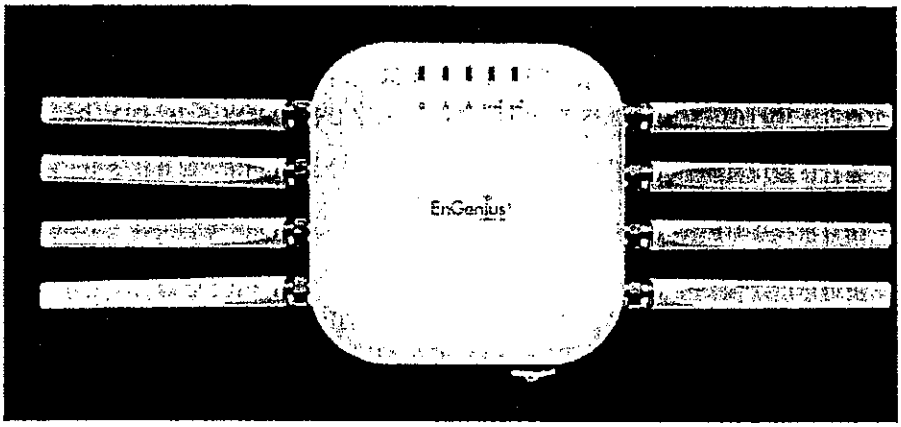
# Comparative Signal Ranges by Standard

*wireless network range*



https://www.engeniustech.com/resources/Webinar-Presentation_3-13-2012.pdf




Dimensions and Weights

Length: 11.22", Width: 8.58" and Depth: 2.1"

Weight: 4.17 lbs



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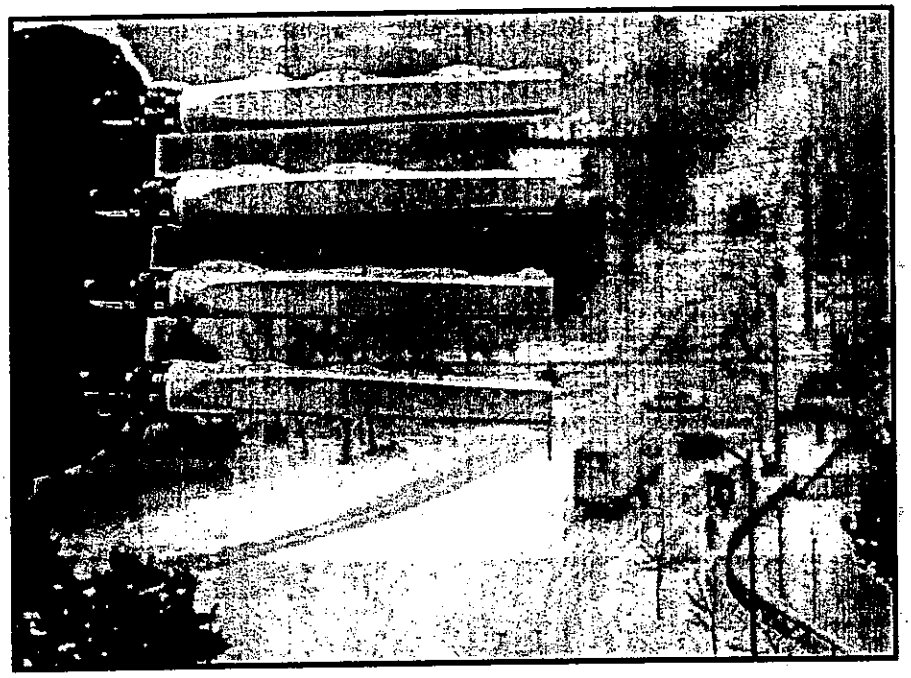

https://www.engeniustech.com/managed-outdoor-access-points.html

https://nerdtechy.com/best-outdoor-Wi-Fi-range-extender

The smaller size and longer range of the latest generation of Wi-Fi devices points out how behind the times the technology cell tower companies are promoting.

## 3) Copper wire

Force Verizon to sell its defunct copper wire. When I had DSL, Verizon charged me $15 per month. While Verizon the owner of the wire capped the speed at 1meg, others owners using alternative technology have increase the data speed. London, UK users report speed of 30meg. A "G.fast" Technology exists to extended the speed to 1gig. A new owner should be able to achieve faster speeds at a lower cost to the customer. Faster DSL would bring more competition and a reduction in price as the theory goes.

https://en.wikipedia.org/wiki/Digital_subscriber_line



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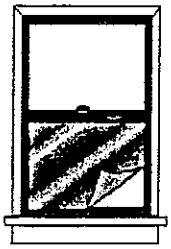
## 4) Reciprocity

When a cell tower company installs a cell tower in a utility right of way with all under ground utilities and in a community with income above the average for Montgomery County, require the cell tower company to put in an antenna in a less well to do community.

## 5) Signal blocking

For people who do not want 5G signals in their homes, require the cell tower company to coat or replace windows with materials that reflect cellular signals.



http://www.lessemf.com/plastic.html - 1215

"It's really hard to get [millimeter-wave] signals to travel through windows that are coated with material that reflects UV light (and most new homes and offices require this kind of coating in order to lower cooling costs)."

This article describes how the window treatments block cellular signals.

http://www.fiercewireless.com/5g/editor-s-corner-verizon-says-its-new-indoor-outdoor-prototype-5g-modem-solves-one-28-ghz-biggest

## 6) Sue FCC

Sue FCC over health issues. Should not be promoting 5G without testing health effects.

Best Best & Krieger LLP, Kissinger & Fellman are representing cities suing the FCC.

## 7) Sue cell tower companies

Sue cell tower companies over the taking of property. Cell towers in my community will reduce property tax revenue as home values decrease. There is the concept of a neighbor taking property by inconsiderate behavior.



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## 8) Tax

Tax all broadband carriers based on electricity usage. Less power used means less effect on the environment

## 9) Compensation

Require tower companies to reimburse stakeholders all monetary losses. Pay homeowners for decreased property value. Reimburse county for decrease in tax revenue.

Pay legal costs for homeowners to sue cell tower companies over the decrease in their property values and deceased enjoyment of their property.

## 9) Volunteer

There are some people who want cell towers in their front yard. Require the cell tower company to seek these people out and place a pole in their front yard first.

## 10) Vote

Let the voters in each neighborhood vote on whether or not they want cell towers in their neighborhood.

This my not stand legal challenge but it would point out to the FCC and Congress that most likely the majority of voters do not want these cell towers. It would be an example of democracy in action. It would be a good basis for congressional action, as legislators would have to explain why they are not going with the will of the people.

A neighbor in Westleigh suggested this idea

## 11) Require Insurance

Tower companies should have insurance on all cell towers. Government should not be taking on this burden.



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Should tower companies not be able to get insurance, they can form a consortium of their own to provide insurance.

12) Require tower companies to compensate for all damages.

Examples decrease in housing values and tax revenue.

I have presented no matter of mere 'concern' or any other nonsubstantive matter, but solely matters of substance, of fact and law.

"The End"



Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

January 13, 2020

To: City of Rockville Councilmembers BY EMAIL

I attest and affirm that the following statements are true, accurate, and within my personal knowledge. I have worked in Rockville for over 10 years. My daughter was fortunate enough to gain a slot in the Montgomery County Public School lottery for language immersion and attended elementary school here in Rockville. We frequently patronize Rockville's shops, restaurants, and library. My ties to the community have run deep, though I live in Silver Spring.

In 2001 I enlisted in the US Army and began my training to become an "Air Traffic Control Equipment Maintenance and Repairer". In the modules where we studied the radar, I first learned about the harmful, cariogenic health effects that radiofrequency / microwave (RF/MW) radiation have on the human body from transmissions from antennas. When the radar is "fired" or transmitting RF/MW radiation at its full capacity, it is imperative not to be in front of those antennas. Safety features are built into the radar to prevent the accidental "firing" and to alert persons that RF/MW radiation is transmitting. Additionally, the person who fires the radar is responsible and obligated to ensure that the entire area in line with the antennas are clear of all personnel for their safety. Despite my knowledge of the health risks and precautions that I always took prevent my exposure to RF/MW radiation, I never gave much consideration to what it was doing to the environment. The proposed deployment of massive amounts of wireless telecommunication towers across the country encouraged me to take a holistic look at what that means for everything that occupies the Earth.

Scientific peer-reviewed research has concluded that radiofrequency / microwave (RF/MW) radiation from electric and wireless devices have harmful effects to **both plant and animal life**. Damage to trees from cellular towers presents itself by discoloration and thinning of leaves, distorted growth of trunks as well as dead leaves and branches. Tree damage by cellular towers usually starts on the side facing the antennas, then covering the entire tree over time. Plants are affected on a cellular, molecular and whole plant scale; their gene expression is altered after exposure to wireless radiofrequency / microwave radiation. In addition, 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. Without pollinators 33% of our fruits

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and vegetables would not exist. And birds express abnormalities in fertility, nesting patterns, navigation and reduced populations.

The Telecommunications Act of 1996 (TCA) recognizes that environmental effects of radiofrequency / microwave (RF/MW) radiation from Wireless Telecommunications Facilities occur, indicating by extension its recognition of *de facto* health effects.

The preemption clause in recognition thereof, Section 704 subpart iv, of this Telecommunications Act states: "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."

*Black Law's Dictionary* defines environment as "the milieu in which an organism lives. Includes the sum of all of its surroundings. This includes natural forces and other living things. It defines the conditions of danger and damage to existence, as well as development and growth."

The Act did not prohibit regulation of the health effects on **humans** entirely within state and local officials' authority, allowing these officials to protect its residents from the *de facto* health effects with regard to the placement, construction, modification and operations of wireless facilities. The Tenth Amendment of the US Constitution protects local and state officials from overreaches of the federal government, which cannot lawfully take away their authority and obligation to protect the safety of their constituents. And the Ninth Amendment protects constituents more directly yet.

I want to remind the Council that the FCC is not the US Congress and does not make laws. Congress' 1996 Act did not preempt local authority over facilities' **operations,** including RF/MW transmissions and their many different adverse effects. Rather, Congress left all authority over **operations**, as distinct from placement, construction and modification, within state and local officials' hands. I need you to protect my daughter, myself, the community and environment by prohibiting the transmission of any additional amount RF/MW radiation where people sleep, live, heal and congregate.

Over the past half century, many thousands of peer-reviewed scientific studies regarding the adverse health effects of RF/MW radiation on the inhabitants of this planet have been published. The US Supreme Court Daubert Rule deems relevant, peer-reviewed, journal-published science as admissible; therefore, I implore you to give top priority to the published, peer-reviewed scientific findings of adverse health effects.

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Our current fiber-optic cables that are already in place are safe; they pose no cancer risk to children or the environment. Fiber is more secure from a cyber-security standpoint and is not built to invade our privacy the way wireless and 5G are. We call this "Safe-G". I ask you to make Rockville a Safe-G zone for everything and everyone.

Lastly, consider how other cities across America such as Westminster, MD; Chattanooga, TN; and San Leandro, CA, to name a few, have used their local fiber-optic cables to provide their constituents with safe, reliable, secure, environmentally friendly, super high-speed wired communications. Rockville deserves the best service, which is fiber. Wireless, by contrast, is just bad engineering.

I have presented no matter of mere 'concern' or any other non-substantive matter, but solely matters of substance, of fact and law.

Signed,

Natalie Rosser
13114 Mica Ct, Silver Spring, MD 20904

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

13 Jan 2020. Address to Bridgit Newton, Lord Mayor of Rockville and her Council re: Bill ZTA 19-07. (5G)

Good evening Mayor and Council,

My name is Fiona Morrissey and I live at Four Corners, Silver Spring. I attest and affirm that the following statements are true, accurate and within my personal knowledge.

I wish to state my opposition to ZTA 19-07. We simply do not know enough about the long-term health effects of 5G to give it a free pass. Even if only half of what I have read and heard is true, the news is not good. At best we are facing a high-risk experiment, at worst a national calamity. No wonder Lloyd's of London, the biggest insurance group in the world, is refusing to insure health claims made against 5G. Based on the analysis of experts, Lloyd's have concluded that any short-term financial gain would be offset by **huge losses** in the future. The significance of this cannot be over-stressed.

Lloyd's is smart enough to realize that new evidence just might emerge showing that constant exposure to EMR causes **serious** health issues. As yet Lloyd's has not announced its' position on 5G to the general public, but my father, Roger Garland, former member of the Irish Parliament, has been a Lloyd's underwriter for over 40 years and **he** tells me that this is indeed the case. If Lloyd's, which insures against earthquakes, tornados, wildfires, terrorist attacks, nuclear power accidents and plane crashes, if **this** company has **blacklisted** 5G, then something is very wrong and we should all sit up and pay attention.

Mayor and council, as elected representatives it is your duty to speak out loud and clear to protect the city of Rockville. No-one in Rockville, or anywhere else, should be forced to have a 5G cell tower beside their home until it is proven to be absolutely safe. Remember Lloyd's of London. They did their homework on 5G and made a very wise decision. I am hoping you will follow their lead and do the same.

Thank you and I wish you all a very happy - and healthy - new decade.

Fiona Morrissey,
10301 Edgewood Ave., Silver Spring, MD 20901.

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Anna R. Pritchard, RN,BSN,CNC,LMT
Doctor of Naturopathy, Clayton College of Natural Health

January 13, 2020

**Verbal Testimony to the Rockville City Mayor, Bridgette Newton, and Council**

**January 13, 2020**

My name is Anna Pritchard, I have lived in Silver Spring since 1965. I attest and affirm that the following statements are true, accurate and within my personal knowledge.

I worked as a Registered Nurse for 35 years. I now have a Doctorate Degree in Naturopathy and am also a Certified Nutritional Consultant and a Licensed Massage Therapist. In addition, I am employed 1.5 days a week by Montgomery County at the Margaret Schweinhaut Senior Center and I volunteer at Shepherd's Table.

As a health care professional who has been working helping my patients regain their health and prevent illness for many years, I am very worried about the health harms of 5G radiofrequency microwave radiation in close proximity to our homes, schools and offices.

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I have experienced severe adverse health effects from this type of radiation myself.

Over time, I realized that I was experiencing significant memory, learning, and word-recall problems. An electrical engineer tested my house and found that my cordless phone was against a wall, on the other side of which was where my head laid at night while sleeping, and that I had a gas utility smart meter on my house, among other wireless radiation problems. After keeping my cordless phone unplugged, and having the gas smart meter removed, very soon my cognitive abilities came back to normal. These symptoms were not an endogenous condition of mine. The external radiation my body was absorbing was affecting me.

5G deploys pulse-modulated microwave radiation, which is much more harmful than previous wireless deployments to all living organisms, especially to bees and birds. Some 2G, 3G, and 4G will still be in the ambient atmosphere. Therefore the addition of 5G RF/MW radiation would bring an exponential increase in microwave radiation intensities to local homes, schools, and offices, relative to what now exists.

Scientists have published in the tens of thousands of studies on RF/MW radiation. This is an established science which is showing great **harm to all living organisms.**

Dr. Martin Pall, Ph.D. in Biochemistry and Genetics, who has extensively researched the mechanisms of action upon living cells, found that RF/MW radiation severely damages the DNA, and other critical parts of our cells including the mitochondria (the energy producing part of cells), which will lead to large amounts of oxidative stress and neurological impairments which will include insomnia, learning problems, ADHD, autism, headaches, early dementia, depression, fatigue, blood brain barrier permeability, cardiac and blood pressure problems, decreased immunity, cancers, and much more.

These are **serious impairments and illnesses** that take away life, and all persons will be affected, as will all animals, insects, and plants.

The rushed deployment of 5G radiation in close proximity to our homes, schools, etc. while knowing this is hazardous, is **irresponsible, un-American,** and **Unconstitutional**. The oath that all legislators take requires that you "..uphold the Constitution of the U.S." The

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Preamble of the Constitution states that you will "promote the general welfare" which means ***"the concern of the government for the **health**, ...and **safety of** its citizens."

I have seen a lot of suffering of people in my career and I don't want to see more needless suffering due to such a corrupt unfair cause of illness that most people are completely unaware of. People will get sick and they won't know why. That is very unfair, and will be heartbreaking, and not something I think that the United States of America, that I know, would or should do to its citizens. It is obvious that the Telecommunications Industry doesn't care about the suffering and illness they will be causing to millions of people, children, and all living organisms. **We are looking to you, our law makers, to protect us from such a heinous, corrupt, and dishonest "power grab". Please say "no" to the deployment of 5G antennas in residential areas.**

We are already hearing the first reports of symptoms in residents of Geneva, Switzerland where 5G antennas have been installed and turned on. It has been reported that "As soon as the antennas were installed, several residents and entire families reported unusual

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symptoms of loud ringing in the ears, intense headaches, unbearable earaches, insomnia, chest pain, fatigue and not feeling well in the house." Dr. Bertrand Buchs, MD. who has also called for a 5G moratorium, states he has seen more and more patients with similar symptoms. He notes, "In this case our authorities are going against common sense. We risk experiencing a catastrophe in a few years." https://mdsafetech.org/2019/07/20/the-first-report-of-5g-injury-from-switzerland/ (Physicians for Safe Technology). This information is coming from a website which is a "group of physicians and health care professionals whose mission is to provide trusted leadership in promoting healthy and safe technology...Our aim is to prevent acute and chronic diseases by encouraging understanding...the health effects of using modern technology." I respectfully suggest that you read this website.

The Telecom companies are intending to install 5G antennas only 30 feet from each our homes which will be beaming RF/ MR into our homes and our bodies 24/7/365 days a year without our consent. We will have no way of knowing what frequency levels they set the exposure to. We already have found out from the Chicago Tribune Newspaper who

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conducted credible studies on the levels of radiation that our cell phones are emitting that several brands of cell phones were emitting more RF than the FCC standards allow. In addition the cell phone industry has not educated us not to hold cell phones directly against our heads or our bodies which we now know is a cause of brain cancer and infertility. Based on these findings, do we think we should trust the telecom industry to monitor the amount of 5G frequency emitted from the 5G antennas? They may turn up the levels of frequencies on the 5G antennas without our knowledge, meanwhile this frequency is entering out bodies through the skin and causing serious cellular damage.

Montgomery County is one of the most highly educated counties in the country and I hope it will be a leader in protecting its residents, pets, wildlife, and the environment generally **by declining close proximity irradiation in residential areas and near schools.**

I have presented no matter of concern, but solely matters of substance: of fact and law. I accept your oath of office.

Thank you,

Anna R. Pritchard RN, BSN.,

CNC, LMT, Doctor of Naturopathy,

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Mayor and Council, you may already be familiar with the potential deleterious effects of 5G as documented by The World Health Organization, Bioinitiative.org, and numerous scientists and doctors: BAD NEWS

Good news: We in Rockville can avoid many of the potential negative effects of 5G and still comply with current FCC requirements by doing one thing: Accessing the hard wired fiber optic underground structure that is already in place and we have paid for. The 9th Circuit Court of Appeals will hear a case in January 2020 by NYC and the National Association of Telecommunications Officers and Advisors that the FCC illegally moved billions of dollars out of state public utilities that was earmarked for safe, fast, reliable wired networks (fiber optics) into wireless microwave operations. Many wired networks that were built with public money are not now being used. If won, state public utilities will be able to have an open public network that is safer and far less expensive than what they are paying for now.

One city that is already implementing the fiber optic network is our neighbor Westminster MD. This is the Mid-Atlantic's first community-wide gigabit fiber network creating a competitive local marketplace for internet services and proving community access to affordable gigabit internet speeds. The City of Westminster constructs, owns and maintains the fiber network while their private partner Ting, installs the equipment, lights the network, and provides services to customers and Westminster receives the lease money. It is a 1Gigabit per second speed that is approximately 10X faster or more than its competitor for a cheaper price. It's a hit for citizens because they get fast internet less expensive that supports their city at the same time.

If we don't do something like this, we are looking to pay the price with a reduction in property values. It is common knowledge that homes that are close to or certainly in front of cell towers are subject to lower comps (based on cancer and leukemia data). If houses that are close to or in front of the small cell towers (especially since we haven't agreed on setback limits nor have they been established by the FCC), we are looking at diminishing values in those properties

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that will affect other neighborhood assessments as the comps will ultimately drag down property value.

If we use funds to access a network already in place that we have already paid for we can still keep citizens safe, reduce potential health liability, not just keep but grow property values and therefore the tax base, and be known as a Safe City. On February 6, 2019 the leaders of the telecom industry admitted to Senator Blumenthal in a Senate Hearing there are no studies nor do they plan to have any studies on the effects of 5G. Let us in Rockville be the leaders in Montgomery County who are saying yes to safe technology, yes to safer schools for our children, and yes to protecting the economy of Rockville and our environment. Let's talk about this. Thank you

Attachment 7.e: Public Testimony (2827 : Discussion and Instruction, TXT2019-00251 - Small Celll Antennas)

Mayor & Council Meeting Date: March 18, 2020
Agenda Item Type: Update
Department: Police
Responsible Staff: Victor Brito

## Subject

Emergency Management Briefing on Coronavirus (COVID-19)

## Recommendation

No action required at this time by the Mayor and Council

## Discussion

A new (novel) Coronavirus known as COVID-19 emerged in Wuhan, China in December 2019. The virus causes respiratory illness that can range from mild to severe, and it can be spread from person to person. The Centers for Disease Control and Prevention (CDC) and state and local health departments in the District of Columbia, Maryland, and Virginia are closely monitoring the outbreak. Area health directors and other officials have been in communication with one another and are sharing information and resources.

- On March 5, 2020 - The State's Public Health Laboratory in Baltimore confirmed the first positive cases of novel coronavirus (COVID-19) in Maryland, all three in Montgomery County. The patients, who contracted the virus while traveling overseas, are in good condition. County health officials, along with regional emergency management officials, are working closely with State and Federal health officials to respond and plan should the situation change.
- The CDC considers the immediate risk to the general public to be low currently and exposure to the virus unlikely within the United States.
- As cases of COVID – 19 increase in other countries as a result of community spread, the likelihood of increased incidents as a result of community spread in the United States also increases.
- Public health efforts at this time are focused on containing spread and mitigating the impact of this virus.
- Because we are in peak cold and flu season, health officials encourage the following everyday actions to help prevent the spread of respiratory viruses, including:
  - Wash your hands often with soap and water for at least 20 seconds. Use an alcohol-based hand sanitizer that contains at least 60% alcohol if soap and water are not available.
  - Avoid touching your eyes, nose, and mouth with unwashed hands.
  - Avoid close contact with people who are sick.
  - Stay home when you are sick.
  - Cover your cough or sneeze with a tissue, then throw the tissue in the trash.
  - Clean and disinfect frequently touched objects and surfaces.

- Misinformation about coronavirus can create fear and hostility that hurts people and makes it harder to keep everyone healthy. We can fight stigma and support others by sharing accurate information and staying informed through reputable, trusted sources.

The situation is evolving.

Local Actions:
The City of Rockville Emergency Management is currently coordinating with the Montgomery County Office of Emergency Management and Homeland Security (OEMHS), as well as the Montgomery County Department of Health and Human Services (DHHS). City Emergency Management will continue to maintain lines of communication as the event develops to ensure coordination of City and County actions, particularly related to government operations and the status of community events.

The City has taken several actions in preparation for the event including forming an Emergency Management Working Group briefing by DHHS on Public Health Emergency Response. Internally, following City Senior Staff discussions, the following actions are underway or have taken place: (1) Human Resources (HR) is communicating with employees concerning risks and actions including recommendations related to household preparedness. (2) HR is also considering the impact of confirmed employee cases, reviewing policy related to leave, telework, as well as considering the impact of potential community actions, such as school or daycare closures on the City workforce. (3) Recreation and Parks is reviewing the current cleaning protocols of City facilities. Consideration is being given to additional and more detailed cleaning, as well as increasing the availability of cleaning supplies in facilities. (4) Recreation and Parks is also examining the process and preparing for the possibility of cancelling public events if recommended by DHHS. (5) Public Information Office has printed and made available information materials from the CDC on COVID-19 for display, targeting the general public and City employees related to non-pharmaceutical interventions in all City facilities. (6) Information Technology is providing guidance and support to City employees, so they are prepared to work from home if deemed necessary. (7) All City Departments are reviewing their Continuity of Operations Plans (COOP) including updating contact information, identifying critical functions and processes, cross-training employees where necessary, and planning for potential staff loss and reductions or modifications of services due to lack of available staff.
Attachment A “Get Your Workplace Ready for Pandemic Flu” has been provided.

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**Mayor and Council History**

This is the first time this item has been brought before the Mayor and Council.

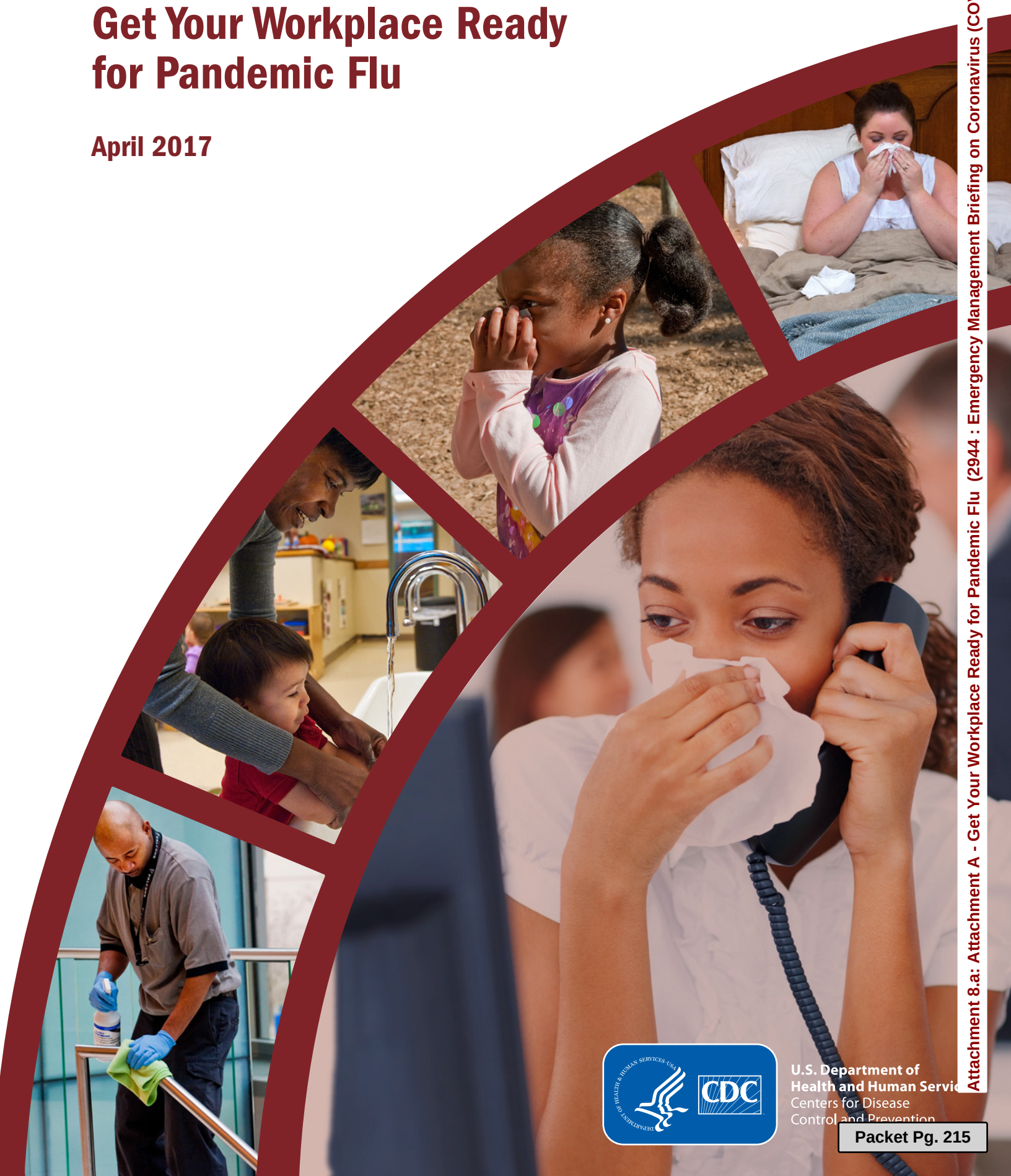
## Attachments

Attachment 8.a: Attachment A - Get Your Workplace Ready for Pandemic Flu (PDF)

Rob DiSpirito, City Manager 3/12/2020

# Get Your Workplace Ready for Pandemic Flu

April 2017



U.S. Department of Health and Human Servic
Centers for Disease Control and Prevention

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**Audience:** Employers and workers responsible for planning for and responding to a flu pandemic and its recovery.

**Purpose:** This guide provides information about **nonpharmaceutical interventions (NPIs)** and their use during a flu pandemic. NPIs are actions, apart from getting vaccinated and taking antiviral medications, that people and communities can take to help slow the spread of respiratory illnesses like pandemic flu. Use this guide to develop a new contingency plan or modify an existing emergency operations plan for pandemic flu that reflects considerations specific to your workplace setting and community.

## ICON LEGEND

**Tips**

**Readiness Resources**

**Questions**

# Keep Your Workers Healthy and Maintain Productivity By Planning For Pandemic Flu



**Influenza** can spread quickly from sick workers to others who are nearby in the workplace. Seasonal influenza, also known as "the flu," is a contagious respiratory illness caused by flu viruses that infect the nose, throat, and lungs (see **flu symptoms and complications**). Workers are often in close contact, sharing the same space, supplies, and equipment for long periods of time. As a result, there is an increased risk that workers will spread flu and other illnesses to each other. Flu spreads mostly by droplets containing flu viruses traveling through the air (up to 6 feet) when a sick person coughs or sneezes. Less often, people might get flu by touching surfaces or objects with flu viruses on them and then touching their eyes, nose, or mouth.

The best way to prevent the flu is by getting a flu vaccine. CDC recommends a yearly flu vaccine for everyone 6 months and older. Vaccination can reduce flu illnesses, doctors' visits, and missed work due to flu illness, as well as prevent flu-related hospitalizations. CDC also recommends that people practice *everyday preventive actions* (or personal NPIs) at all times to protect themselves and their community from flu and other respiratory infections (see Page 5).

Each year, seasonal flu is responsible for nearly 17 million missed workdays and costs more than $10 billion in direct medical expenses;* these numbers may increase during a flu pandemic. *Flu pandemics are much less common but can occur at any time.* Do not let your workplace be caught by surprise! Just as you prepare for seasonal flu, you should prepare for pandemic flu. Establishing flexible sick-leave policies is the single most important action for employers to consider when preparing for flu pandemics. When sick workers are at work, they can spread flu to others and increase the number of people who become sick. Allowing sick workers to stay home until they recover reduces the risk of flu spreading in the workplace and supports business continuity of operations.

Most workplace settings have developed an emergency operations plan that addresses a range of crises. Make sure your workplace has a contingency plan that includes policies and procedures that are flexible and can align with future public health recommendations that may occur during a flu pandemic.

*Molinari NA, et al. Vaccine 25 (2007)

## Pandemic flu is not seasonal flu

A **flu pandemic** occurs when a new flu virus that is different from seasonal flu viruses emerges and spreads quickly between people, causing illness worldwide. Most people will lack immunity to the pandemic flu virus. Pandemic flu can be more severe, causing more deaths than seasonal flu. Because it is a new virus, a vaccine may not be available right away. A pandemic could therefore overwhelm normal operations in workplace settings. Read more about the important **differences between seasonal flu and pandemic flu.**

## NPIs can help slow the spread of flu

When a new flu virus emerges, it can take up to 6 months before a **pandemic flu vaccine** is widely available. When a vaccine is not available, NPIs are the best way to help slow the spread of flu. They include personal, community, and environmental actions. These actions are most effective when used together (see Page 4).

As an employer, you play a key role in flu readiness. Planning for and practicing NPI actions will help your workplace respond more effectively when an actual emergency occurs. Safeguard the health of your workers, customers, and the community by making sure your contingency plan includes provisions for pandemic flu. Most importantly, develop flexible policies and procedures that allow workers to stay home when they are sick during a pandemic.

**Personal NPIs** are *everyday preventive actions* that can help keep people from getting and/or spreading flu. These actions include staying home when you are sick, covering your coughs and sneezes with a tissue, and washing your hands often with soap and water.

**Community NPIs** are strategies that organizations and community leaders can use to help limit face-to-face contact. These strategies may include making sick-leave policies more flexible, promoting telework, avoiding close contact with others, and scheduling remote meetings.

**Environmental NPIs** are surface cleaning measures that remove germs from frequently touched surfaces and objects.

## CDC has created resources to help you plan for a flu pandemic.

Visit www.cdc.gov/npi for the latest information and resources about nonpharmaceutical interventions (NPIs).

## Center for Infectious Disease Research and Policy's Toolkit for Doing Business During an Influenza Pandemic

http://www.cidrap.umn.edu/sites/default/files/public/downloads/cidrap-shrm-hr-pandemic-toolkit.pdf

# Take Action to Help Slow the Spread of Flu and Illness

CDC has developed recommended actions for preventing the spread of flu in workplace settings. Promote and reinforce the practice of *everyday preventive actions* at all times. Plan for and educate workers about additional community NPI actions that may be recommended by public health officials, if a flu pandemic occurs.

Work closely with your local public health department before a pandemic occurs to establish a flexible contingency plan that includes actions to take during a mild, moderate, severe, very severe, or extreme pandemic. Be prepared to take actions that are appropriate for the **level of severity** of the local pandemic outbreak. The **Before, During,** and **After** sections of this guide offer suggested actions to help you plan for and implement these recommendations.

## EVERYDAY PREVENTIVE ACTIONS

***Everyone should always practice good personal health habits to help prevent flu.***

**Stay home when you are sick.** Stay home for at least 24 hours after you no longer have a fever or signs of a fever without the use of fever-reducing medicines.

**Cover your coughs and sneezes with a tissue.**

**Wash your hands often with soap and water for at least 20 seconds.** Use at least a 60% alcohol-based hand sanitizer if soap and water are not available.

**Clean frequently touched surfaces and objects.**

## NPIs RESERVED FOR A FLU PANDEMIC

***Employers should be prepared to take these additional actions, if recommended by public health officials.****

**Allow workers to telework, if feasible.**

**Be prepared to allow workers to stay home if someone in their house is sick.**

**Increase space between people at work to at least 3 feet, as much as possible.**

**Decrease the frequency of contact among people at work.**

**Modify, postpone, or cancel large work events.**

**Postpone or cancel non-essential work-related travel.**

*These additional actions may be recommended for severe, very severe, or extreme flu pandemics.

### Planning for a flu pandemic is a wise investment.

Most large workplaces find it important to develop continuity-of-operations plans for a range of emergencies. Make sure your plan includes preparations for a flu pandemic and is flexible to accommodate pandemic outbreaks of varying severity levels.

### What Employers can do to Protect Workers from Pandemic Influenza, from the U.S. Department of Labor, Occupational Safety and Health Administration

https://www.osha.gov/Publications/employers-protect-workers-flu-factsheet.html

*Note: The following sections include CDC's recommended actions for preventing the spread of pandemic flu and suggested strategies for implementing these recommendations.*

# Before a Flu Pandemic Occurs: Plan



## Did you know community-wide pandemic flu planning by employers can help limit the impact to the economy and community?

A flu pandemic can last for several months. Public health officials may recommend additional community actions based on the **severity of the pandemic** that limit exposure, such as flexible sick-leave and telework policies. These recommendations may be challenging to plan for and implement in your workplace. However, you may be asked to follow such recommendations for the safety and well-being of your workers and the community.

✔ **Establishing ongoing communication with your local public health department now can give you access to relevant information before and during a pandemic.** Having a good contingency plan in place and developing flexible policies and procedures to accommodate public health recommendations can help reduce infection. During your planning process, remember to engage key partners across both public and private sectors. Also, the specific details of your plan should be based on the severity of the pandemic and the size of your workplace and workforce, complexity of your day-to-day operations, and type of services your workplace provides.

Community-wide planning is essential to responding to and recovering from a flu pandemic. Find out if your local government has a private-public emergency planning group that meets regularly. Building strong alliances before a pandemic may provide your workplace with the support and resources needed to respond effectively.

**Small Workplaces:** A flu pandemic can be especially challenging for small workplaces. Up to 40% of workplaces never reopen following a major disaster. Planning for flu or other disasters is key. Put strategies in place to protect your workers, customers, and business.

## Update your existing emergency operations plan

✔ **Meet with your emergency operations coordinator or planning team to update your emergency operations plan.** If your workplace does not have a person or team in place, determine who will be responsible for coordinating your workplace's pandemic flu actions. Review all aspects of your workplace, such as personnel, systems, services, and other resources. Make preparations for the key prevention strategies outlined in this guide. Develop or update your plan based on various scenarios your workplace may face during a flu pandemic.

**Small Workplaces:** Select an emergency planning coordinator and one support person to plan for emergencies like pandemic flu. They will be responsible for engaging community partners in planning efforts, reviewing workplace policies and protocols, and identifying critical workplace functions and positions to maintain during an emergency. Learn more about pandemic flu and Continuity of Operations Planning by visiting **https://www.fema.gov/media -library/assets/documents/93250**

✔ **Establish relationships with key community partners and stakeholders.** When forming key relationships, include the local public health department, local boards of education, and community leaders. Collaborate and coordinate with them on broader planning efforts. Clearly identify each partner's role, responsibilities, and decision-making authority. Review the pandemic flu plan for your community and participate in community-wide emergency preparedness activities.

## Address key prevention strategies in your emergency operations plan

- ✔ **Promote the daily practice of *everyday preventive actions* at all times** (see Page 5). Use health messages and materials developed by credible public health sources, such as your local public health department or the Centers for Disease Control and Prevention (CDC). **Read more about everyday preventive actions.**
- ✔ **Provide flu-prevention supplies in your workplace.** Have supplies on hand for workers, such as soap, hand sanitizer with at least 60% alcohol, tissues, trash baskets, and disposable facemasks. Plan to have extra supplies on hand during a pandemic. *Note: Disposable facemasks should be kept on-site and used only when someone becomes sick at the workplace. Those who become sick should be given a clean disposable facemask to wear until they can leave.*
- ✔ **Plan for worker absences.** Develop flexible pandemic flu attendance and sick-leave policies. Workers may need to stay home when they are sick, caring for a sick household member, or caring for their children in the event of school dismissals. Identify critical job functions and positions, and plan for alternative coverage by cross-training staff (similar to planning for holiday staffing).
- ✔ **Develop a method for monitoring and tracking flu-related worker absences.** Understand your usual absenteeism patterns at each worksite. Determine what level of absenteeism will disrupt day-to-day operations. If worker absenteeism increases to disruptive levels, some workplaces may need to consider temporarily reducing on-site operations and services.
- ✔ **Identify space that can be used to separate sick people (if possible).** Designate a space for people who may become sick and cannot leave the workplace immediately. If possible, designate a nearby separate bathroom just for sick people. Develop a plan for cleaning the room daily.
- ✔ **Plan ways to increase space between people to at least 3 feet or limit face-to-face contact between workers and those who come to the workplace.** Several ways to do this include offering workers the option to telework, creating reduced or staggered work schedules, spacing workers farther apart, and postponing non-essential meetings and travel.
- ✔ **Develop a risk-assessment and risk-management process for your workplace.** Work closely with local public health officials to develop a contingency plan if assessing and managing risks among workers and those who come to your workplace is needed (for example, conducting health screenings for flu-like symptoms).
  *Note: Your Human Resources Manager may want to review the current Employee Assistance Program (EAP) to ensure workers will have access to needed emotional and mental health services during and after a pandemic.*
- ✔ **Review your process for planning workplace events.** Identify actions to take if you need to temporarily postpone or cancel events.
- ✔ **Plan ways to continue essential services if on-site operations are reduced temporarily.** Provide Web- and mobile-based communication and services, if possible. Increase the use of email, conference calls, video conferencing, and web-based seminars.
- ✔ **Be familiar with your local board of education's pandemic flu plans.** Local public health officials may recommend schools be dismissed for up to 2 weeks until they have time to gather information about how fast the pandemic flu virus is spreading in your community and how severe the flu is. Workers with children may need the flexibility to work from home. Encourage workers to plan for alternative childcare arrangements now.

**Small Workplaces:** Determine if social media would be a helpful tool to increase and sustain your business before and during a pandemic. Consider creating a strong social media plan to provide information to customers and help secure online business and revenue in the event your workplace has to temporarily reduce on-site services.

## Communicate about pandemic flu and NPIs

- ✔ **Update your emergency communication plan for distributing timely and accurate information.** Identify everyone in your chain of communication (for example, workers, customers, suppliers, and key community partners and stakeholders) and establish systems for sharing information with them. Maintain up-to-date contact information for everyone in the chain of communication. Identify platforms, such as a hotline, automated text messaging, and a website to help disseminate information to those inside and outside your workplace.
- ✔ **Identify and address potential language, cultural, and disability barriers associated with communicating pandemic flu information to workers and customers.** Learn more about reaching people of diverse languages and cultures by visiting **www.cdc.gov/healthcommunication/Audience/index.html**. You also can learn more about communicating to workers in a crisis at **www.ready.gov/business/implementation/crisis**

## Get input and support for your emergency operations and communication plans

- ✔ **Share your plans with workers, suppliers, and key community partners and stakeholders.** Develop training and educational materials about the plans for workers.
- ✔ **Test and update your plans every 12–18 months, or as aspects of your workplace change.** Start with discussion-based practice sessions, such as tabletop exercises to identify and address the gaps in your plans.

### Create a culture of health and resilience for emergencies in your workplace.

Plan workshops, trainings, and health campaigns to help workers create emergency care and response plans for their households. Create a plan for providing health information to workers. Consider using multiple forms of communication, such as a website, text messaging, social media, or an automated phone system.

# During a Flu Pandemic: Take Action



## Did you know a flu pandemic could seriously impact the nation's economy, accruing costs of $100-$250 billion?

It is important that your emergency operations planning team meets regularly during a pandemic to accurately assess, manage, and communicate possible risks. Early action to slow the spread of flu will help keep workers healthy, reduce absenteeism, maintain productivity, and limit the negative impact of flu.

## Put your emergency operations and communication plans into action

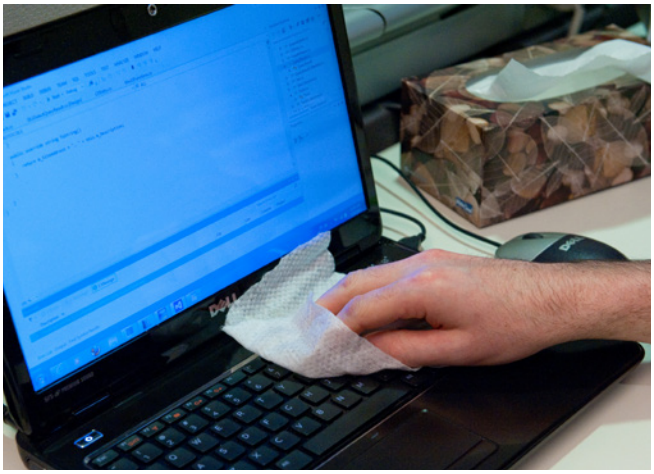
✔ **Stay informed about the local flu situation.** Get up-to-date information about local flu activity from public health officials. Be aware of temporary school dismissals in your area because these may affect your workers.
*Note: Early in the pandemic, local public health officials may recommend schools be dismissed temporarily to allow time to gather information about how fast and severe the flu virus is spreading in your community. Temporarily dismissing schools also can help slow the spread of flu.*

**Small Workplaces:** Work closely with your local public health department to learn how flu is affecting your community and what steps you need to take to protect your workers. You also can sign-up to receive alerts and updates directly from CDC during a pandemic. To become a subscriber, visit **http://www.cdc.gov/Other/emailupdates/**

✔ **Implement NPI actions to protect your workers and others** (see Page 5). Meet with your coordinator or planning team to discuss plans for starting NPI actions, such as increasing space between people or decreasing the frequency of contact among people. Again, work closely with your local public health department when starting NPIs reserved for flu pandemics. Discuss how these actions will impact your workplace.
*Note: Using multiple NPIs at the same time is more effective.*

✔ **Track worker absenteeism related to flu symptoms.** Work with local public health officials to determine when to begin tracking and reporting flu-related absenteeism. They may ask you to notify them if absenteeism is higher than normal for your workplace. Learn more about flu symptoms at: **https://www.cdc.gov/flu/about/disease/complications.htm**

✔ **Implement your risk-assessment and risk-management plan.** Work closely with local public health officials and healthcare partners to conduct health risk assessments at your workplace, if warranted by the severity of the pandemic.



## Communicate frequently with those in your communication chain

- ✔ **Update key community partners and stakeholders regularly.** Share information about how your workplace is responding to the pandemic.
- ✔ **Provide flu-prevention supplies and distribute health messages and materials to workers.** Continue to promote ***everyday preventive actions*** (see Page 5). Ensure that your workplace has supplies, such as tissues, trash baskets, disposable facemasks, and at least a 60% alcohol-based hand sanitizer for workers and customers. Clean frequently-touched surfaces and objects with regular soap and water or Environmental Protection Agency (EPA)-approved products. Offer resources that provide reliable pandemic flu information. Address the potential fear and anxiety that may result from rumors or misinformation. For pandemic flu health messages and materials, visit: **http://www.cdc.gov/nonpharmaceutical-interventions/tools-resources/educational-materials.html**
  *Note: Messages, materials, and resources should be culturally appropriate.*
- ✔ **Address the concerns of workers who are at high risk for flu complications.** Encourage workers to consult with their healthcare provider about how to protect their health, if they are at high risk for flu complications. Be prepared to address the health concerns and needs of workers who are at high risk (for example, by allowing them to telework, if possible). Learn who may be at high risk for flu complications at: **http://www.cdc.gov/flu/about/disease/high_risk.htm**
- ✔ **Provide information that explains why and when on-site operations and services may be reduced temporarily.** Some employers may choose to alter normal operations due to high worker absenteeism or lack of patronage.

## Take administrative action (as needed) to maintain operations

- ✔ **Implement flexible attendance and sick-leave policies (if possible).** Continue to encourage workers to stay home if they are sick or caring for a sick household member. Notify workers of when your workplace plans to implement pandemic flu leave policies. Provide instructions about how and when to safely return to work.
  *Note: If a worker gets sick with **flu symptoms**, they should stay home to lower their chances of spreading illness to others. CDC recommends they stay home for at least 24 hours after their fever is gone without the use of fever-reducing medicines, such as acetaminophen. This will help ensure their fever is truly gone, and they are past the point of being contagious. People with weakened immune systems may need to stay home longer.*

- ✔ **Increase space to at least 3 feet and limit face-to-face contact between workers in the workplace.**

- ✔ **Postpone or cancel large meetings or events.** Suspend non-essential business travel, if recommended by public health officials, and postpone workplace, community, and social events.

- ✔ **Separate those who become sick at your workplace from those who are well.** Send sick workers home immediately. If someone becomes sick at your workplace, separate them from others (particularly from those who are at high risk for flu complications) as soon as possible. Provide them with clean disposable facemasks to wear until they can leave. Work with the local public health department and nearby hospitals to care for those who become sick. If needed, arrange transportation for workers and others who need emergency care. Read more about caring for those sick with the flu at: **http://www.cdc.gov/flu/consumer/caring-for-someone.htm**
  *Note: Providing sick workers with facemasks does **not** replace the need to encourage them to go home and stay home when they are sick. Facemasks may be in short supply during a flu pandemic.*

### Communicate only accurate, up-to-date information.

Rumors and misinformation may contribute to confusion and fear. Address misinformation among workers by staying informed about the flu situation in your local community.

### Connect to *city* and *county* public health officials

http://www.naccho.org/about/LHD/index.cfm

### Connect to *state* and *territorial* public health officials

http://www.astho.org/Directory/

# After a Flu Pandemic Has Ended: Follow Up



## Did you know employers who focus on protecting and promoting health and safety have more productive and satisfied workers, and see reductions in absenteeism, lower levels of healthcare spending, and a decrease in rates of illness and work-related injuries?

Remember, a flu pandemic can last for several months. When public health officials determine that a flu pandemic has ended, work with them to identify criteria for phasing out and ending your workplace's NPI actions. The criteria should be based on reduced flu severity or a slowing of the outbreak in your local area. The criteria also should consider how easy or difficult it will be to end each action and return to normal operations.

## Evaluate the effectiveness of your emergency operations and communication plans

- ✔ **Discuss and note lessons learned.** Gather feedback from workers and key community partners and stakeholders to improve your plans. Identify any gaps in your plans and any needs you may have for additional resources.
- ✔ **Maintain and expand your emergency planning team.** Look for ways to expand community partnerships. Identify agencies or partners needed to help you prepare for pandemic flu, and make an effort to add them to your planning team.
- ✔ **Revisit your risk-assessment and risk-management plan.** Determine ways to improve planning and implementation processes. Assess the availability of medical, mental health, and social services for workers.
- ✔ **Update and practice your emergency operations and communication plans every 12–18 months, or as aspects of your workplace change.** Update your plans based on lessons learned, and replace necessary supplies and equipment.

## Congratulations on planning for a flu pandemic

A flu pandemic can occur at any time, and having a plan in place is essential. Your contingency or emergency operations plan will help protect the health and safety of your workers, customers, and the community, while preserving workplace productivity. Coordinate your planning activities with local public health officials and key community partners and stakeholders to help maintain essential services.

### Meet with your emergency coordinator or planning team within 30 days after a flu pandemic ends.

Debrief with your team and key community partners and stakeholders while they still remember events.

### Community Mitigation Guidelines to Prevent Pandemic Influenza—United States, 2017

http://dx.doi.org/10.15585/mmwr.rr6601a1

### Questions?

Help and planning resources are just a click away. Visit www.cdc.gov/npi and www.cdc.gov/flu/pandemic

# Readiness Resources



## Pandemic Flu Planning Resources

### CDC Pandemic Flu Planning Tools and Resources

- Visit **www.cdc.gov/npi** for the latest information and resources about nonpharmaceutical interventions (NPIs)
- Learn who may be at high risk for flu complications **http://www.cdc.gov/flu/about/disease/high_risk.htm**
- Community Mitigation Guidelines to Prevent Pandemic Influenza—United States, 2017 **http://dx.doi.org/10.15585/mmwr.rr6601a1**
- Visit **http://www.cdc.gov/flu/pandemic-resources/index.htm** for the latest information and resources about pandemic flu
- Reaching People of Diverse Languages and Cultures with Flu Communications **http://www.cdc.gov/healthcommunication/Audience/index.html**
- Creating Easy-to-understand Materials **http://www.cdc.gov/healthliteracy/pdf/Simply_Put.pdf**
- Crisis and Emergency Risk Communication (CERC) **http://emergency.cdc.gov/cerc/index.asp**
- Preparing for the Flu (including 2009 H1N1 Flu): A Communication Toolkit for Businesses and Employers, from the U.S. Department of Health and Human Services **http://www.cdc.gov/H1N1flu/business/toolkit/pdf/Business_Toolkit.pdf**
- Estimate potential days of work loss resulting from a pandemic flu at Flu Work Loss 1.0 **http://www.cdc.gov/flu/pandemic-resources/tools/fluworkloss.htm**

### CDC Pandemic Flu NPI Planning Guides

- Get Ready for Pandemic Flu: Educational Settings **https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-ed-set.pdf**
- Get Ready for Pandemic Flu: Individuals and Households **https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-ind-house.pdf**
- Get Ready for Pandemic Flu: Event Planners **https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-event-plan.pdf**
- Get Ready for Pandemic Flu: Community- and Faith-Based Organizations Serving Vulnerable Populations **https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-com-faith-org-serv-vul-pop.pdf**
- Get Ready for Pandemic Flu: Health Communicators **https://www.cdc.gov/nonpharmaceutical-interventions/pdf/gr-pan-flu-health-com.pdf**

### CDC Checklists

- Pandemic Flu Checklist for Workplace Administrators **http://www.cdc.gov/nonpharmaceutical-interventions/communication/pdf/pandemic-flu-checklist-workplace-administrators.pdf**

### CDC Factsheets

- Do Your Part to Slow the Spread of Flu **http://www.cdc.gov/nonpharmaceutical-interventions/pdf/do-your-part-slow-spread-flu-item5.pdf**

### CDC Trainings

- NPI 101—An Introduction to Nonpharmaceutical Interventions for Pandemic Flu **http://cdc.train.org/DesktopModules/eLearning/CourseDetails/CourseDetailsForm.aspx?courseId=1051645**
- CERC Pandemic Influenza Training **http://emergency.cdc.gov/cerc/cerconline/pandemic/index.html**
- Message Mapping Guide and Training **http://www.orau.gov/cdcynergy/messagemappingguide**

### Additional Planning Information

- 2009 Guidance on Preparing Workplaces for an Influenza Pandemic, from the U.S. Department of Labor, Occupational Safety and Health Administration **https://www.osha.gov/Publications/OSHA3327pandemic.pdf**
- 2009 What Employers can do to Protect Workers from Pandemic Influenza, from the U.S. Department of Labor, Occupational Safety and Health Administration **https://www.osha.gov/Publications/employers-protect-workers-flu-factsheet.html**
- Preparedness Planning for Your Business **http://www.ready.gov/business**
- Prepare My Business **http://www.preparemybusiness.org/**
- Exploring National Surveillance for Health-Related Workplace Absenteeism: Lessons Learned From the 2009 Influenza A Pandemic **http://www.ncbi.nlm.nih.gov/pmc/articles/PMC4552194/**
- Pandemic Influenza Guide for Critical Infrastructure and Key Resources (2011) **https://training.fema.gov/programs/emischool/el361toolkit/assets/cikr_pandemicinfluenzaguide.pdf**

### Connecting with Public Health Agencies

- Connect to city and county public health officials for local information **http://www.naccho.org/about/LHD/index.cfm**
- Connect to state and territorial public health officials for statewide information **http://www.astho.org/Directory/**

### Communicating about Pandemic Flu

- Culture, Language, and Health Literacy **http://www.hrsa.gov/culturalcompetence/index.html**
  See "Essential Health Literacy Tools" on the right side navigation toolbar.
- Developing Materials for Clear Communication **http://www.nih.gov/clearcommunication/**
- Crisis Communications Plan **http://www.ready.gov/business/implementation/crisis**
- Read more about the important differences between seasonal flu and pandemic flu **https://www.cdc.gov/flu/pandemic-resources/basics/about.html**

## Seasonal Flu Planning Resources

### CDC Seasonal Flu Planning Tools and Resources

- Visit **www.cdc.gov/flu** for the latest information and resources about seasonal flu
- Summary of Weekly Flu View **http://www.cdc.gov/flu/weekly/summary.htm**
- Flu View Portal **http://gis.cdc.gov/grasp/fluview/fluportaldashboard.html**
- Make it Your Business to Fight the Flu: A Toolkit for Businesses and Employers **http://www.cdc.gov/flu/pdf/business/Toolkit_Seasonal_Flu_For_Businesses_and_Employers.pdf**

### CDC Fact Sheets

- Everyday Preventive Actions **http://www.cdc.gov/flu/pdf/freeresources/updated/everyday_preventive.pdf**
- Hand-washing: A Corporate Activity—Improving Health and Increasing Productivity (CDC) **http://www.cdc.gov/healthywater/pdf/hygiene/hwcorporate.pdf**

### CDC Brochures

- Flu and You **http://www.cdc.gov/flu/pdf/freeresources/updated/fluandyou_upright.pdf**
- "Take 3" Actions to Fight the Flu **http://www.cdc.gov/flu/pdf/freeresources/general/take3.pdf**

### CDC Videos

- Do Your Part to Stop the Spread of Seasonal Flu at Home **https://www.youtube.com/watch?v=9APKBBr18Cc&feature=youtu.be**

**CDC Posters**

- Do Your Part to Slow the Spread of Germs **http://www.cdc.gov/nonpharmaceutical-interventions/communication/pdf/do-your-part-slow-spread-germs-poster.pdf**
- Don't Spread Germs at Work **http://www.cdc.gov/nonpharmaceutical-interventions/pdf/dont-spread-germs-work-item3.pdf**
- Don't Spread Germs at Work (with Message to Employers) **http://www.cdc.gov/nonpharmaceutical-interventions/pdf/dont-spread-germs-work-employers-item2.pdf**
- Stay Home If You're Sick **http://www.cdc.gov/nonpharmaceutical-interventions/pdf/stay-home-youre-sick-item5.pdf**
- Stay Home If You're Sick (with Message to Employers) **http://www.cdc.gov/nonpharmaceutical-interventions/pdf/stay-home-youre-sick-employers-item4.pdf**
- Everyday Preventive Actions **http://www.cdc.gov/flu/pdf/freeresources/family/flubreak-poster.pdf**
- "Take 3" Actions to Fight the Flu **http://www.cdc.gov/flu/pdf/freeresources/general/take3-poster.pdf**

**Additional Planning Information**

- Flu Near You **https://flunearyou.org/**
- Flu Season Hits US: Seven Steps You Can Take to Prepare Your Business and Employees **http://www.iesmallbusiness.com/news_sbdc/flu-season-hits-us-seven-steps-you-can-take-to-prepare-your-business-and-employees/**
- Seasonal Flu—Employer Guidance Reducing Healthcare Workers' Exposures to Seasonal Flu Virus **https://www.osha.gov/dts/guidance/flu/healthcare.html**
- CDC Foundation Business Pulse Tools and Resources **http://www.cdcfoundation.org/businesspulse/flu-prevention**

**Suggested Citation:**

*Get Your Workplace Ready for Pandemic Flu,* 2017. Atlanta, GA: Community Interventions for Infection Control Unit, Division of Global Migration and Quarantine, National Center for Emerging and Zoonotic Infectious Diseases, Centers for Disease Control and Prevention, April 2017.

Mayor & Council Meeting Date: March 18, 2020
Agenda Item Type: Review and Comment
Department: City Manager's Office
Responsible Staff: Jenny Kimball

## Subject

Action Report

## Recommendation

Staff recommends that the Mayor and Council review and comment on the Action Report.

## Attachments

Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (DOC)

Rob DiSpirito, City Manager 3/13/2020

Attachment A

Blue - new items to the list.
Red - latest changes.

# Mayor and Council Action Report

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| **2014-23** | 9/8/11 | R&P | Future agenda | **King Farm Farmstead**<br>**Status: Responses to a request for information (RFI) on potential future uses of the Farmstead were shared with the Mayor and Council on January 24, 2020. The responses will be discussed at the May 4, 2020 meeting.** | Ongoing |
| **2015-14** | 7/13/15 | CMO | Future agenda | **Purchasing Study Response**<br>**Status: An update on the Procurement Action Plan was shared on January 27, 2020. Another update will be provided in July 2020.** | Ongoing |
| **2016-12** | 9/26/16 | HR | Future agenda | **Vacancy Report**<br>Provide a Vacancy Report to the Mayor and Council at the end of each Quarter.<br><br>**Status: The Fiscal Year 2020 second quarter report was shared on January 27, 2020 meeting. The next report will be shared with the Mayor and Council on April 27, 2020.** | 2020 |
| **2016-16** | 10/10/16 | PDS | Future agenda | **Global Issues on BRT**<br>Schedule another discussion on BRT with the City of Gaithersburg and Montgomery County, to include broader issues such as governance and finance. Consider holding the meeting in Gaithersburg.<br><br>**Status: County transportation is studying alternatives to identify a recommended alternative for design of the MD 355 route. A recommended alternative for the Viers Mill route was selected. The project is funded for preliminary design in the County Budget for FY23.** | Ongoing |
| **2016-18** | 10/24/16 | PDS | Future agenda | **FAST – Faster, Smarter, More Transparent (Site Plan/Development Review Improvements)**<br>Provide regular updates on the status of the work.<br><br>**Status: A FaST update was provided to the Mayor and Council on November 18, 2019. The next update is scheduled for June 1, 2020.** | Ongoing |



Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (3047 : Action Report)

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| **2017-6** | 2/27/17 | CMO | Email | **Minority-, Female- & Disabled-Owned Businesses**<br>Provide updates on the Procurement Division's activities to engage and support minority-, female- and disabled-owned businesses.<br><br>**Status: The next update will be on April 27, 2020. Staff is researching a veteran component and local preference component to include in the April 27 discussion.** | Ongoing |
| **2017-11** | 6/12/17 | R&P | Agenda item | **Deer Population in Rockville**<br>Continue to monitor the deer population. Consider action steps and gather community input.<br><br>**Status: The Mayor and Council directed staff to implement the pilot deer culling program. Staff will bring required changes to the City Code for Mayor and Council for approval. Given the increased use of RedGate as a park, staff will reconsider the deer culling location and follow-up with the Mayor and Council.** | September-November 2020 |
| **2018-1** | 1/22/18 | Finance | Action Report | **Utility Billing System**<br>Provide updates on the replacement of the Velocity Payment System, powered by Govolution.<br><br>**Status: Contracts are in place, a kick-off meeting was held and implementation underway, with estimated completion in July 2020.** | July 2020 |
| **2018-7** | 6/18/18 | CMO | Agenda Item | **LGBTQ Initiatives**<br>Identify and implement Mayor and Council suggestions.<br><br>**Status: Comments about future gender-neutral bathroom installations were shared during the Mayor and Council's March 2 budget worksession. Discussion will continue through the remaining budget worksessions. Signs directing users to the gender-neutral bathrooms in City Hall were ordered and temporary signs are currently up.** | Ongoing |

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| **2018-8** | 6/18/18 | CMO/RCPD /R&P | Town Meeting | **Opioid Town Meeting**<br>Schedule a Town Meeting on the opioid crisis, to include prevention, enforcement and treatment.<br><br>**Status: A subset of the committee will meet the week of March 23 to work on a strategic plan for the Rockville Goes Purple initiative.** | Ongoing |
| **2018-11** | 8/1/18 | PDS | Agenda Item | **Neighborhood Shopping Centers**<br>Discuss mechanisms to encourage neighborhood shopping center revitalization and explore additional zoning and uses | Summer 2020 |
| **2018-15** | 10/8/18 | PDS | Future Agenda | **Short-Term Residential Rentals**<br>Discuss how to manage short-term residential rentals' (e.g., Airbnb) impact on city neighborhoods and explore options for taxing users.<br><br>**Status: Short-term residential rentals was discussed on January 13. Staff emailed the results of additional research requested by the Mayor and Council on January 23, 2020. The Mayor and Council also requested that a public hearing be held at a future date.** | Fall 2020 |
| **2018-19** | 10/15/18 | HR | Future Agenda | **Volunteer Program**<br>Discuss whether the Mayor and Council want to direct the City Manager to create a centralized volunteer program.<br><br>**Status: A report on the number of volunteers and volunteer hours for the first half of FY20 was provided on the January 13, 2020 agenda. The next update will be on the July 27, 2020 agenda.** | July 27, 2020 |
| 2019-1 | 10/29/18 | PDS | Future Agenda | **Accessory Structures**<br><br>**Status: The Mayor and Council authorized the filing of a Zoning Text Amendment on April 8. A workshop was held on May 29th for the public to learn more about these proposed regulations. A public hearing was held on July 15 and October 7, 2019. Discussion and Instruction was held on September 16, 2019. Mayor and Council and staff determined that there are outstanding issues to continue flushing out and to discuss further at a future meeting. This topic will be discussed at the April 20, 2020 meeting.** | April 20, 2020 |

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2019-2 | 2/25/19 | R&P/PDS/ CMO | Future Agenda | **RedGate Golf Course Property**<br><br>**Master Planning** – Prepare a scope of work for a master planning consultant. **Status: A proposed scope of work for master planning the property was discussed during the February 3 Mayor and Council meeting. A draft scope of work will be discussed at the March 30 Mayor and Council meeting. The Recreation and Parks Strategic Plan will be discussed on March 23, with the strategic plan results required to be reflected in any master plan of the property.**<br><br>**Veterans Home –** Consider the proposed partnership with the Maryland Veterans Administration to establish a home for veterans at the Redgate property. **Status: The City Manager continues to communicate with the State Veterans Administration, share information with the Mayor and Council and respond to questions. A discussion of this topic is on the Montgomery County Commission on Veterans Affairs' March 17 meeting agenda.** | March 30, 2020<br><br>TBD |
| 2019-4 | 3/25/19 | PDS | Future Agenda | **Business Improvement Districts (BIDs) and Tax Increment Financing (TIF)**<br>Discussion of potential City uses of BIDs and TIFs | TBD |
| 2019-7 | 4/1/19 | R & P | Memo | **Child Care Services**<br>Discuss city provision of child care services (history of the current program, community need for the service, private sector market, expansion to additional Rockville locations).<br><br>**Status: This item was discussed on September 9, 2019. Staff answered questions about child care cost recovery by email the week of October 14, 2019. A worksession discussion occurred on November 25, 2019. Additional information was provided via e-mail to the Mayor and Council on November 26, 2019. Staff is preparing a strategy to follow up on the worksession discussion.** | Summer 2020 |
| 2019-9 | 4/1/19 | HR | Memo | **Reduction in Force (RIF) Policy**<br>**Prepare a Reduction in Force (RIF) policy, to be incorporated in the Personnel Policy and Procedures Manual update.**<br><br>**Status: Mayor and Council will consider this policy in the context of the ongoing review of the proposed Personnel Policies and Procedures Manual (PPM). The next discussion of the PPM is scheduled for May 18, 2020.** | Mayy 18, 2020 |

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2019-10 | 4/1/19 | HR | Email | **Personnel Policy and Procedures Manual Update**<br>Share an update on the status of this effort.<br><br>**Status: The draft revised manual was distributed to Mayor and Council on January 31, 2020 and was discussed at the February 24, 2020 meeting. Mayor and Councilmembers are forwarding questions to staff who will provide responses in writing. The next discussion on agenda is anticipated to occur on May 18, 2020.** | May 18, 2020 |
| 2019-11 | 4/1/19 | HR | Future Agenda | **Retirement Incentive/Employee Buyout Program**<br>Provide information about employee buyout programs and discuss the potential for a Rockville program.<br><br>**Status: Director of Finance provided an update to the Mayor and Council via email on May 3, 2019.** | Summer 2020 |
| 2019-12 | 4/1/19 | Police | Future Agenda | **Parking Enforcement at Street Meters**<br>Share an overview of Rockville's current program and how other local jurisdictions handle parking enforcement at street meters, including hours of enforcement.<br><br>**Status: Parking meter operations was a component of the Mayor and Council's parking discussion on July 15th, 2019. Staff will continue to discuss this topic with FRIT and will keep the Mayor and Council informed as developments occur.** | Ongoing |
| 2019-14 | 6/3/19 | PDS | Future Agenda | **Voluntary Rent Increases**<br>Discuss City guidelines for rent increases instituted by landlords.<br><br>**Status: On March 2, the Mayor and Council adopted a resolution to establish a maximum rate of rent increase.** | Complete |
| 2019-15 | 9/16/19 | CMO | Future Agenda | **County Bill 24-19 Landlord Tenant Relations –Obligations of Landlord—Air Conditioning**<br>**Monitor County Council consideration of the Bill.**<br><br>**Status: The County Council voted unanimously to adopt Bill 24-19, with amendments, on February 25, 2020. The final version of Bill-24-19 was provided to the Mayor and Council on March 11, 2020.** | Complete |

Attachment A

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2019-16 | 9/16/19 | CMO | Future Agenda | **County Bill 29-19 Health and Sanitation – Electronic Cigarettes—Distribution; Resolution to Adopt Bill 29-19 as a Board of Health Regulation; Zoning Text Amendment 19-06 Vape Shops**<br>Monitor County Council consideration of the Bill, Resolution, and Text Amendment<br><br>**Status: A Public hearing was held on November 5, 2019. On November 25, 2019, the Health and Human Services Committee discussed and approved the bills. The bills, to be considered by the full Montgomery County Council after the new year (TBD), include:**<br>• **Bill 29-19 – Health and Sanitation–Electronic Cigarettes;**<br>• **Bill 31-19 – Health and Sanitation–Electronic Cigarettes – Distribution-Use and Possession; and**<br>• **Bill 32-19–Health and Sanitation- Flavored Electronic Cigarettes.**<br><br>**On December 9, the Mayor and Council approved a letter in support of the County vaping legislation. On March 9, the County Council's Planning, Housing and Economic Development Committee discussed and approved ZTA 19-06 Vape Shops, with clarifying amendments. The ZTA, vaping bills, and Board of Health Regulations are scheduled to be discussed by the County Council at their March 24, 2020 meeting. An email update with additional details was sent to the Mayor and Council on March 11, 2020.** | TBD |
| 2019-19 | 12/16/2019 | City Clerk/Director of Council Operations | Worksession | **Boards and Commissions Task Force Work Session** – Continue the Mayor and Council's discussion of the Boards and Commission Task Force (BCTF).<br><br>**Status: The Mayor and Council will discuss the BCTF's top four recommendations during a regular meeting on June 8, 2020.** | June 8, 2020 |
| 2019-20 | 12/16/2019 | City Clerk/Director of Council Operations | Meeting | **Post-Election Presentation –** The community meetings about the 2019 election were held on January 30 and February 8. A Board of Supervisors of Elections report to the Mayor and Council on the 2019 election is scheduled for May 11. | May 11, 2020 |
| 2020-01 | 1/6/2020 | Police | Future Agenda | **Emergency Management Program** – Receive an update from the Emergency Manager on the city's emergency management program and activities.<br><br>**Status: On the Mayor and Council's March 18th agenda, staff will brief the Mayor and Council on COVID-19.** | March 18, 2020 |



Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (3047 : Action Report)

Attachment A

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2020-02 | 1/13/2020 | CMO | Memo and Future Agenda | **5G Wireless Technology -** Collect information on the Westminster, MD fiber network and any information that the Maryland Municipal League (MML) has collected on alternatives to 5G.<br><br>**Status: Staff shared information with the Mayor and Council about Westminster's fiber network on February 24, 2020, clarifying that the Westminster network is unrelated to 5G wireless technology. Staff approached MML and learned that MML does not have any information about alternatives to 5G, but has collected over 50 ordinances, resolutions, and guidelines that Maryland municipalities have adopted in order to comply with the FCC order (effective 1/14/19).**<br><br>**Discussion of Zoning Text Amendment TXT2019-00251 to regular the Installation of Small Cell Antennas is on the March 18th Mayor and Council agenda.** | March 18, 2020 |
| 2020-03 | 1/13/2020 | DPW | Memo and Future Agenda | **Climate Change Efforts -** Brief the Mayor and Council on City efforts related to climate change.<br><br>**Status: Staff is preparing a memo describing the City activities underway and the areas that require direction from the Mayor and Council. Based on that background information and any other specific topics requested by the Mayor and Council, staff will schedule a discussion on a future agenda.** | TBD |
| 2020-04 | 1/13/2020 | Police | Memo and Future Agenda | **Drones and Public Safety –** Explore potential public safety issues associated with drones and how the City could consider monitoring, regulating and penalizing criminal activity. | Summer or Fall 2020 |
| 2020-05 | 1/13/2020 | R&P | Email | **Americans with Disabilities Act** – Provide information about the City's work to ensure compliance with ADA requirements at City facilities.<br><br>**Status: Staff provided initial information via email to the Mayor and Council on January 17, 2020. Funding for ADA-related projects is being discussed by the Mayor and Council in the context of the FY21 proposed budget.** | May 2020 |



Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (3047 : Action Report)

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2020-07 | 1/13/2020 | PDS | Future Agenda | **Affordable Housing Goals -** Discuss Rockville's strategy to meet the affordable housing goals established by the Metropolitan Washington Council of Governments (COG).<br><br>**Status:** The Mayor and Council kicked off their discussions of affordable housing on February 3. **On March 23, 2020, the Mayor and Council will consider an amendment to the MPDU regulations to provide clarifying language on affordability structuring for the homeownership component of the MPDU Program.**<br><br>Staff will conduct a forum with stakeholders in the development community and building trade association to solicit feedback on the following items, then bring the feedback to the Mayor and Council on agenda:<br><br>**1. Affordable Housing Fee for Small Residential Developments**<br>With this proposed policy change, one of the options would be for developers of smaller residential projects, consisting of 10-49 total dwelling units, to be required to pay an affordable housing fee. Staff has developed data on these smaller residential projects. Incorporating a fee for small development projects would increase the impact of the City's inclusionary zoning policy by requiring an affordable housing contribution across a broader range of residential development projects.<br><br>**2. In-Lieu Fee for Condominium Development**<br>Condominiums are often viewed as an entry into homeownership. Escalating condo fees are a problem in many communities, making the affordability of the units unsustainable. Some communities elect to accept in-lieu fees for such developments for this reason. While condominium fees alone may not be the sole factor leading to some owners of MPDU condominium units being housing-cost burdened, they are a contributing element. Some of the 272 units have been lost to the MPDU program in foreclosure proceedings, and others may be at risk of future foreclosures. With this proposal, staff is to create in-lieu fee calculations for condominium developments providing 50 or more dwelling units.<br><br>**3. Require Developments with 50 or More Units to Provide 15% MPDUs**<br>In this proposal, staff seeks the Mayor and Council's direction on whether to apply an MPDU set-aside requirement of 15% throughout the city. Doing so would increase and equalize the impact of the City's inclusionary zoning policy. If the Mayor and Council wish to consider an MPDU set-aside requirement above 15%, it would be worthwhile to weigh such consideration with the cost implications and to pair the set-aside requirement with incentives (e.g., reduced parking requirements, expanded increased height limits, fee waivers, and an expedited permit and approval process) | Ongoing |

Attachment A

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2020-08 | 1/27/2020 | CMO/PDS/Finance/DPW | Worksession | **Town Center – Follow up on Mayor and Council direction from the Town Hall meeting and Urban Land Institute (ULI) report.**<br>**Status: A discussion of the Town Center Work Program is on the Mayor and Council's May 11 agenda.**<br><br>**Parking** – Explore improvements to parking in Town Center<br>Status: CMO met with the new FRIT Executive on December 11, 2019.<br>**Status: Staff is preparing a proposal on parking improvements to present to the Mayor and Council.**<br><br>**Town Center Road Diet –** Study and report to Mayor and Council on suggestions in the TAP report and discussion at the Mayor and Council's TAP worksession.<br>**Status: Public Works examination of options is underway. Funding was identified for a consultant to continue the examination in FY20.**<br><br>**Real Estate/Broker/Economist Assessment –** In the context of the next update on the ULI recommendations, invite industry experts to dialogue on competitive challenges to Town Center<br><br>**Undergrounding of Route 355 –** Revisit the information provided to the Mayor and Council, including community impacts, to formulate an official Mayor and Council position.<br>**Status: Discussion is scheduled for June 1, 2020.** | Ongoing |
| 2020-09 | 1/27/2020 | DPW | Future Agenda | **Corridor Cities Transitway –** provide background information to facilitate the current Mayor and Council taking an official position on the CCT route.<br>**Status: Discussion is scheduled for May 4, 2020.** | May 4, 2020 |
| 2020-10 | 1/27/2020 | DPW | Future Agenda | **I-270 widening –** Establish a strategy for collaborating with the State.<br><br>**Status: City staff met with SHA staff and their consultant on February 14, 2020, to begin coordination on a potential MOU. State staff provided preliminary findings related to the potential impacts of different alternatives on traffic, parks, bridges, utilities, and storm water facilities. More information will be needed to develop the parameters to be used for negotiating an MOU between the City and MDOT. MDOT is preparing to release an RFQ this spring to seek their private developer partner, and they expect to complete this process by 2021. City staff will use information collected to draft parameters for negotiating an MOU with the State for Mayor and Council discussion and instructions.** | TBD |



Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (3047 : Action Report)

Attachment A

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| 2020-11 | | PDS | Future Agenda | **Annexation Options** – Discuss annexation options. | TBD |

**CLOSED/COMPLETED**

| Ref. # | Meeting Date | Staff/ Dep | Response Method | Direction to Staff / Action Taken / Status | Timeline |
|---|---|---|---|---|---|
| | | | | | |

Attachment 9.A.a: MC Action Report Master 2020 _REVISED 0226.docx (3047 : Action Report)

Mayor & Council Meeting Date: March 18, 2020
Agenda Item Type: Review and Comment
Department: City Clerk/Director of Council Operations Office
Responsible Staff: Sara Taylor-Ferrell

## Subject

Future Agendas

## Recommendation

## Attachments

Attachment 10.A.a: 03.23.2020 Mock Agenda (Rev. 3.13)(DOC)
Attachment 10.A.b: Future Agendas 3.18.2020 (Rev. 3.13) (XLS)

Sara Taylor-Ferrell, City Clerk/Director of Council Operations 3/13/2020

# MAYOR AND COUNCIL

## MEETING NO.
## Monday, March 23, 2020 – 6:00 PM

## MOCK AGENDA

Agenda item times are estimates only. Items may be considered at times other than those indicated.

Any person who requires assistance in order to attend a city meeting should call the ADA Coordinator at 240-314-8108.

**6:00 PM 1. Convene**

**2. Pledge of Allegiance**

**3. Agenda Review**

**6:05 PM 4. City Manager's Report**

**6:10 PM 5. Community Forum – Comments by Email or Phone**

**6. Mayor and Council's Response to Community Forum**

**6:15 PM 7. Consent**

**A. Award of IFB #09-20 for Temporary Labor and Staffing Services to Numa Management Assoc., All-Pro Placement Services, Inc., CMT Services Inc., and Pollen Scape Design, through June 30, 2021, in the Amount Not to Exceed $215,000**

**B. An Amendment to the MPDU Regulations to Provide Clarifying Language on Affordability Structuring for the Homeownership Component of the MPDU Program**

**C. Award of IFB #01-20, Scott Drive and Crofton Hill Lane Bridge Rehabilitation, to Concrete General, Inc. in the Amount Not to Exceed $460,906**

Attachment 10.A.a: 03.23.2020 Mock Agenda (Rev. 3.13) (3048 : Future Agendas)

D. **Award of SourceWell (NJPA) Rider Contract #081716-NAF, Rear Loader Refuse Truck, to National Auto Fleet Group in the Amount Not to Exceed $250,785**

E. **Award of Sourcewell/NJPA Rider Contract #030817-JHN for HVAC Systems, Installation and Service with Related Products and Supplies**

**6:20 PM 8. FY 2021 Budget Public Hearing**

**7:05 PM 9. Presentation and Discussion of the Recreation and Parks Strategic Plan**

**8:05 PM 10. Fiscal Year 2021 Mayor and Council Budget Worksession**

**9:35 PM 11. Review and Comment - Mayor and Council Action Report**

**12. Review and Comment - Future Agendas**

A. **Future Agendas**

**13. Old/New Business**

**9:50 PM 14. Adjournment**

The Mayor and Council Rules and Procedures and Operating Guidelines establish procedures and practices for Mayor and Council meetings, including public hearing procedures. They are available at: http://www.rockvillemd.gov/mcguidelines.

Attachment 10.A.a: 03.23.2020 Mock Agenda (Rev. 3.13) (3048 : Future Agendas)

# Future Agendas
## Tentative as of 03/04/2020

| Meeting : 03/30/20 07:00 PM (4 items) | | |
|---|---|---|
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Discussion | 60 | RedGate Master Planning: Discussion of Refined Scope of Work |
| Consent | 0 | Park Road and North/South Stonestreet Avenue Area Comprehensive Master Plan Amendment: Request to Release the Planning Commission Draft Document and Set a Public |
| Discussion, Instructions & Possible Introduction | 20 | Introduction and Discussion and Instruction of a Resolution to Revise the Schedule of Various User and Regulatory Fees for the City of Rockville |
| Presentation and Discussion | 30 | Introduction and Discussion and Instruction of an Ordinance to Revise Parking Fees |
| Total Meeting Time (In Hours) | 1 HRS 50 MINS | |
| | | |
| Meeting : 04/20/20 07:00 PM (10 items) WS Format | | |
| Category | Estimated Agenda Time Needed | Title |
| Proclamation and Recognition | 5 | Proclamation Declaring April 21, 2020 as Yom HaShoah/Holocaust Remembrance Day |
| Consent | 5 | Authorize the City Manager to Execute the Seventh Amendment to the Interim Management Agreement Between the Mayor and Council of Rockville and Street Retail, Inc. (Herein Referred to as "FRIT") to Temporarily Manage the Town Square Commercial District and the Town Square Street and Area Lighting District (Collectively, the "Town Square Management District") and the Plaza at Rockville Town Square |
| Work Session | 60 | Worksession with the REDI Board of Directors about the Memorandum of Understanding Between REDI and the Mayor and Council |
| Work Session | 60 | FY 2021 Mayor and Council Budget Worksession |
| Discussion and Possible Approval | 30 | Compensation and Classification Study |
| Consent | 5 | East Rockville Design Guidelines and Standards: Authorization to File a Zoning Text & Map Amendment |

Attachment 10.A.b: Future Agendas 3.18.2020 (Rev. 3.13) (3048 : Future Agendas)

# Future Agendas
## Tentative as of 03/04/2020

| | | |
|---|---|---|
| Public Hearing | 30 | Map Amendment MAP2020-00119, for the Rezoning of 102 Aberdeen Road from R-60 to R-60 (Historic District) in Order to Place the Property in a Historic District; Historic District Commission, Applicants |
| Discussion and Instructions | 30 | Discussion and Instructions to Staff on Zoning Text Amendment Application TXT2019-00254, to Revise the Development Standards for Accessory Buildings in the Residential Zones, and for Accessory Buildings Located in Both the MXT (Mixed-Use Transition) and HD (Historic District) Zones; Mayor and Council of Rockville, Applicant |
| Recognition | 10 | Recognition of the Student Delegation from Theodor Heuss Schule from Rockville's Sister City Pinneberg, Germany |
| Discussion and Instructions | 30 | King Farm Farmstead Request for Information (RFI) |
| | | |
| Total Meeting Time (In Hours) | 4 HRS 25 MINS | |
| | | |
| Meeting : 04/27/20 07:00 PM ( 10 items) | | |
| | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Public Hearing | 30 | Public Hearing Charter Review Commission |
| Discussion and Instructions | 45 | Strategy for Collecting and Using Community Survey Data |
| Presentation | 20 | FY19 Minority, Female, Disabled-Owned Outreach Program Update |
| Proclamation | 5 | Asian-American and Pacific Islander Heritage Month |
| Discussion | 10 | Fiscal Year 2020 Third Quarter Vacancy Report |
| Authorization | 30 | Authorization to File Zoning Text Amendment for Parkland Dedication |
| Proclamation | 5 | Proclamation Declaring May as Building Safety Month |
| Presentation | 20 | Presentation of the Environmental Excellence Awards by the Environment Commission |
| Consent | 5 | Award WMATA Rider Contract #(Contract #), Diesel Fuel, to (Vendor) in the Amount Not to Exceed ($Xxx) |

Attachment 10.A.b: Future Agendas 3.18.2020 (Rev. 3.13) (3048 : Future Agendas)

# Future Agendas
## Tentative as of 03/04/2020

| | | |
|---|---|---|
| Presentation and Discussion | 60 | Vision Zero Plan Presentation, and Discussion and Instructions to Staff |
| Total Meeting Time (In Hours) | 3 HRS 50 MINS | |
| | | |
| | | |
| Meeting : 05/04/20 07:00 PM ( 16 items) | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Proclamation | 5 | Proclamation Declaring May 16, 2020 as National Kids to Parks Day |
| Adoption | 5 | Adoption of an Ordinance to Revise Parking Fees |
| Proclamation | 5 | Proclamation Declaring Older Americans Month May 2020 |
| Proclamation | 5 | Proclamation Declaring Women's Health Week May 10 - 16 2020 |
| Adoption | 5 | Adoption of a Resolution to Establish the Service Charge Rate for Municipal Refuse Collection |
| Adoption | 5 | Adoption of an Ordinance to Appropriate Funds and Levy Taxes for Fiscal Year 2021 |
| Introduction and Possible Adoption | 5 | Introduction, and Possible Adoption, of an Ordinance to Levy Special Assessments For Driveway Aprons Constructed in Fiscal Year 2019, Project TC16 |
| Adoption | 5 | Adoption of a Resolution to Close Completed Capital Improvements Program Projects |
| Presentation | 10 | Third Quarter FY 2020 Financial Report |
| Introduction and Possible Adoption | 5 | Introduction, and Possible Adoption, of 2020 Bond Ordinance |
| Introduction and Possible Adoption | 10 | Introduction, and Possible Adoption, of an Ordinance to Amend Ordinance #__-20 to Appropriate Funds and Levy Taxes for Fiscal Year 2020 (Budget Amendment #3) |
| Public Hearing | 60 | Park Road and North/South Stonestreet Avenue Area Public Hearing |
| Adoption | 5 | Adoption of a Resolution to Revise the Schedule of Various User and Regulatory Fees for the City of Rockville |

Attachment 10.A.b: Future Agendas 3.18.2020 (Rev. 3.13) (3048 : Future Agendas)

# Future Agendas
## Tentative as of 03/04/2020

| | | |
|---|---|---|
| Discussion | 60 | Discussion on the Corridor Cities Transitway (CCT) |
| Proclamation | 5 | Proclamation Recognizing May as Bicycle Awareness Month |
| Presentation | 30 | TERRIFIC KID Bike Program Presentation |
| | | |
| Total Meeting Time (In Hours) | 3 HRS 45 MINS | |
| | | |
| Meeting : 05/11/20 07:00 PM ( 5 items) | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Presentation and Discussion | 60 | Board of Supervisors of Elections - 2019 Vote by Mail Election Report |
| Discussion, Instructions and Possible Adoption | 30 | Proposed Appointment Selections - 2020 Charter Review Commission and Scope of Work |
| Discussion | 60 | Discussion of Town Center Work Program |
| Presentation | 30 | Briefing on Project Plan PJT2020-00012, Key West at Fallsgrove, for an Amendment to the Fallsgrove Planned Development (PD) |
| Proclamation | 10 | Proclamation Declaring May 10 - 16, 2020 Taiwanese American Heritage Week |
| Total Meeting Time (In Hours) | 3 HRS 10 MINS | |
| | | |
| Meeting : 05/18/20 07:00 PM ( 4 items) | | |
| | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Recognition | 15 | Recognition of Winner and Semi-Finalist - 2020 Rockville "If I Were Mayor Essay Contest" |

# Future Agendas
## Tentative as of 03/04/2020

| | | |
|---|---|---|
| Discussion and Instructions | 45 | Discussion of the Personnel Policies and Procedures Manual |
| Presentation | 45 | Proposed Amendments to the Property Maintenance Code, Being Article XII of Chapter 5 of the City Code |
| Proclamation | 5 | Proclamation Recognizing May 18-22, 2020 as National Public Works Week |
| | | |
| Total Meeting Time (In Hours) | 1HR 50 MINS | |
| | | |
| | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Meeting : 06/01/20 07:00 PM ( 5 items) | | |
| Discussion | 60 | Undergrounding of 355 Discussion |
| Discussion, Instructions and Possible Adoption | 45 | Discussion and Instruction and Possible Adoption of Rockville Economic Development, Inc. (REDI) Agreement |
| Proclamation | 5 | Proclamation Declaring June 20 as World Refugee Day |
| Proclamation | 5 | Proclamation Declaring June as LGBTQ+ Pride Month |
| Presentation | 30 | FAST Project Report |
| | | |
| Total Meeting Time (In Hours) | 2 HR 25 MINS | |
| | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Meeting : 06/08/20 07:00 PM ( 3 items) | | |
| | | |
| Discussion and Instructions | 40 | Boards and Commissions Task Force Priority Recommendations |
| Discussion, Instructions and Possible Adoption | 60 | Park Road and North/South Stonestreet Avenue Area Work Session and Possible Adoption |
| Adoption | 30 | Resolution to Adopt Vision Zero Plan |
| | | |
| Total Meeting Time (In Hours) | 2 HR 10 MINS | |
| | | |
| Category | Estimated Agenda Time Needed (in minutes) | Title |
| Meeting : 06/22/20 07:00 PM ( 0 items) | | |