STOP SOLON TOWNSHIP DATA CENTER

We, the residents of Solon Township, request that the Township Board enact an immediate 9 to 12 month moratorium on the approval, permitting, rezoning, or construction of any data center or large-scale computing facility within Solon Township while the Township conducts a full public review and environmental, health, and social impact assessment.

Water	Energy	Noise & Light	Health
• U.S. data centers' total water use reached about **17.4 billion gallons in 2023** and could exceed **150 billion gallons over five years by 2028**, largely for cooling purposes.[1] • Closed-loop systems concentrate salts, metals, and treatment chemicals over time, and when *blow-down* is finally discharged it can contain **contaminants (e.g., glycol) at *thousands of times regulatory limits*** for surface waters, posing serious environmental hazards.[2] • Most of a closed-loop data center's water footprint comes from the electricity it uses, so even water-efficient cooling **shifts water demand** to power generation rather than eliminating it.[3] • Although closed-loop systems recycle most water, they still rely on municipal sources for makeup. In the Great Lakes region, where **water levels are dropping**, these withdrawals add pressure on drinking water and other community needs.[4]	• In parts of the U.S. with dense data centers (e.g., Northern Virginia), utility bills have **already risen ~20%** for some households despite no increase in personal consumption, linked to rising grid demand.[5] • Data center demand strain on grid markets can increase wholesale electricity capacity prices **by ~1,000 %**, which can translate into **higher retail bills for consumers** as utilities recover costs.[6] • Analyses estimate that a large data center (~1 GW) could cause **5 – 10 % increases in residential electricity rates** in its region if cost protections aren't in place.[7] • U.S. data centers consumed **about 183 TWh of electricity in 2024 (~4 % of national use)** and that total demand is **projected to grow to about 426 TWh (~12%) by 2030** under current trends.[8] • PJM customers absorbed **$4 billion in 2024** for data center grid connections, raising costs for residents not directly consuming the power.[9]	• Data center cooling and backup equipment are reported to generate **55–85 dBA** of noise - enough to disturb nearby residents and contribute to hearing and health problems.[10] • Security lighting on expansive campuses can be **"easily seen for miles,"** especially in rural or darker areas, meaning the visual impact **extends well beyond the property line** and disrupts natural nighttime darkness.[11] • Constant noise from data centers — often a humming or buzzing from servers and cooling systems — has been linked to **sleep disturbance, headaches, stress, and anxiety** among nearby residents, and can even exceed safety standards that protect against hearing damage.[12]	• Air pollution from data center energy use and on-site diesel generators has been linked to **over $5.4 billion in U.S. public health costs (illnesses like asthma, cancer)** between 2019–2023.[13] • A California study found **health impacts** related to pollution from data centers **tripled** over four years, with emissions linked to respiratory and cardiovascular conditions.[14] • Diesel backup generators and power plant emissions tied to data centers contribute fine particulate and nitrogen oxide pollution that is known to increase **respiratory and cardiovascular disease risks** in surrounding communities.[15] • Communities within a mile of many data centers tend to have **higher-than-average air pollution levels**, heightening risks for respiratory illnesses and deepening existing health inequalities.[16]

Sources

[1]Data centers: An overview for Hoosier communities: https://eri.iu.edu/resources/fact-sheets/data-centers.html

[2]Closed-Loop Cooling: Water Saver or Chemical Time Bomb? https://ketos.co/closed-loop-cooling-water-saver-or-chemical-time-bomb

[3]AI's Cooling Problem: How Data Centers Are Transforming Water Use: https://www.eli.org/vibrant-environment-blog/ais-cooling-problem-how-data-centers-are-transforming-water-use?utm_source=chatgpt.com

[4]Water levels across the Great Lakes are falling – just as US data centers move in: https://www.theguardian.com/technology/2025/dec/16/great-lakes-us-data-centers

[5]AI Data Centers Are Hiking Electricity Costs in Some States as Expert Warns 'There's So Much More to Come': https://people.com/ai-data-centers-are-hiking-electricity-costs-in-some-states-as-expert-warns-theres-so-much-more-to-come-11849734

[6]Prices in biggest US power grid auction hit new record, signaling higher utility bills ahead: https://www.reuters.com/business/energy/prices-biggest-us-power-grid-auction-hit-new-record-supply-crunch-2025-12-17/

[7]Consumers Energy case sheds light on how Michigan data centers could hike your power bill: https://planetdetroit.org/2025/10/data-centers-michigan-power-costs/

[8]What we know about energy use at U.S. data centers amid the AI boom: https://www.pewresearch.org/short-reads/2025/10/24/what-we-know-about-energy-use-at-us-data-centers-amid-the-ai-boom/

[9]Study Finds $4B in Data Center Grid Costs Shifted to Consumers Across PJM Region: https://www.datacenterfrontier.com/energy/article/55321163/study-finds-4b-in-data-center-grid-costs-shifted-to-consumers-across-pjm-region

[10]Data centers: An overview for Hoosier communities: https://eri.iu.edu/resources/fact-sheets/data-centers.html

[11]Data centers are changing the landscape. Here's how they may affect rural Virginia: https://cardinalnews.org/2025/03/12/data-centers-are-changing-the-landscape-heres-how-they-may-affect-rural-virginia/

[12]Understanding the impact of data center noise pollution: https://www.techtarget.com/searchdatacenter/tip/Understanding-the-impact-of-data-center-noise-pollution

[13]Pollution from Big Tech's data centre boom costs US public health $5.4bn: https://www.ft.com/content/d595d5f6-79d1-47eb-b690-8597f09b39e7

[14]California data center health impacts tripled in 4 years: https://news.ucr.edu/articles/2025/11/21/california-data-center-health-impacts-tripled-4-years

[15]Han Y., Wu Z., Li P., Wierman A., Ren S. 2024. The unpaid toll: quantifying the public health impact of AI. arXiv. 2412.06288.

[16]The Health Divide: The AI data center boom will harm the health of communities that can least afford it: https://centerforhealthjournalism.org/our-work/insights/health-divide-ai-data-center-boom-will-harm-health-communities-can-least-afford