

Ed Moed, CEO of Hot Paper Lantern, has worked on site selections for two decades “It’s really something I have never seen before. It’s town-to-town, county-to-county,” he said of the pushback against data centers.

A recent Gallup poll revealed that 71% of Americans oppose local data centers, with respondents more likely to support a nuclear power plant in their community (45%) than an AI facility (27%).

‘IT’S ASTOUNDING’

There are already 5,400 existing U.S. data centers with an estimated 3,000 new ones planned or proposed to fuel AI machine learning, according to various industry estimates.

Commercial real estate firm JLL estimates that global data center power needs will nearly double to 200 gigawatts by 2030, requiring \$3 trillion in investment.

This exponential growth is driven by the world’s wealthiest tech giants (Alphabet, Microsoft, Meta, SpaceX and Amazon) and billionaires like Elon Musk, Bill Gates and Jeff Bezos. Capital spending on AI infrastructure is projected to reach \$7.6 trillion over the next six years, according to Goldman Sachs.

MAINTAINING AMERICA’S ADVANTAGE

AI advocates, including President Donald Trump, argue new data centers are vital to ‘win the global AI race.’

Senate Intelligence Committee Chairman Tom Cotton, R-Ark., has urged the Justice Department to investigate whether foreign rivals like China are manipulating public opposition via social media to slow U.S. data center developments.

Celebrity investor Kevin O’Leary, who is planning a \$100 billion data center campus in Utah, echoed national security sentiments, though he noted he has “no evidence” that local opposition groups are foreign-funded.

PUMPING THE BRAKES

The breakneck speed has prompted more than 100 U.S. jurisdictions to pass temporary moratoriums to rewrite zoning laws and evaluate resource strains.

AI Data Center Projections

(By 2030)

Global Energy Use Share
Projected to reach 20% (up from 1.5% in 2024)

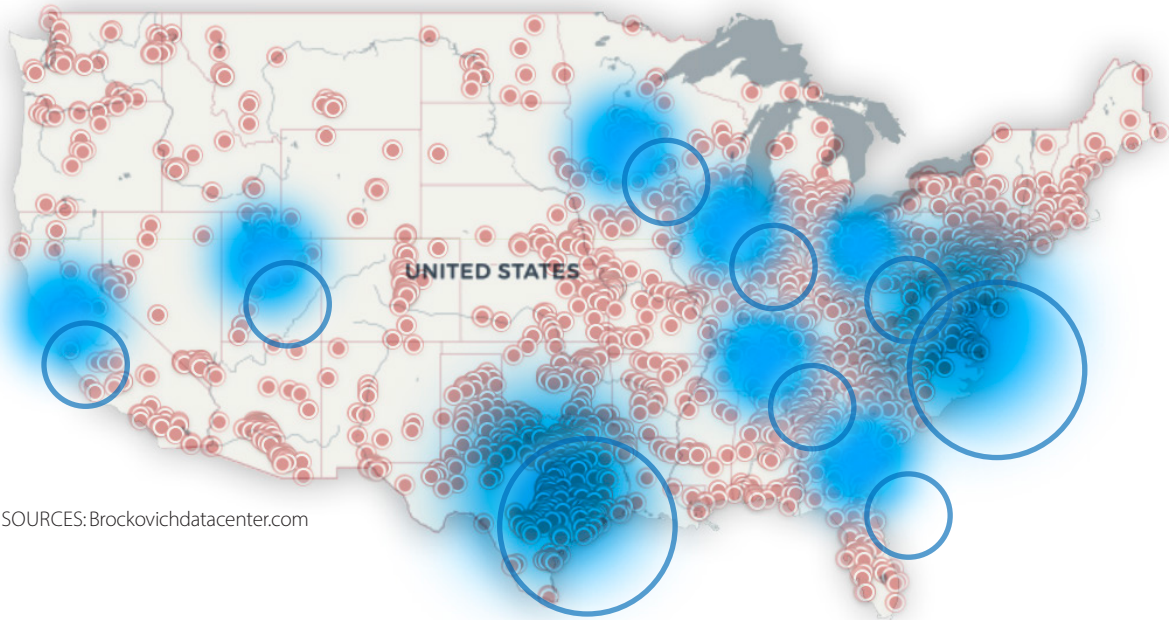
Global Carbon Emissions
Increase by up to 220 million tons

Global Power Demand
Nearly double to 200 gigawatts

Queen Anne’s County, Maryland, approved a one-year freeze in June. “Everyone is just really cautious moving forward,” said County Commissioner Jack Wilson, who worries about agricultural water supplies. Localities

Data center deluge

Thousands of new data centers are being planned and proposed across the country to fuel machine learning and the artificial intelligence (AI) wave. They are being pushed by the world’s biggest companies and wealthiest billionaires, while stirring community concerns and consternation.



SOURCES: Brockovichdatacenter.com



PHOTO CREDIT: KAITA GORSUCH



Dayva Goetzinger, whose family has owned farmland in southeastern Minnesota for more than a century is worried about new artificial intelligence (AI) data centers changing the character of rural communities. “It’s a way of life,” Goetzinger said about living in Houston County.

must also consider the risk of early obsolescence if technology pivots to space or ocean-based cooling. “What happens when the developer walks away?” warned Mary Ann Dickinson, policy director at the Lincoln Institute of Land Policy. However, the financial incentives can be massive. David Rubenstein, an attorney with the Polsinelli law firm specializing in data center developments, notes that these projects can fund local infrastructure. For example, a planned \$27 billion Meta data center in Louisiana will fund \$50,000 bonuses for local teachers. “It’s just a massive windfall for local governments,” Rubenstein said.

Because of the shifting landscape, developers are hedging their bets by eyeing twice as many potential sites. “The number of proposed projects has nearly doubled,” said Brian Strawberry, chief economist at FMI Corp., a North Carolina-based consulting firm. Back in Minnesota, Goetzinger remains on high alert regarding new transmission lines slated for her property, despite utility claims that they are for grid upgrades rather than AI. “Spidey sensations are everywhere,” she said. A longer version of this appears online at www.datacenterdiscord.adamsmultimedia.com. We used Google Gemini to trim the story down for print.

About this series: Digital forums

Adams MultiMedia (AMM) will host upcoming forums online featuring experts in the artificial intelligence (AI) data center space, as well as our journalists from across the country who have been covering projects and community concerns.

For more news and content on AI data centers and information on digital forums check out www.datacenterdiscord.adamsmultimedia.com.

Artificial intelligence (AI) and data center glossary

- Data center** — A physical facility that houses computing infrastructure like IT equipment and servers. Data centers house servers and storage systems as well as redundant or backup power supplies, data communications connections, environmental controls (air conditioning, fire suppression, etc.) and special security systems.

Artificial intelligence (AI) — The endeavor of creating intelligent agents, which are systems that reason, learn, and act autonomously in pursuit of goals. This field encompasses diverse approaches like machine learning, symbolic reasoning, and optimization to simulate human-like cognitive abilities in machines.
- Bandwidth** — The maximum rate of data transferred across a network connection, typically measured in bits per second (bps) or multiples thereof.

Hyperscale — A very large data center facility, characterized by high performance, efficiency and volume of computation.

Large Language Model (LLM) — Neural networks that work by forecasting word sequences. They can now hold dialogues, write prose, and scrutinize enormous text quantities from the internet.

Latency — The delay between the initiation and completion of a data transfer, influenced by factors such as network congestion, distance, and processing time.
- Machine learning (ML)** — A subfield of AI where algorithms improve their performance on a specific task through experience. They learn from data, identifying patterns and relationships without explicit programming. This allows them to make predictions, classifications, or decisions on new data, constantly refining their abilities.

Prompt — A user-provided input that guides the model's generation process. It can be text instructions, descriptions, or even existing data.

Rack — A standardized framework used to mount and organize IT equipment vertically within a data center. Racks typically feature mounting rails, cable management systems, and airflow optimization features.
- Server** — A dedicated computer system designed to provide computational resources, data storage, or services to clients over a network.

Token — The smallest unit of text that an AI model processes and understands; this is typically 4 characters in English, or about ¾ of a word. Tokens may include whole words, parts of words, individual characters, punctuation marks, and special characters.