

Data Centers Power Everything You Do Online

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BOTTOM LINE

Data centers are the physical backbone of the digital economy. Every email, card payment, weather forecast, video call, and AI query runs on computers housed in them. Hospitals, banks, schools, and governments depend on them every day. States that welcome data centers can attract billions in investment, put downward pressure on electricity prices, and fund schools and public safety, while protecting ratepayers and local water.

CORE RULE Make sure whoever causes extra costs pays for them, build more capacity, and judge each project by its full economic value.

WHY DATA CENTERS MATTER

1. **Fewer sepsis deaths.** [Johns Hopkins](#) used AI to catch sepsis hours earlier than traditional methods, making patients 20% less likely to die.
2. **Faster wildfire response.** AI-equipped cameras in [Cal Fire](#) dispatch centers have spotted fires before 911 calls did more than 30% of the time, speeding up response time before the fires spread further.
3. **Good jobs at high wages.** Since 2023, [the US has added](#) more than 750,000 AI-related jobs, with a median advertised salary of about \$180,000, more than double the median across all job postings.
4. **Historic investment.** [A Brookings study](#) estimates that the United States could invest \$10.3 trillion in AI infrastructure between 2025 and 2032, one of the largest bets on a single industry in American history.

COMMON CONCERNS — AND WHAT ACTUALLY HAPPENS

DATA CENTERS CAN PAY FOR GRID UPGRADES AND REDUCE ELECTRICITY BILLS

- **Concern:** More electricity demand must mean higher prices.
- **In practice:** A 2025 [Berkeley Lab and Brattle Group](#) analysis found that state-level load growth has generally put downward pressure on retail electricity prices by spreading fixed grid costs across more sales. [Indiana](#) [Michigan Power](#), [Entergy Mississippi](#), and [Georgia Power](#) have all requested residential rate reductions because of data center investments. Where supply is scarce or the grid needs major upgrades, costs can rise.
- **Takeaway:** Public policy should protect ratepayers while also meeting growing demand with more supply.

AI IS NOT CREATING A NATIONAL WATER CRISIS

- **Concern:** Data centers use substantial water for cooling, especially in hot or water-stressed areas.
- **In practice:** Water use varies enormously by location and [cooling technology](#). Air cooling, closed-loop systems, reclaimed water, and liquid cooling can sharply reduce a facility's footprint. The key distinction, informed by [Berkeley Lab's](#) national assessment, is local versus national: a large facility can matter to one watershed or exist in a community with plenty of water resources. Furthermore, concerns from communities are incentivizing innovation in cooling technology — [one developer](#) has increased water efficiency by 52 percent in the last five years.
- **Takeaway:** Treat water as a siting and engineering question, not a national generalization.

MORE AI DOESN'T MEAN ELECTRICITY USE HAS TO SKYROCKET

- **Concern:** If computing grows rapidly, electricity use must grow at the same rate.
- **In practice:** From 2010 to 2018, [Berkeley Lab](#) found global data-center compute rose roughly 550% while electricity use rose only about 6%. [Google estimates](#) a median Gemini text prompt uses about 0.24 watt-hours and 0.26 milliliters of water (about five drops), and reports that energy per prompt fell 33-fold in one year.
- **Takeaway:** Plan for more power, but don't assume compute and energy grow one-for-one.

COMMUNITIES BENEFIT FROM DATA CENTERS

- **Concern:** Once construction ends, data centers employ fewer workers than traditional industrial facilities.
- **In practice:** Data centers support construction and skilled-trades work, buy equipment and services, and add billions in taxable property without comparable demand for schools and other services.
 - **Loudoun County, VA,** the nation's largest market, collects roughly \$26 in tax revenue for every \$1 it spends serving the industry.
 - **Quincy, WA,** a farm town under 9,000 people, saw poverty fall from 30% to 6% and built a new high school, aquatic complex, police station, and fire house with the added revenue.
 - **Richland Parish, LA** issued bonuses of up to nearly \$51,000 to teachers from construction-phase sales tax.
- **Takeaway:** [Jobs-per-acre is the wrong single metric.](#) Data centers create high-paying construction and operations jobs; judge those alongside investment, suppliers, tax revenue, and service costs.

POLICYMAKERS SHOULD

- **Protect ratepayers.** Assign the grid costs a facility creates to that facility, not to households.
- **Build more energy supply.** Make it easier to build new generation and transmission.
- **Address water where constraints are real.** Evaluate cooling systems, watershed stress, and non-potable options project by project.
- **Apply predictable rules.** Siting and permitting decisions should be based on measurable impacts.

ABUNDANCE INSTITUTE RESOURCES Compare county-level electricity use, water consumption, employment, and estimated property-tax revenue with the [Data Center Atlas](#).

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