

West Montgomery County Citizens Association

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West Montgomery County Citizens Association (WMCCA) Comments on Bill 4-26 and ZTA 26-01

The West Montgomery County Citizens Association (WMCCA) works to safeguard the Potomac River and the environmental integrity of the Potomac Subregion by limiting environmentally disruptive infrastructure expansion, reducing stormwater runoff and tree loss, and protecting water quality, public health, and the environment.

ZTA 26-01 and Bill 4-26 are inadequate and lack rigorous safeguards. **The Council should first invoke a moratorium on data center development to allow time to develop enforceable protections and ensure full transparency.** We have an opportunity to ensure Montgomery County becomes a leader in demonstrating that economic development does not come at the expense of our air quality, water resources, public health, or environmental integrity.

Data Centers pose critical risks related to energy use, water quality, air pollution and environmental health impacts.

Protecting water quality must be central. Data center facilities increase impermeable surface area, accelerate stormwater runoff, and can concentrate toxic contaminants into local waterways — all of which can affect the Potomac watershed, as detailed in prior testimony.

Data centers increase air pollution, and are expected to contribute to 1,300 premature deaths every year in the U.S. by 2030, disproportionately affecting certain low-income communities according to [a report](#) by Caltech and University of California Riverside. One of the researchers [stated](#) that, “The findings reveal that the total public health burden of U.S. AI data centers in 2030 is valued at up to more than \$20 billion per year.”

Air pollution from data centers comes from both on-site diesel backup generators and the fossil fuels burned to produce the electricity they consume. Diesel generators emit fine particulate matter (PM2.5), nitrogen oxides (NO_x), and other toxic pollutants that can penetrate deep into the lungs and increase the risk of asthma, heart disease, and other respiratory problems. In addition, when data centers draw electricity from power plants that burn coal, oil, or natural gas, those facilities release pollutants into the air. These emissions contribute to smog, acid rain, climate change, and both short- and long-term health risks, particularly for children, older adults, and people with existing lung conditions.

Read: [The Unpaid Toll: Quantifying and Addressing the Public Health Impact of Data Centers AI's deadly air pollution toll | UCR News | UC Riverside](#)

Data centers frequently require substantial electrical grid expansion, including new substations, high-voltage transmission lines, and related infrastructure to meet massive energy demands. These upgrades extend well beyond project sites into surrounding communities and across regional systems. The financial burden is often borne by ratepayers through increased electricity costs, expanded transmission corridors, noise, visual impacts, and potential property value loss. Yet ZTA 26-01 does not require adequate disclosure of total megawatt demand, transmission buildout plans, or ratepayer cost analysis.

Source: [Berkeley Lab Report Evaluates Increase in Electricity Demand from Data Centers 2024 Berkeley Lab United States Data Center Energy Usage Report](#)

A 500-foot setback is wholly inadequate. While robust long-term research on the human health and environmental impacts of data centers is still developing, communities nationwide report serious concerns, including increased miscarriages and rare cancers near facilities.

Source

[CERES Report: Drained by Data: The Cumulative Impact of Data Centers on Regional Water Stress](#)

BBC: ['I can't drink the water' - life next to a US data centre](#)

[The water use of data center workloads: A review and assessment of key determinants - ScienceDirect?](#)

Rolling Stone ['The Precedent Is Flint': How Oregon's Data Center Boom Is Supercharging a Water Crisis](#)

Noise protections proposed in the ZTA are also insufficient. The ZTA's vague requirement to "minimize noise levels to the extent practicable" fails to protect residents and wildlife, particularly given documented reports of persistent low-frequency hum detectable more than 2.5 miles from data centers. Emissions may include sub-audible infrasound frequencies that are not adequately addressed by conventional noise standards, which focus only on human-audible ranges. Noise pollution is linked to sleep disturbance, cardiovascular effects, and other health impacts. Mechanical noise also disrupts wildlife, interfering with communication, navigation, and reproduction, and can be especially harmful to pollinators.

Additionally, the electromagnetic exposure associated with the electrical infrastructure needed to serve these facilities warrants serious consideration. The International Agency for Research on Cancer classified extremely low frequency (ELF) magnetic fields as a "possible" human carcinogen in 2001 based on associations with childhood leukemia from residential power-line exposure. Additional studies have reported associations with adult cancers, sleep disruption, Alzheimer's disease, and other health effects. Kaiser Permanente research has reported associations between prenatal EMF exposure and increased risks of miscarriage, ADHD, obesity, and asthma. While many countries have adopted precautionary policies to reduce EMF exposure, the United States has no federal safety standards.

Read more at [The Health Effects of EMF, ELF and Magnetic Fields from Power Lines and Electricity](#)

Current industry guidelines, including IEEE and ICNIRP exposure limits, allow EMF at levels thousands of times higher than levels associated with childhood cancer. These limits are designed primarily to protect against short-term, high-intensity exposure and do not address potential effects of chronic, long-term exposure reported in the scientific literature. If new above-ground transmission lines are constructed to power these facilities, residential EMF exposure levels in surrounding communities could increase. There should be required measurement, monitoring, auditing, public disclosure, and clear mitigation standards to protect nearby residents.

ZTA 26-01's grouping of data centers with "Communications Facilities" is inappropriate because it ignores the significant cumulative impacts of this industry. Data centers should have their own classification as an industrial use.

If all environmental issues are properly addressed after rigorous review, and if the decision is to move forward with data centers which is questionable in light of the numerous adverse effects reported from such facilities, at least data centers should be permitted only as a conditional use in the Heavy Industrial zone, not in light or moderate industrial zones, which are expressly intended for uses with minimal impacts. Data centers are industrial-scale facilities that can produce significant noise, vibration, and environmental effects consistent with heavy industrial uses.

We urge the Council to establish an environmentally responsible regulatory framework before approving additional data center deployment so that Montgomery County can avoid harms increasingly reported in communities nationwide.

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RE: ZTA 26-01

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