

Meeting with Chairman Estes
August, 20, 2026 at 3pm and Town Hall
Topic: DATA CENTERS
Speaker: Gina

Hello,

Thank you for taking the time to meet with us today. I have included some resources regarding the topics discussed below. We'd appreciate your time in considering and reviewing the information below.

PLEASE THOROUGHLY READ THIS WEBPAGE:

<https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers>

Take into consideration this note: "Right now, permitting decisions for data centers are being made without any clear accounting of their public health costs—and that gap means health damages are systematically left out of these important decisions. Independent, science-based health impact analysis is part of how we close that gap and bring these costs into decision-making." Quoted from: Karen Feldscher, Associate Director for News in the Office of Communications, Harvard School of Public Health,

(<https://hsph.harvard.edu/news/analyzing-air-pollution-health-economic-risks-from-ai-data-centers/>)

Claim: Data centers are HUGE and continue to demand more space.

Fact:

- In 2024, the average data center site covered about 224 acres or 0.35 square miles — roughly the size of 450 football fields. This represents a 144% increase since 2022.
- The average data center occupies around 100,000 square feet, and hyperscale data centers typically occupy 10 acres, or over 435,000 square feet.
- Google has announced a \$400 million expansion to an existing data center, Microsoft recently acquired 300 acres of land, and Vantage Data Centers has a \$3 billion project in the works.

Sources:

<https://www.wri.org/insights/us-data-center-growth-impacts>

<https://rpa.org/news/lab/the-rise-of-data-centers>

<https://programs.com/resources/data-center-statistics/>

Claim: Data centers generate a large amount of waste that fills landfills. When looking at the statistics listed below, keep in mind that a "refresh" includes swapping out all of the computer/server parts, cooling equipment, and other physical items inside of the data centers. This does not account for wastewater or wasted cooling liquid, nor for power usage/waste. The average data center produces 22,000 pounds of waste a year.

Facts:

- Operational site data shows a standard mid-sized data center location generates roughly 22,000 pounds of routine operational non-hazardous waste per year
- AI hardware refresh cycles are compressing from five to seven years down to roughly 18–36 months, dramatically increasing the volume and cadence of decommissioned assets.
- Researchers predict a thousand-fold increase in e-waste from AI data centers, estimating 1.2-5 million metric tons of discarded hardware annually by 2030.

- The report claims that 40% of organizations have refreshed more frequently since COVID-19, and that 44% upgrade their server infrastructure every three years or less.

Sources:

<https://www.ehn.org/ai-data-center-energy-use>

<https://horizontechnology.com/news/data-center-hardware-refresh-cycles/>

<https://invrecovery.org/data-center-decommissioning-in-2026-navigating-ai-infrastructure-upgrades/>

Claim: No Meaningful New Jobs and DATA CENTERS COST US MONEY

Facts:

- A review of more than 1,200 U.S. data centers found that even the largest employ fewer than 150 permanent workers, and sometimes as few as 25.
- Data centers have typically not paid their fair share in utilities, particularly for electricity consumption, and in those situations other consumers (including residential customers) have had to pay more than they otherwise would.
- When a utility grid operator must add new infrastructure to accommodate growing populations or large load customers, rates may increase for all users in that region, despite attempts to regulate those increases or to allocate costs to the large load customer.
- Water and electric infrastructure often remains in place for around 30 years. If a data center downsizes or relocates before these costs are recovered, communities may be left paying for infrastructure sized for a facility that no longer exists.
- The U.S. Energy Information Administration shows the average resident has been paying 37% more for electricity since 2020.
- 2025 saw over \$60 billion worth of electricity rate increases countrywide, with Americans paying almost 10% more for electricity on average compared to 2024.
- More pressure on the grid naturally means more pressure to update the grid. Local belief and research alike contend that the cost of these grid updates, as well as the price tag of the extra energy demand, will show up in locals' energy bills. A Harvard study provides evidence that under-the-table agreements between utilities and Big Tech consumers could be partly responsible for increased rates on everyday residents' bills.
- Increased prices have already trickled down to homeowners. With the highest concentration of data centers, Virginia is predicted to see the highest increases in the coming years. Today's average monthly electricity bill in the state is about \$143, but could surge to \$315 by 2039.

Sources:

<https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers>

<https://www.wri.org/insights/us-data-center-growth-impacts>

<https://sites.uab.edu/humanrights/2025/10/02/construction-and-consequences-the-human-impacts-of-artificial-intelligence-data-centers/>

<https://programs.com/resources/data-center-statistics/>

Claim: Data Centers Cause Noise Pollution And Are Damaging to Animals

Facts:

- Smaller diesel generators reportedly reach 85 decibels, levels that can harm hearing. Larger industrial units can approach 100 decibels — equivalent to a motorcycle or jackhammer.
- Residents in Loudon County, Virginia, reported disruptions in sleep, headaches and even lower quality of life because of a nearby data center, experiences that were echoed during a recent congressional roundtable.
- These include the emission of Electromagnetic Fields (EMF) and the release of heat into their surroundings. Not only are these things dangerous to humans, but they are also potentially dangerous to one insect that is essential to many lifeforms: bees.
- A study published by iScience revealed that even weak EMFs pose a threat to the natural patterns of bees. "Weak [EMFs ...] significantly alter honeybee floral landing behaviors. [They] reduced landings by [up to] 71%," it stated. "These findings underscore the potential for [EMFs] to disrupt plant-pollinator interactions, threatening pollination efficiency, a cornerstone of agriculture and biodiversity." According to a research article published on ScienceAdvances, EMFs are also capable of interfering with a bee's learning, navigation system, flight and decision-making.
- A 2023 review of research on EMF and insects by Thill et al. (2023) documented decreased reproductive capacity, altered behavior, oxidative stress, DNA damage, and impaired development. A review of over 1,200 studies examining EMF impacts to wildlife by Levitt et al. (2021) details how bees may be reacting negatively to EMF "through multi-sensory mechanisms to numerous sources of anthropogenic multi-frequency [EMF] interference." Numerous experts caution that EMF limits are outdated and human-centric, ignoring the growing research reporting the impacts of EMF exposure on wildlife health, especially for pollinators.
- Texas Farmer raises commercial cattle and registered boar goats on two properties totaling about 225 acres. He said the constant noise generated by a data center, including low-frequency sound that humans can't hear but animals can, would make it impossible for his cattle and goats to breed.
- The noise from a data center can reach wildlife up to a mile away, and its effects on animals' behavior are more disruptive than most residents realize.
- Data centers disrupt the environment in 5 main ways: habitat loss from their construction, loss and fragmentation of habitat from the expansion of electrical infrastructure, freshwater use, noise pollution, and light pollution.
- Noise pollution can cause chronic stress, weaken the immune system, and disrupt circadian rhythms in animals and humans; it can also interfere with an animal's ability to find a mate or hunt for prey.

Sources:

<https://www.wri.org/insights/us-data-center-growth-impacts>

<https://opgov.news/articles/are-ai-data-centers-dangerous-to-bees>

<https://www.ehn.org/honeybee-emf-power-line-pollination>

<https://www.kwtx.com/2026/06/27/temple-rancher-worries-data-center-construction-threatens-family-farm-dating-back-1870s/>

<https://a-z-animals.com/articles/nashville-zoo-vs-a-data-center-5-ways-wildlife-loses/>

Claim: Data Centers Cause Water Demand and Pollution

Facts:

- Stormwater runoff from data centers contains heavy metals, oils, cleaning agents, and corrosion inhibitors.
- Most data centers source water from community drinking water utilities, increasing demand on local water supplies and **raising water treatment costs for all ratepayers**.
- A single large data center can consume up to five million gallons of water per day — the same daily water use as more than 15,000 homes.
- Mid-sized facilities can use up to 300,000 gallons of water a day
- In 2021, just one of Google's data centers in Oregon used up 355 million gallons of water. these centers are draining wells and aquifers, leaving locals without drinkable or fully functional running water in their homes
- Large buildings and landscape changes: During storms, rainwater cannot penetrate the ground and is instead discharged to creeks and rivers, where it increases stormwater impacts and delivers pollutants to nearby waters.
- Cooling often relies on evaporation, which causes much of this water to be released into the atmosphere instead of being returned to the river system. This results in a net loss of water for rivers and aquatic habitats.
- Some facilities use cooling systems that require a much smaller amount of water or sometimes no water at all, like closed-loop cooling systems or direct-to-chip liquid cooling systems, but these typically increase electricity demand.

Sources:

<https://a-z-animals.com/articles/nashville-zoo-vs-a-data-center-5-ways-wildlife-loses/>

https://www.americanrivers.org/rivers-and-data-centers/?gad_source=1&gad_campaignid=12077091751&gbraid=0AAAAAD-YJLTLKAKcl6wU29Kweq9duiRLc&gclid=CjwKCAjws_DTBhB_EiwAXZknGTvc9MfMUonhF-4rMrNq1IEPuWqbZ0up2Z4NkfejQpCE4ca4iOJV5RoCD0cQAvD_BwE

<https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers>

<https://www.wri.org/insights/us-data-center-growth-impacts>

<https://sites.uab.edu/humanrights/2025/10/02/construction-and-consequences-the-human-impacts-of-artificial-intelligence-data-centers/>

Claim: Power Demand and Environmental Pollution

Facts:

- Data centers use systems of cameras and 24/7 bright floodlights to secure their perimeters, posing challenges for nearby life. Light pollution disorients migrating birds, causing them to waste energy by flying outside of their historical migration routes and leaving them vulnerable to predation. Resident animals suffer serious harm from this bright intrusion. "It shifts wildlife away from light pollution: take your big deer, foxes, things that are crepuscular or nocturnal aren't going to spend their time where there's bright lights constantly," according to Hart.
- Air pollution is the most acute concern. Fossil-fueled power plants and diesel backup generators that power data centers emit hazardous pollutants such as nitrogen oxides and fine particulate matter, increasing rates of respiratory diseases, cardiovascular conditions, and elevating cancer risk in nearby communities. A recent model indicates that the U.S. data centers in 2030 could contribute to nearly 1300 deaths annually, resulting in a public health burden of more than \$20 billion.

- More pressure on the grid naturally means more pressure to update the grid. Local belief and research alike contend that the cost of these grid updates, as well as the price tag of the extra energy demand, will show up in locals' energy bills. A Harvard study provides evidence that under-the-table agreements between utilities and Big Tech consumers could be partly responsible for increased rates on everyday residents' bills.
- Diesel generators can release 200 to 600 times more nitrous oxides (NOx) than a natural gas plant while producing the same amount of energy. NOx pollution can cause irritation in the eyes, throat, and nose, as well as more severe cases of respiratory infection, reduced metabolism, and even death.
- Increased prices have already trickled down to homeowners. With the highest concentration of data centers, Virginia is predicted to see the highest increases in the coming years. Today's average monthly electricity bill in the state is about \$143, but could surge to \$315 by 2039.

Sources:

<https://a-z-animals.com/articles/nashville-zoo-vs-a-data-center-5-ways-wildlife-loses/>

<https://pmc.ncbi.nlm.nih.gov/articles/PMC12273412/>

<https://www.environmentalhealthproject.org/post/the-dangers-of-data-centers>

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<https://programs.com/resources/data-center-statistics/>

Claim: Data centers are detrimental to our health.

Facts:

- To maintain operations during power disruptions, data centers often rely on on-site backup generators powered by diesel or natural gas, which contribute to local air pollution.
- Together with the Piedmont Environmental Council, we completed an analysis of the Vantage Data Center in Loudoun County, Virginia. We estimated between \$53 million and \$99 million in annual health damages from associated air pollution. The damages we estimated are driven primarily by an estimated 3.4 to 6.5 additional premature deaths per year across the impacted region, along with increased hospital admissions, asthma-related outcomes, and lost productivity.
- Diesel generators, the most common source of backup power for data centers, emit a cocktail of harmful pollutants, including particulate matter, carbon dioxide, nitrogen oxides, and sulfur oxides. Industrial-size diesel generators release 200 to 600 times more toxic nitrous oxides than a natural gas plant.
- pollutants increase rates of respiratory diseases and cardiovascular conditions, and they elevate cancer risks among nearby communities
- U.S. data centers in 2030 could cause approximately 600,000 asthma symptom cases and 1,300 premature deaths, exceeding 1/3 of asthma deaths in the U.S. each year, resulting in a public health burden of more than \$20 billion.
- As with other forms of air pollution, those at increased risk include children, developing fetuses, pregnant people, elderly, and individuals with chronic respiratory or cardiovascular disease.
- According to the Institute of Electrical and Electronics Engineers, IEEE, data centers caused about \$6 billion in public health damages due to this type of air pollution in 2023.

- Studies on human exposure to non-ionizing EMF have reported associations with childhood leukemia, miscarriage, dementia and other health impacts.

Sources:

<https://www.sciencedirect.com/science/article/pii/S2772985025000262>

<https://arxiv.org/pdf/2412.06288>

https://www.americanrivers.org/rivers-and-data-centers/?gad_source=1&gad_campaignid=12077091751&gbraid=0AAAAAD-YJLTLKAKcl6wU29Kweq9duiRLc&gclid=CjwKCAjws_DTBhB_EiwAXZknGTvc9MfMUonhF-4rMrNq1IEPuWqbZ0up2Z4NkfejQpCE4ca4iOJV5RoCD0cQAvD_BwE

<https://hsph.harvard.edu/news/analyzing-air-pollution-health-economic-risks-from-ai-data-centers/>

<https://www.eesi.org/articles/view/data-centers-are-hotbeds-of-health-risks>

<https://sites.uab.edu/humanrights/2025/10/02/construction-and-consequences-the-human-impacts-of-artificial-intelligence-data-centers/>

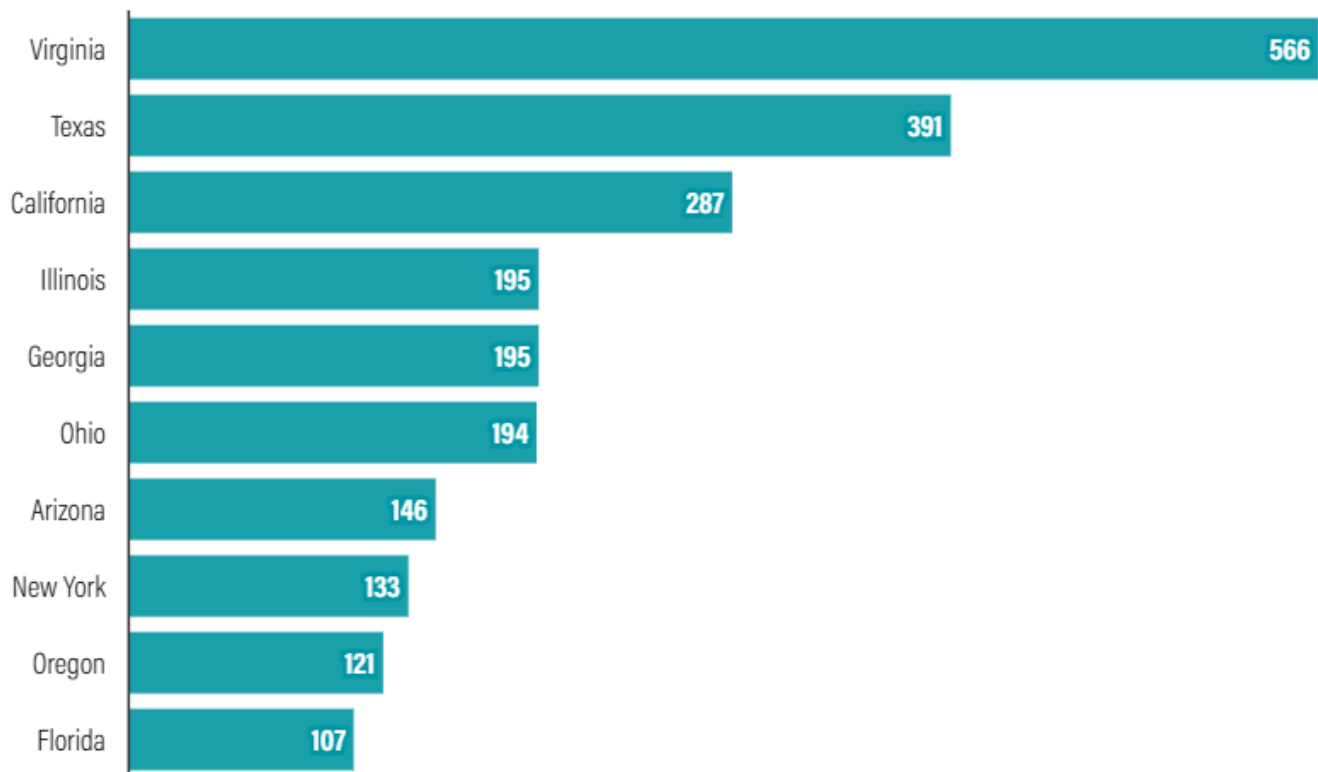
<https://www.ehn.org/honeybee-emf-power-line-pollination>

This is an in-depth study of diesel generators and their effects over time:

<https://www.sciencedirect.com/science/article/pii/S2772656825000193#:~:text=Diesel%20engines%20and%20generators%20contribute,incl%20respiratory%20and%20cardiovascular%20problems>

60% of U.S. data centers are found in 10 states

Top 10 states with the most data centers



Note: Data as of 1/22/2026.

Source: datacentermap.com.

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As of January 2026, Georgia is the number 5 state in the nation for having the most data centers. I don't believe the responsibility to provide data centers should fall on our shoulders any more than any other state. Let the other 45 states have a chance to catch up to us.

Graph and statistics from: <https://www.wri.org/insights/us-data-center-growth-impacts>

Thoughts on how to create, build, and manage Data Centers responsibly:

- Noise Pollution: “To address this, some data center developers and local governments are beginning to use measures such as natural acoustic barriers, greater setbacks from homes and improved insulation for backup generators.”
 - <https://www.wri.org/insights/us-data-center-growth-impacts>
- Ban diesel generators, “Some facilities are beginning to adopt cleaner on-site power alternatives. Battery energy storage systems can replace diesel generators during outages, avoiding their high pollution. Pairing hybrid microgrids with renewables is another alternative that supports community resilience without increasing emissions.”
 - <https://www.wri.org/insights/us-data-center-growth-impacts>
- Refusing water to data centers: “Some data centers are using cooling approaches that reduce water demand, such as liquid immersion.”
 - <https://www.wri.org/insights/us-data-center-growth-impacts>
- “Other states, like Oregon, Minnesota and Missouri, have required utilities to create new billing classes and rate structures for large energy users so that their costs aren’t shared by households and businesses.”
 - <https://www.wri.org/insights/us-data-center-growth-impacts>