OPINION
GUEST ESSAY

Noisy, Hungry Data Centers Are Catching Communities by Surprise

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Sept. 15, 2024

The revolution in artificial intelligence that promised us breakthroughs in medical research and corporate productivity seems to be running a little behind. But already A.I. has become something of a nightmare for the Americans who happen to live near one of the more than 5,000 data centers that power it and keep the cloud above our digital world running.

Across the country, from Indiana to Oregon, companies such as Amazon, Meta and Microsoft are building data centers on sites that can stretch over 1,000 acres, ringed with guard towers and razor wire fences.

People who live near one Northern Virginia center have complained that the mechanical whir of the fleet of industrial fans needed to cool the sensitive computer equipment inside can sound like a leaf blower that never turns off. Cooling the heavy equipment also diverts great volumes of water even in places where it's scarce. And some of the costs of powering the centers are shouldered by utility customers, in the form of hundreds of dollars a year added to household energy bills.

Residents rarely learn how data centers may affect their lives until it's too late. Big tech operators are aggressively deploying nondisclosure agreements to force local officials, construction workers and others to keep these projects under wraps.

For tech firms, the incentives to build more of these centers are immense: A McKinsey analysis projected the generative A.I. business could eventually be worth nearly $8 trillion worldwide. Tech companies don't want to tip off rivals that might try to swoop in and steal a viable site for development. That's part of the reason they so zealously enforce nondisclosure agreements. But it's more than that — they also seem to want to avoid angering locals who might learn of the coming disruptions and protest zoning changes.

The tactics companies have deployed in recent years to build their massive data center networks are downright mercenary, and regulators now need to step in to make sure the communities most affected by these industrial projects can learn about and evaluate them for themselves.

At the moment, without those measures in place, residents and environmental groups have to go up against the tech firms largely on their own just to obtain basic details about the water, energy and noise impacts.

In bucolic Frederick County, Md., county officials signed a nondisclosure agreement with Amazon in 2019 around a possible data center project that fell through in 2021. Sugarloaf Alliance, a local land conservation group with concerns about the project, wasn't able to get details on the company's plans to rezone parcels of land and the potential environmental impacts until it sued the county in 2022.

"Prying the details out of county government was a giant wake- up call," Steve Black, Sugarloaf Alliance's president, told me.

In Orange County, Va., residents learned Amazon was holding secret discussions with a group of nearly a dozen local officials who'd signed nondisclosure agreements. The agreements meant officials couldn't disclose negotiations over energy needs and water usage for a data center project that is part of a 2,600-acre mixed-use development. A historical preservation group has continued to fight the project, arguing that it would undermine the character of a Civil War battlefield nearby. But the group may not succeed in stopping the project from breaking ground.

Even when local leaders don't sign nondisclosure agreements, it can be difficult for community members to assess the impact of a proposed center. In Cass County, Mo., local officials held private meetings with representatives of a company interested in building a facility in their small farming community, but few details emerged from those conversations, and residents eventually formed a group to host citizen town halls to crowdsource information on tax increases, noise issues and the potential strain on the electric grid.

Google and its big tech rivals are trying to get out in front of blowback from local constituents, and are investing in community engagement or tapping public relations spin shops. They argue that disclosing how much water and electricity their data centers require will put them at a competitive disadvantage. And they promise their data centers will eventually be "water positive" and use only renewable energy. It will be years until the cooling technology and green-energy infrastructure is in place to make those promises a reality.

Local leaders who run interference on behalf of tech giants often play up the benefits, particularly the jobs and advanced technical training opportunities they promise. Recently, a small but growing number of officials have begun to question these deals. In Georgia, where electricity demand and energy grid strain from more than 50 data centers pushed residential utility bills up almost $200 a year on average per household, state senators passed a bill this year that would pause tax incentives for data center development for the next two years.

Yielding to intense lobbying from big tech, Gov. Brian Kemp vetoed the legislation in May, but the bipartisan support behind the new tax rules pointed to the emergence of a new sentiment summed up by State Senator John Albers, a sponsor of the bill, who said simply that the return on the tax incentives "is not there."

A similar resistance from residents critical of the impact a 10-acre data center campus would have on electricity demand in Cascade Locks, Ore., led to the recall of two officials who'd supported the project. In Chesterton, Ind., concerns about energy use and noise from a proposed data center's 75,000-square-foot yard of backup diesel generators were glossed over by the developer. In the end, the $1.3 billion project was nixed.

Those local victories will remain the exception to the rule unless regulators, Congress or both intervene to prohibit the use of nondisclosure agreements and require independent audits of how data center development could raise energy bills, drain water resources and increase noise pollution.

Protecting communities and the environment from the malignant impact of data center projects won't spell the end of the A.I. industry. Though new rules could take a bite out of potential profits for big tech companies, ensuring the transparency of data center development as it proliferates is all but essential for the A.I. revolution to become a reality.

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A version of this article appears in print on , Section A, Page 21 of the New York edition with the headline: Data Centers Make Terrible Neighbors