

From: Montgomery County Coalition to Protect Neighborhoods

To: Montgomery County Council

Re: Data centers, ZTA 26-01 and Bill 4-26

February 25, 2026

Dear Councilmembers and Mr. County Executive,

We urge you to pause all data center permitting and deployment until the county has created a responsible regulatory framework for data centers.

The proposed ZTA 26-01 is a useful start in the process; however it is missing a number of key items and in many ways relies on vague, poorly defined language that allows significant wiggle room for noncompliance with the spirit of the ZTA. For example, when it comes to negative impacts, the bill uses the language “minimize to the maximum extent practicable.” Who determines what extent is practicable? The applicant? We would prefer a) “minimize to the maximum extent reasonably possible” for general nuisance clauses and b) requirements to avoid altogether emissions from the data center that could make surrounding areas uninhabitable for residents (as set out below).

In another example of this ZTA not being ready for passage, it does not deal at all with the central question of primary power source for data centers.

We recommend the following amendments to the proposed legislative text.

Section numbers below refer to the ZTA 26-01:¹

1. Amend Section 3.1.6

- The new category for Data Centers should be moved out of the communications facilities group and into its own standalone category, 3.6.10, which is the group for industrial uses.²

¹ Section numbers refer to the ZTA 26-01 text introduced on January 20, 2026
https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=169&event_id=16734&meta_id=212320

² See Use Table, Sec 3.1.16

- Data centers should only be allowed as a conditional use, and only in the IH (heavy industrial) zone only (not all industrial zones).

Rationale:

There are currently three types of industrial zones in the zoning code: light (IL), moderate (IM), and heavy (IH), as set out in section 4.8.1.³ The definitions of light and moderate specifically disqualify data centers.

Sec 4.8.1.A sets out the definition of light industrial, which clearly does not match data centers, which are widely recognized to create noise, vibration, and other adverse environmental impacts that are not minimal.:

*“The IL zone is intended to provide land for industrial activities where major transportation links are not typically necessary and **noise, dust, vibration, glare, odors, and other adverse environmental impacts are usually minimal.**”*
[emphasis added]

Sec 4.8.1.B sets out the definition of moderate industrial, which also clearly does not match data centers:

*“The IM zone is intended to provide land for industrial activities where major transportation links are not typically necessary and **noise, dust, vibration, glare, odors, and other adverse environmental impacts are usually minimal.**”*
[emphasis added]

Sec 4.8.1.C squarely fits the characteristics of a data center:

*The IH zone is intended to provide land for industrial activities that usually need major transportation links to highways or rail and **may create significant noise, dust, vibration, glare, odors, and other adverse environmental impacts.***
[emphasis added]

Property owners in areas surrounding IL and IM zones never expected to have heavy (IH) uses near their property. These property owners have a reliance interest in the

https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-778

³ Section 4.8.1

https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-3375

existing zoning code and would be adversely affected – including without limitation their property values being decreased – if the Council acts in a manner inconsistent with the zoning code.

The "transportation link" referred to above is a resource link. If a use requires a dedicated "pipe" (whether for vehicles, electrons, bits, or water) that exceeds the capacity of a standard commercial or residential neighborhood, it meets the functional intent of the IH zone. The resource links for a data center include electricity transmission, connectivity to a fiber optic backbone, and water use.

2. Amend Section 3.5.2.B

Sec B.2

- All data centers and modifications thereto should be subject to the conditional use OZAH process.⁴
- Conditional use permits should have a 5-year renewable time limit.⁵
- The approval process of this conditional use and any changes or updates to the permit should require a public hearing.

Rationale: data center land use decisions should be made with public transparency and safeguards already built into the OZAH process. The renewal process provides an opportunity to look back and see if the permittee is meeting its obligations, as well as whether it is up-to-date on mitigation measures.

3. Amend Sec B.2.a

Minimum setback from a residential zone should be 3 miles

Rationale: vibration, sound, and infrasound reported at least 2.5 miles away from data centers. Therefore we propose 3 miles to reflect a safety margin.⁶

⁴ Office of Zoning and Administrative Hearings, <https://www.montgomerycountymd.gov/OZAH/index.html>

⁵ There is precedent in the zoning code for time-limited heavy industrial use permits, such as the 3-year limit for mining and excavation. See Sec 3.6.5.B.2.h
https://codelibrary.amlegal.com/codes/montgomerycounty/latest/montgomeryco_md_zone2014/0-0-0-2274

⁶ West Virginia News reported low frequency sound below the audible range at 2.5 miles
https://www.wvnews.com/news/around_the_web/states/sheehy-hasnt-live-up-to-midshipmens-honor-code/article_1baf3f29-bcc2-522b-b958-79f120d4e001.html

Delaware Sierra Club reported 2 miles
<https://www.sierraclub.org/sites/default/files/2025-07/data-center-factsheet-4.pdf>

4. Insert Sec B.2.b.vi

Add subparagraph vi to reflect the following:

the project, including related electrical infrastructure for generation, transmission, and energy storage, will not cause an increase in electromagnetic fields above baseline levels, between zero and 300 GHz, on properties outside the contiguous industrial zone in which the data center is constructed.

Rationale: if not constructed responsibly, data centers and their electrical power infrastructure (e.g., generation equipment, substations, transmission lines, and energy storage such as batteries) can cause increases in magnetic fields, electric fields, radiofrequency exposure, and "dirty electricity" in surrounding areas and on the surrounding electric grid, disrupting adjacent land users.⁷

5. Amend Sec B.2.d

Noise standards must include audible range (20 Hz-20 kHz) and sub-audible range (0-20 Hz).

Rationale: Much of the public discussions have focused on noise in the audible range; residents surrounding other data centers report significant effects from sound in the sub-audible range, also referred to as "infrasound."⁸

6. Amend Sec B.2.e

- Label this section as "Energy Standards".
- Insert new subparagraph (i). Energy source, which includes:
 - Require that data centers are not connected to the electric grid used by residential ratepayers.
 - This requirement can be met either by having on-site electricity generation or with off-site generation having dedicated transmission lines not shared by other users.

⁷ AI data centers causing "distortions" in US power grid, Data Center Dynamics, Jan 6, 2025
<https://www.datacenterdynamics.com/en/news/ai-data-centers-causing-distortions-in-us-power-grid-bloom-berg/>

⁸ Much attention has already been paid to the audible range. See here for additional information on sub audible.

Datacenters Behaving Like Acoustic Weapons: Data Centers Are Making People Sick, by Benn Jordan
https://www.youtube.com/watch?v=_bP80DEAbuo

- o Any new transmission lines should be buried (at the expense of the data center developer) to minimize impacts on surrounding residential areas
- o All infrastructure, including transmission lines, must be compliant with the National Electrical Safety Code⁹ and must comply with the standards set out above in section 2.b.vi, as proposed.¹⁰
- Relabel the current text subparagraph (ii), Generator Standards.

Rationale: the electromagnetic footprint on surrounding and other properties is often caused by the impacts the data centers have on the electric grid. Sequestering data centers to their own source of power generation and/or transmission infrastructure will mitigate spillover effects and to areas that would otherwise share the surrounding grid. Burying these transmission lines underground further minimizes these impacts.¹¹

7. Insert Sec B.2.f

Applicants should be required to post a bond for wind-down costs.

Rationale: Capital expenditures on data centers is approaching \$1 trillion per year.¹² We may be in a bubble phase and some current providers may go out of business. If that happens, taxpayers should not have to foot the bill to shutter these sites.

8. Insert Sec 3

Add the following:

3.a Ongoing monitoring and compliance

The data center owner/permittee should pay for independent audits to measure at baseline, post construction, and on an ongoing basis thereafter to ensure adherence with any representations made during the application process, including without limitation, the electromagnetic field conditions set out in section 2.b.vi above and the noise standards in section 2.d (as proposed above). Permit applications should include

⁹ Published by IEEE

<https://standards.ieee.org/products-programs/nesc/>

¹⁰ We realize that some aspects of electricity transmission are subject to state jurisdiction. While the County may not be able to control the state directly, it can withhold a permit for a data center until the applicant has navigated the state process efficiently to meet the County requirements.

¹¹ Carpenter, D. O. (2019). Extremely low frequency electromagnetic fields and cancer: How source of funding affects results. *Environmental Research*, 178, 108688.

<https://doi.org/10.1016/j.envres.2019.108688>

¹² AI Boom Drives Data Center Capex to \$1.7 Trillion by 2030, According to Dell'Oro Group, Feb 11, 2026
<https://www.delloro.com/news/ai-boom-drives-data-center-capex-to-1-7-trillion-by-2030>

a simulation of the expected electromagnetic field levels on the site and surrounding areas. All items from this paragraph will be posted online for public access.

Bill 4-26

If the Council decides to pass this bill alone, or in addition to the ZTA, we recommend the following amendments:¹³

9. Amend Sec 8-58.a.1.C to add the bolded text as follows:

potential environmental noise **and electromagnetic** impacts; and

10. Amend Sec 8-59.c.8 and 9 to allocate one representative each, from a civic association and an environmental group, appointed by the Council and one by the County Executive.

11. Amend Sec 8-60.a.3 to add the bolded text as follows:

the potential environmental impact of data centers on air, water, **the electromagnetic environment**, and woodland quality and supply in the County, including recommended measures to mitigate negative impacts;

General comments

We note the following regarding both the ZTA and bill:

- Unlike cell towers that provide personal wireless services,¹⁴ data centers are not subject to federal preemption with respect to their electromagnetic fields. Therefore the County and the state of Maryland are free to regulate data centers to protect residents from health effects of electromagnetic fields.¹⁵
- We are still formulating our position on this complex issue and may contribute additional comments as the text moves through the legislative process.

¹³ Based on the version introduced January 20, 2026

https://montgomerycountymd.granicus.com/MetaViewer.php?view_id=169&event_id=16734&meta_id=212318

¹⁴ See 47 USC §332(c)(7)(B)(iv)

[https://uscode.house.gov/view.xhtml?req=\(title:47%20section:332%20edition:prelim\)](https://uscode.house.gov/view.xhtml?req=(title:47%20section:332%20edition:prelim))

¹⁵ If a cell tower to provide personal wireless service to the public were proposed to be constructed on a data center site, this would be a separate land use, subject to the existing zoning code for antennas.

Data centers are an integral part of our modern life – transporting this letter to the Council and providing the Internet content and services we rely on every day. They are not benign, however. Just as we rely on certain chemicals for everyday life, we would not locate a plant handling or emitting toxic chemicals in a residential zone. So too must we take care to locate data centers responsibly.

Montgomery County has little experience with data centers – communities with more experience around the country are rejecting them because they were not deployed responsibly. We urge the Council not to repeat these mistakes.

Sincerely,

Montgomery County Coalition to Protect Neighborhoods
protectmoco@gmail.com