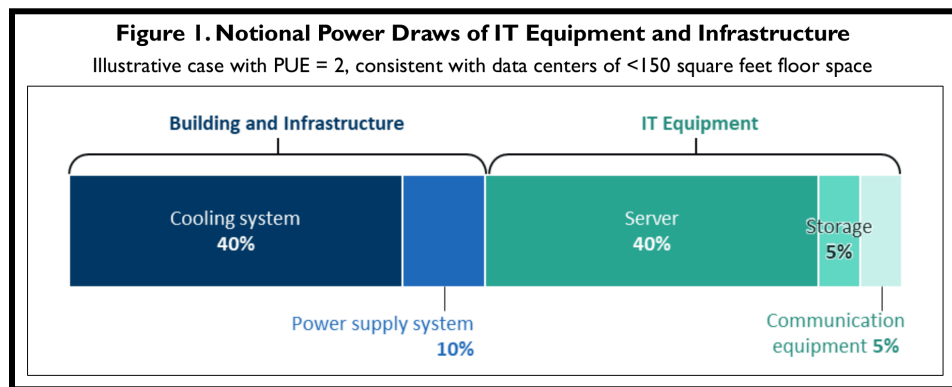


Data Center Development and Regulation Research in the US

PurpleState Research and Analysis Department

Perspectives and Statistics from Research Organizations and Special Interest Groups

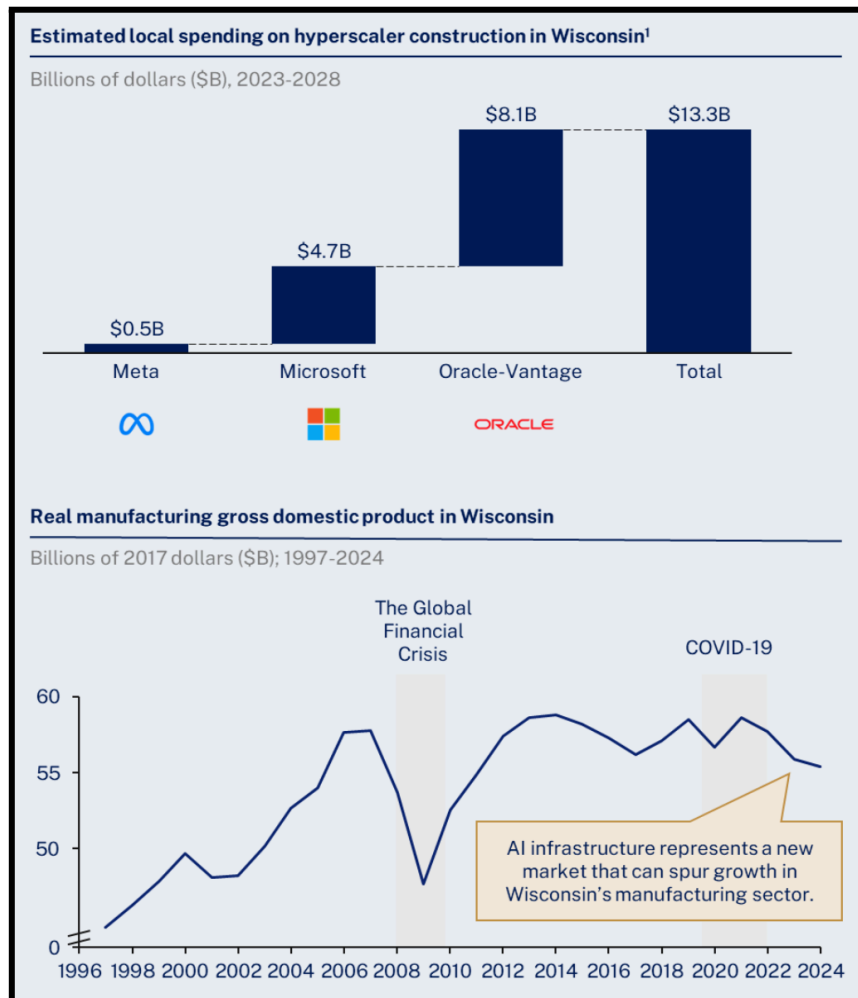
Congressional Research Service – [Data Centers and Their Energy Consumption: Frequently Asked Questions](#)



- Data center electricity use in 2023 was approximately 4.4% of total U.S. electricity consumption. Some projections show this could triple by 2028. Roughly half or more of a data center's power demand comes from running computing equipment. Most of the rest goes to cooling that equipment.
- A 100-megawatt data center may use roughly 530,000 gallons of water per day on average to cool equipment.
- There are currently no legally binding federal energy-efficiency standards specific to private-sector data center operations, though voluntary programs and some federal guidance exist.
- The relationship between data center growth and local electricity rates varies by state. An analysis of U.S. electricity prices from 2019–2025 found that the primary drivers of rate increases were aging grid infrastructure investment, natural gas prices, and storm recovery, not data center demand specifically, though this could change with increased data center construction.
- Regulations to address affordability concerns include creating separate utility rates for large data center customers and pursuing grid and permitting reforms to reduce costs falling on residential ratepayers. Proposed legislation (the Clean Cloud Act) would give federal agencies new authority to collect data center energy-use data.

Mandala (commissioned by Microsoft) – [Demonstrating the local benefits of AI infrastructure in Wisconsin](#)

- Wisconsin data-center construction is projected to generate \$16.5 billion in spending from 2024 through 2028.
- One project brought significant revenue and employment to the local area during the construction phase, including local construction contracts, catering, workforce training opportunities, and equipment and materials purchasing
- It is estimated that one hyperscale project will support an average of 9,420 Wisconsin jobs per year during 2024-2028, including more than 6,000 construction workers. The facility will employ 5,970 Wisconsin jobs once operational, including 1,850 in center operations and 4,120 in supply systems support.



Bipartisan Policy Center – [Key Considerations for Data Center Development](#)

- AI-related investment categories contributed an estimated 39% of total GDP growth in 2025.
- California data centers generated an estimated \$13.1 billion in tax revenue and 99,000 direct and indirect jobs in 2023. Construction-phase jobs are far more numerous than the jobs in operations once data centers are built.

Brookings Institution – [“The Future of Data Centers”](#)

- Large-scale data centers can cost \$1 billion or more to build, and typically create around 1,500 construction jobs and 100 permanent operational jobs once complete. A shortage of electricians and construction workers has recently slowed data center construction timelines.
- Financing approaches vary: some technology companies are issuing corporate bonds (e.g., a reported \$26 billion from one major firm) to fund data centers, and regulators in some states are shifting a greater share of grid costs onto the data center operators themselves rather than residential ratepayers.

Rockefeller Institute Of Government – [Clouds, Cables, and Megawatts: States and Localities Grapple with the Data Center Boom](#)

- From 2016 to 2023, data center employment grew more than 60% to over 500,000 workers nationwide. 12 to 30 temporary construction jobs are typically created for every one permanent job.
- Communities near data centers have reported a range of local impacts following nearby construction such as decreasing water supply and increased noise. One study linked backup diesel generators at Virginia data centers to increased asthma cases.
- Residential utility bills increased more than average in states with heavy data center growth. Virginia saw a 13% rate increase, Illinois 15%, and Ohio 12%, with some residents near Northern Virginia and Baltimore reporting bill increases as high as 50% in a single year.
- States have taken different approaches to regulating data centers, with some expanding regulatory exemptions to attract them, and others scaling back. Of 36 states with data-center-specific subsidies, only 11 disclose which companies receive them.
- Some states have considered temporary bans on data center construction, and some cities have enacted local bans. In 2026, Virginia mandated a regulatory package covering ratepayer protection, noise impacts of proposed data center construction sites, water-use disclosure, grid reliability, and emissions standards.