



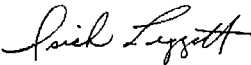
OFFICE OF THE COUNTY EXECUTIVE  
ROCKVILLE, MARYLAND 20850

Isiah Leggett  
*County Executive*

MEMORANDUM

February 2, 2018

TO: Hans Riemer, President  
Montgomery County Council

FROM: Isiah Leggett  
County Executive 

SUBJECT: Telecommunications Towers - ZTA

I am attaching a Zoning Text Amendment (ZTA) for the Council's consideration that would amend zoning regulations related to placement of telecommunications towers. Because wireless technology is evolving, Montgomery County has recently received an unprecedented number of applications to deploy small cell antennas in the County. Council amended the zoning code in the mid-1990's to address 100 foot+ tall cell towers, and in 2014 to address limited small cell deployments. Further action is needed now to address small cells in dense urban areas and on utility poles.

On one hand, we all welcome the coming transformation that allows us to be one of the most digitally connected counties at home and at business. On the other hand, many of our residents are concerned about the placement of these antennas. Because of this concern, I sponsored four public forums over the past year to hear from the public about proposed changes to the zoning code to allow deployment of small cell antennas both in commercial and residential neighborhoods.

Because of the concerns that have been expressed by our residents, this ZTA will propose very limited changes in residential zones. It will allow deployment of small cell antennas as a limited use only in those zones where commercial and employment uses are allowed, the CRN, CRT, CR and NR zones. I will come back with proposal for changes in residential zones at a later date.

As noted in the community meetings, residents also expressed concerns about the health effects of radio frequency (RF) emissions from antennas, especially antennas that would be placed much closer to houses. As you are aware, the Federal Communications Commission (FCC) has exclusive jurisdiction to establish RF emissions standards, and local jurisdictions are preempted from regulating antennas deployments based on health effects. The FCC has not

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February 2, 2018  
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updated its RF emission standards since 1996. We have learned that many of these standards are actually based on 1980s standards. We all agree that FCC's failure to issue new standards undermines public confidence that its rules will adequately address new wireless technology, and for that reason, Council President Riemer, Congressman Jamie Raskin and staff from all of our congressional delegation, and I met with FCC Chairman Ajit Pai in May 2017 to urge the FCC to update the RF standards.

Further, there is a very real threat of both federal and state preemption. We anticipate that in the very near term, an industry-sponsored bill that would preempt local zoning over small cell antennas may be introduced in the Maryland General Assembly. Therefore, it is important that Montgomery County move to enact zoning changes to demonstrate that we have provided a local solution. The ZTA I am proposing works to allow more deployments in commercial/residential zones, allows deployment of antennas that can support four carriers, and allows deployment of antennas on lower height buildings. It does not change, and leaves for further discussion, changes to deployments in residential areas.

I look forward to working with the Council to ensure a successful solution to the deployment of small cell technology.

IL/mh

Zoning Text Amendment No.: 18-XX  
Concerning: Telecommunications  
Towers – Limited Use  
Draft No. & Date:  
Introduced:  
Public Hearing:  
Adopted:  
Effective:  
Ordinance No.:

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

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Lead Sponsor: Council President at the request of the Executive

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**AN AMENDMENT** to the Montgomery County Zoning Ordinance to:

- allow certain telecommunications towers as a limited use;
- revise the use standards for antennas;
- revise the standards for antennas on existing structures;
- allow telecommunications towers as a limited use in certain zones; and
- amend telecommunications tower and cellular antenna provisions.

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

DIVISION 59-3.1. "Use Table"  
Section 3.1.6. "Use Table"  
DIVISION 59-3.5. "Commercial Uses"  
Section 3.5.2. "Communication Facility"  
Section 3.5.14. "Accessory Commercial Uses"  
DIVISION 59-8.3. "Planned Unit Development Zones"  
Section 59-8.3.2. "PD Zone"  
Section 59-8.3.3. "T-S Zone"  
Section 59-8.3.4. "Planned Neighborhood Zone"  
Section 59-8.3.5. "Planned Retirement Zone"  
Section 59-8.3.6. "Planned Cultural Center Zone"

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

*Underlining indicates text that is added to existing law by the original text amendment or by ZTA 14-09.*

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

*Double underlining indicates text that is added to the text amendment by amendment or text added by this amendment in addition to ZTA 14-09.*

*[[Double boldface brackets]] indicate text that is deleted from the text amendment by amendment or indicates a change from ZTA 14-09.*

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

## ORDINANCE

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

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

2 **DIVISION 59-3.1. Use Table**

3 \* \* \*

4 **Section 3.1.6. Use Table**

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

6 Division 4.9.

USE OR USE GROUP	Definitions and Standards	Rural Residential			Residential														Employment						Industrial								
		R	RC	RNC	Residential Detached							Residential Townhouse							Residential Multi-Unit			CRN	CRT	CR	GR	NR	LSC	EOF	IL	IM	IH		
					R-60	R-40	TLD	TMD	THD	R-30	R-20	R-10	GRN	CRT	CR	GR	NR	LSC	EOF	IL	IM	IH											
COMMERCIAL																																	
Animal Services	3.5.1																																
Animal Boarding and Care	3.5.1.B	C	C	C																													
Veterinary Office/Hospital	3.5.1.C	C	C	C																													
Communication Facility	3.5.2																																
Cable Communications System	3.5.2.A	C	C	C																													
Media Broadcast Tower	3.5.2.B	C	C	C																													
Telecommunications Tower	3.5.2.C	L/C	L/C	C																													

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

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

9           **DIVISION 3.5 Commercial Uses**

10          \*    \*    \*

11          **Section 3.5.2. Communication Facility**

12          \*    \*    \*

13          C.    Telecommunications Tower

14            1.    Defined

15            a.    Telecommunications Tower means any structure, other than a  
16                    building, [providing] used to provide wireless voice, data or  
17                    image transmission within a designated service area.

18                    Telecommunications Tower [consists of] includes one or more  
19                    antennas attached to a support structure and related equipment,  
20                    but does not include amateur radio antenna (see Section  
21                    3.5.14.A and Section 3.5.14.B, Amateur Radio Facility), radio  
22                    or TV tower (see Section 3.5.2.B, Media Broadcast Tower), or  
23                    an antenna on an existing structure (See Section 3.5.14.C,  
24                    Antenna on Existing Structure).

25            b.    Antenna Dimension means an antenna and any enclosure  
26                    containing the antenna, in which the total combined size of the  
27                    antenna within any enclosure, meets the following dimensions:

Standard	Maximum Length on Any Side (in feet)	Maximum Volume (in cubic feet excluding any equipment cabinet)
<u>A</u>	<u>4 feet 2 inches</u>	<u>6 cubic feet</u>
<u>B</u>	<u>4 feet 2 inches</u>	<u>46 cubic feet</u>
<u>C</u>	<u>6 feet</u>	<u>30 cubic feet</u>
<u>D</u>	<u>9 feet</u>	<u>13 cubic feet</u>
<u>E</u>	<u>15 feet</u>	<u>1 cubic foot</u>

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2. Use Standards

a. Where a Telecommunications Tower is allowed as a limited use in the Agricultural zone, Rural zone, Rural Cluster zone, Employment zones, and Industrial zones, and the Tower is not a replacement tower that complies with 59.3.5.2.C.2.b, it must satisfy the following standards:

- [i. It must not be staffed.]
- [ii]i. Antennas are limited to the following[types and dimensions]:
  - (a) an antenna that satisfies one of the Antenna Dimensions standards in Section 59.3.5.2.C.1.b;  
[omni-directional (whip) antennas with a maximum height of 15 feet and a maximum diameter of 3 inches];
  - (b) [directional or panel antennas with a maximum height of 8 feet and a maximum width of 2 feet; and
  - (c)] satellite or microwave dish antennas with a maximum diameter of 8 feet.
- [iii]ii. Signs or illumination on the antennas or support structure are prohibited unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.
- [iv]iii. In the AR, R, and RC zones, the tower must be located within an overhead transmission line right-of-way and is a maximum height of [199]179 feet with a setback of one

55 foot for every foot of height from any dwelling. The  
56 tower must be a minimum of 300 feet from any  
57 residence. A Telecommunications Tower conditional use  
58 application may be filed with the Hearing Examiner to  
59 deviate from this standard.

60 [v]iv. In the LSC, IL, IM, IH, zones, the tower is a maximum  
61 height of [199]179 feet with a setback of one foot for  
62 every foot of height from the property lines of all  
63 properties zoned Agricultural, Rural Residential, or  
64 Residential.

65 [vi]v. In the GR and EOF zones, the tower is a maximum  
66 height of [150]130 feet with a setback of one foot for  
67 every foot of height from the property lines of all  
68 properties zoned Agricultural, Rural Residential, or  
69 Residential. A Telecommunications Tower conditional  
70 use application may be filed with the Hearing Examiner  
71 to deviate from this standard.

72 b. In the Commercial/Residential, Industrial, and Employment  
73 zones, where a Telecommunications Tower is allowed as a  
74 limited use and the tower would replace a pre-existing utility  
75 pole, streetlight pole, or site plan approved parking lot light  
76 pole, the Tower is allowed if it satisfies the following standards:  
77 i. Antennas must comply with the Antenna Classification  
78 Category A under Section 59.3.5.2.C.1.b and must be  
79 installed perpendicular to the ground;



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- ii. The tower must replace a pre-existing utility pole, streetlight pole, or site plan approved parking lot light pole, and be located:
  - (a) within 2 feet of the base of a pre-existing pole and at the same distance from the curb line, or edge of travel lane in an open section, as the pre-existing pole in a public right-of-way;
  - (c) at least 10 feet from an existing building;
  - (c) outside of the roadway clear zone as determined by the Department of Transportation;
  - (d) in a manner that allows for adequate sight distances as determined by the Department of Transportation;
  - (e) in a manner that complies with streetlight maintenance requirements as determined by the Department of Transportation; and
- iii. A pre-existing streetlight or parking lot light pole must be removed within 10 business days after power is activated to the replacement tower and a pre-existing utility pole must be removed within 180 days after a replacement utility pole is installed.
- iv. The height of the tower, including any attached antennas and equipment, must not exceed:
  - (a) for streetlights, the height of the pole that is being replaced
    - (1) plus 6 feet when abutting a right-of-way with a paved section width of 65 feet or less;

- 107                                   (2) plus 15 feet when abutting a right-of-way  
108   with a paved section width greater than 65  
109   feet;
- 110                                   (b) for utility poles and parking lot lights, the height of  
111   the pre-existing utility or parking lot light pole plus  
112   10 feet.
- 113                                   v. The tower must be the same color as the nearest pre-  
114   existing pole.
- 115                                   vi. The tower must have no exterior wiring, except that  
116   exterior wiring may be enclosed in shielded conduit on  
117   wooden or utility poles.
- 118                                   vii. Any equipment cabinet:
- 119   (a) must not exceed a maximum volume of 12 cubic  
120   feet;
- 121   (b) used to support antennas on a replacement  
122   streetlight pole, must be installed in the  
123   Telecommunications Tower base or at ground  
124   level, unless this requirement is waived by the  
125   Department of Transportation;
- 126   (c) must be the same color or pattern as the pre-  
127   existing structure, except as provided in Section  
128   59.3.5.2.C.2.b.vii.(d);
- 129   (d) may be a stealth design approved by the  
130   Department of Transportation.
- 131                                   viii. The tower must include a replacement streetlight, if a  
132   streetlight existed on the pre-existing pole.

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- ix. The design of a replacement tower located in a public right-of-way, including the footer and the replacement streetlight, must be approved by the Department of Transportation.
- x. The noise level of any fans used to cool antenna and equipment must comply with Chapter 31B.
- xi. Signs or illumination on the antennas or support structure, excepting a streetlight, are prohibited unless required by the Federal Communications Commission, the Federal Aviation Administration, or the County.
- xii. Each owner of antennas attached to the tower must maintain antennas, equipment and abutting tower areas in a safe condition, remove graffiti, and repair damage.
- xiii. If a tower does not have a streetlight, the tower must be removed at the cost of the owner of the tower when the tower is no longer in use for more than 12 months. Antennas and equipment must be removed at the cost of the owner of the antenna and equipment when the antennas and equipment are no longer in use for more than 12 months. The Transmission Facilities Coordinating Group must be notified within 30 days of the removal.

[b]c. Where a Telecommunications Tower is allowed as a conditional use, it may be permitted by the Hearing Examiner under Section 3.5.2.C.2.a Limited Use standards, Section 7.3.1 Conditional Use, and the following standards:

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- ii. A Telecommunications Tower must be set back [from the property line,] as measured from the base of the support structure, as follows:
  - (a) A Telecommunications Tower is prohibited in any scenic setback indicated in a master plan.
  - (b) In the Agricultural, Rural Residential, and Residential Detached zones, a distance of one foot for every foot of height or 300 feet from an existing dwelling, whichever provides the greater setback.
  - (c) In the Employment zones, a distance of one-half foot for every foot of height [when] from the property lines of abutting Commercial/Residential, Employment, or Industrial zoned properties, and one foot for every foot of height [when] from the property lines of abutting Agricultural, Rural Residential, Residential zoned properties.
  - (d) The Hearing Examiner may reduce the setback requirement to not less than the building setback for a detached house building type in the applicable zone or to a distance of one foot from an off-site dwelling for every foot of height of the support structure, whichever is greater, if evidence indicates that a reduced setback will allow the support structure to be located on the property in a less visually obtrusive location than locations on-site where all setback requirements can be met

187 after considering the height of the structure,  
188 topography, existing vegetation, nearby residential  
189 properties, and visibility from the street. A reduced  
190 setback may be approved only if there is a location  
191 on the property where the setback requirements  
192 can be met.

193 iii. The maximum height of a support structure and antenna  
194 is [155]135 feet, unless it can be demonstrated that  
195 additional height up to [199]179 feet is needed for  
196 service, collocation, or public safety communication  
197 purposes. At the completion of construction, before the  
198 support structure may be used to transmit any signal, and  
199 before the final inspection required by the building  
200 permit, the applicant must certify to DPS that the height  
201 and location of the support structure conforms with the  
202 height and location of the support structure on the  
203 building permit.

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205 **Section 3.5.14. Accessory Commercial Uses**

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207 C. Antenna on Existing Structure

208 1. Defined

209 Antenna on Existing Structure means one or more antennas attached  
210 to an existing support structure, including [such as] a building, a  
211 transmission tower, a monopole, a light pole, a utility pole, a water  
212 tank, a silo, a barn, or an overhead transmission line support structure.  
213 Antenna on Existing Structure includes related equipment.

214 2. Use Standards

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

- 217 a. Antennas are limited to the following types and dimensions:
- 218 i. an antenna that satisfies one of the Antenna Dimensions  
219 standards in Section 59.3.5.2.C.1.b; and
  - 220 [i. omni-directional (whip) antennas with a maximum height  
221 of 15 feet and a maximum diameter of 3 inches;
  - 222 ii. directional or panel antennas with a maximum height of 8  
223 feet and a maximum width of 2 feet;
  - 224 iii]ii. satellite, radar, or microwave dish antennas with a  
225 maximum diameter of 8 feet. If the building includes a  
226 media broadcast studio, a dish may have a maximum  
227 diameter of 22 feet[; and
  - 228 iv. small cell antennas with a maximum height of 3 feet and  
229 a maximum width of 2 feet].

230 \* \* \*

231 c. Associated equipment must be located in an unmanned  
232 building, equipment cabinet, or equipment room in an existing  
233 building.

234 i. \_\_\_\_\_ An equipment building must satisfy the following  
235 standards:

- 236 [i.](a) It is a maximum of 560 square feet in area;  
237 however, a single equipment building in excess of  
238 560 square feet, located at ground level, may be  
239 used if:

240 ([a]1) the overall maximum square footage is  
241 1,500 square feet and the maximum height is  
242 12 feet;

243 ([b]2) the building is used for more than one  
244 telecommunications provider operating from  
245 the same monopole or tower; and

246 ([c]3) the building is reviewed by the  
247 Telecommunications Transmission Facility  
248 Coordinating Group under Chapter 2  
249 (Section 2-58E).

250 [ii.](b)It is a maximum of 14 feet in height, including the  
251 support structure for the equipment building.

252 [iii.](c)If the equipment building is greater than 4 feet in  
253 height and is[or cabinet is at ground level ]in a  
254 Residential zone, or the nearest abutting property  
255 is in a Residential zone, [and the equipment  
256 building or cabinet is more than 4 feet in height,  
257 including the support structure, the building or  
258 cabinet ]the building must be faced with brick or  
259 other material compatible with the surrounding  
260 neighborhood on all sides. [and the equipment  
261 must be surrounded by landscaping of at least 3  
262 feet in height.]

263 ii. If an equipment cabinet and any supporting platform is  
264 greater than 4 feet in height, and supports an Antenna on  
265 an Existing Structure that is not a utility pole, streetlight  
266 pole, or site plan approved parking lot light pole, and the

267 Existing Structure is in a Residential zone, or the nearest  
268 abutting property to the Existing Structure is in a  
269 Residential zone, the equipment must be surrounded by  
270 landscaping of at least 3 feet in height.

271 iii. If an equipment cabinet supports an Antenna on Existing  
272 Structure and the Existing Structure is a utility pole,  
273 streetlight pole, or site plan approved parking lot light  
274 pole, the equipment cabinet:

275 (a) must not exceed a maximum volume of 12 cubic  
276 feet; and

277 (b) must be the same color or pattern as the pre-  
278 existing structure, unless it is a stealth design  
279 approved by the Department of Transportation.

280 \* \* \*

281 d. Except under Section 3.5.14.C.2.e, [for a small cell antenna that  
282 satisfies Section 3.5.14.C.2.a.iv] when mounted on a rooftop or  
283 structure located outside of a right of way [on privately owned  
284 land], the antenna must meet the following standards:

285 i. An antenna is prohibited:  
286 (a) on any detached house, [or] duplex, or townhouse  
287 building type or an accessory structure associated  
288 with either building type; and

289 (b) in any scenic setback indicated in a master plan.

290 ii. An antenna and a related unmanned equipment building  
291 or cabinet may be installed on a rooftop, if a building is a  
292 minimum height of:



- 293 (a) [50] 35 feet in any Residential Detached, Rural  
294 Residential, or Planned Unit Development zone; or  
295 (b) [30] 20 feet in any Residential Multi-Unit,  
296 Commercial/Residential, Employment, or  
297 Industrial zone.

298 \* \* \*

299 e. [When located at least 60 feet from a detached house or a  
300 duplex building type, a small cell antenna that satisfies Section  
301 3.5.14.C.2.a.iv may be installed on any existing structure, at a  
302 minimum height of 15 feet, in any zone where an antenna on an  
303 existing structure is allowed.]

304 An antenna classified as Category A under Section 3.5.2.C.1.b,  
305 may be installed on any existing structure located in the right of  
306 way in any zone where an antenna on an existing structure is  
307 allowed, if:

308 i. the antenna is the same color or pattern as of the existing  
309 structure;

310 ii. the antenna is installed at a minimum height of 15 feet;  
311 and

312 iii. the structure is at least 20 feet from a dwelling in a Rural  
313 Residential, Residential and Planned Unit Development  
314 zone, and at least 10 feet from any structure in any  
315 Commercial/Residential, Employment, or Industrial  
316 zone.

317 **Sec. 4. Effective date.** This ordinance becomes effective 20 days after  
318 approval.

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320 This is a correct copy of Council action.

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323 Megan Davey Limarzi, Clerk of the Council