

# *The Data Center Debate*

# **FACT VS. FICTION**

## *The Goldwater Institute's Free-Market Guide to Data Center Infrastructure*

### **IS IT JUST “BIG TECH” THAT NEEDS DATA CENTERS? WHAT IS REALLY DRIVING THEIR GROWTH?**

*A: No, it's not just about “Big Tech.” Data centers are the 21st-century version of a power plant or water tower, providing the essential “digital flow” for every sector of the modern economy.*

*Hospitals rely on data centers for real-time access to electronic health records; banks use them to process millions of secure transactions per second; and manufacturing plants deploy them to power smart assembly lines. Every time you back up a photo, use GPS, stream a show, or when a student accesses an online portal for homework, a data center is involved.*

*Since every digital action requires a physical home, data centers need immense scale to support the global economy. What looks like an oversized warehouse is a highly engineered environment housing tens of thousands of servers operating with near-zero downtime. This necessitates specialized cooling, high-capacity fiber, and massive on-site power distribution. By building on large campuses, developers can grow in phases to meet the skyrocketing demand for AI and cloud computing while maintaining a predictable, high-value footprint.*

### **ARE DATA CENTERS “RESOURCE HOGS” THAT WILL DRAIN LOCAL WATER SUPPLIES?**

*A: No, this claim is outdated and ignores modern technological innovation.*

*Data centers are among the most water-efficient industrial facilities ever built. Nationwide, data centers consume less than 0.05 percent of total U.S. freshwater withdrawals, a tiny fraction compared to agriculture, thermoelectric power generation, and manufacturing. Furthermore, unlike traditional factories or refineries, data centers do not produce chemical runoff or industrial wastewater. Their primary output is heat managed through sealed equipment loops with no external discharge.*

*On top of that, using water costs money, so data center companies have powerful financial incentives to innovate in order to use less of it.*

### **ARE DATA CENTERS DRIVING UP ELECTRICITY PRICES AND THREATENING GRID RELIABILITY?**

*A: No, the primary drivers of rising electricity prices are regulatory policy, infrastructure investment, and generation costs—not data centers.*

*A 2026 analysis found that retail electricity rates have generally tracked inflation over the past five years, remaining broadly stable in most states. When rates do rise, research shows the culprits are typically wholesale power prices, the doubling of capital spending to replace aging distribution gear, and government mandates that force the retirement of reliable generation sources in favor of more expensive alternatives.*

*In reality, data centers often function as anchor customers that strengthen grid economics and reliability. Because they provide steady, predictable baseload demand, data centers allow utilities to better plan for future projects. Far from being a strain, these facilities often absorb a significant portion of transmission and infrastructure costs, offsetting rates for residential users.*

*Furthermore, modern data centers participate in demand-response programs, switching to on-site backup generation during peak heatwaves or winter storms to stabilize the grid for essential services.*

## **WHO PAYS FOR GRID UPGRADES RELATED TO DATA CENTER DEVELOPMENT?**

*A: In most cases, the developer—not the taxpayer—funds the infrastructure required to connect a data center to the grid.*

*Utilities typically require developers to fund substations, transmission upgrades, or dedicated lines at private expense. These improvements are often transferred to the utility or local government, becoming long-term public infrastructure assets funded by private investment. Many states now require large-load customers to pay for system expansions, shielding residential customers from the costs.*

## **CAN'T WE JUST PUSH DATA CENTERS INTO REMOTE, UNDEVELOPED AREAS?**

*A: Data centers go where there is adequate connectivity, not just land availability, so going to remote areas isn't always feasible.*

*Data centers must be located near high-capacity fiber networks and high-voltage transmission infrastructure. Equally important is latency, the time it takes for data to travel between a user and a server. Delays of just 100 milliseconds can reduce e-commerce conversions and slow cloud applications, which is why data centers must be located near major fiber routes and population centers.*

*Funneling centers into areas with inadequate infrastructure leads to massive, taxpayer-funded expansion costs and legal liabilities.*

## **SHOULD LOCAL GOVERNMENTS USE SPECIAL USE PERMITS OR ZONING TO BLOCK PROJECTS?**

*A: No, using zoning or subjective permits undermines the fundamental property rights that serve as the foundation for our economy.*

*When a city retroactively changes rules to block a project, it strips value from the landowner in response to short-term political pressure. Under Arizona's Proposition 207, such actions can be viewed as regulatory takings, potentially making the government liable for the diminution of property value. Development should be allowed where the market has already established adequate utility capacity, respecting the right of landowners to use their property as they wish.*

## **DO DATA CENTERS CREATE JOBS AND PROVIDE REAL ECONOMIC RETURN ON INVESTMENT?**

*A: Yes, they generate significant construction employment and produce some of the highest tax-revenue-per-acre ratios of any land use.*

*Construction of major hyperscale data centers often employs 1,500 to 5,000 skilled workers over an 18–24 month period. The average data center salary is roughly \$160,000, nearly double the national median household income. Once operational, each facility supports approximately 150 direct and indirect jobs.*

*In Loudoun County, Virginia—a major data-center hub—data centers generate roughly 38 percent of the county's general fund revenue, according to government financial reports. For every \$1 in public services they consume, they pay approximately \$26 in taxes, six times more than traditional manufacturing.*

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