

Debunking Data Center Myths in Pennsylvania: Sorting Fact from Fiction

Fact Sheet

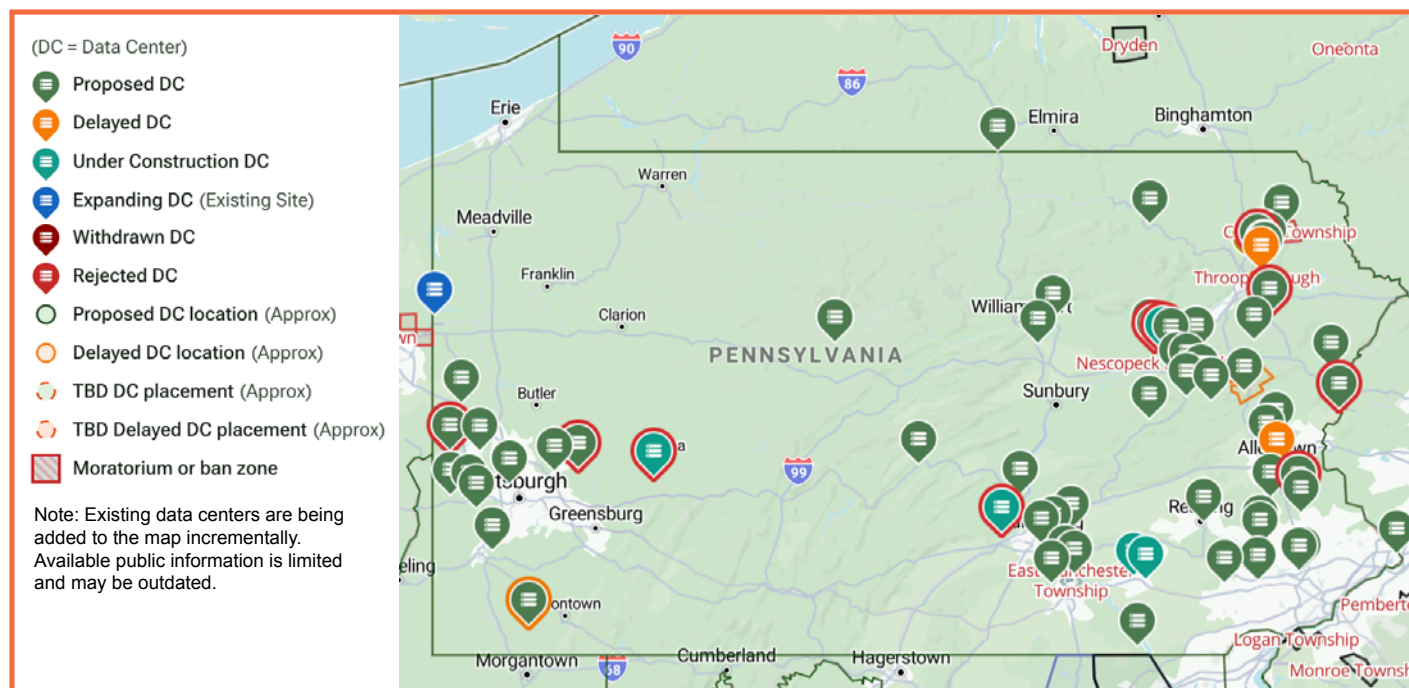
Myth 1: We already have data centers, so there is no reason to be concerned: FALSE

A data center can refer to any physical room, building, or facility that houses computing equipment like servers, storage, and networking gear, along with the power, cooling, and security needed to run it.

However, not all data centers are the same. Types include:

- Smaller edge data centers and private enterprise server rooms used primarily by a single organization.
- Shared colocation data centers where multiple organizations rent space.
- Large cloud or hyperscale campuses built to support massive cloud and AI workloads.¹

Historically, Pennsylvania has had dozens of data centers, with most concentrated around major metros like Pittsburgh and Philadelphia, providing digital infrastructure for businesses, hospitals, universities, and public services.² However, the AI boom during the pandemic rapidly accelerated the scale and pace of new campus-scale project proposals.³



While these massive projects can bring construction activity and some local revenue, hyperscale campuses can also impose significant harm on surrounding communities. These impacts include

exceptionally large electricity demand that can stress the grid and increase consumer costs, as well as ongoing noise and quality-of-life concerns related to cooling equipment, substations, and generator testing.^{4 5}

Myth 2: Data centers will increase state and local tax revenue: TRUE

Data centers can increase state and local GDP and generate tax revenue in the form of property taxes, income taxes, and sales taxes. According to a report by the Northern Virginia Technology Council, data centers paid \$640 million in state taxes and \$1 billion to local governments in Virginia.⁶ However, tax incentives used to attract data centers and long-term costs incurred in providing resources to data centers can eat into this revenue.

Myth 3: Data centers rely on water use, so they will not hurt the environment: FALSE

Data centers contribute to pollution. They primarily draw electricity from the local grid, so their climate and air-pollution footprint depends heavily on what fuels that grid. In Pennsylvania, natural gas is the largest source of in-state electricity generation, with coal and other fossil sources contributing additional power. As a result, new data centers' electricity demand is likely to rely heavily on non-renewable energy sources.⁷ Since uninterrupted power supply is critical in a data center, the use of backup diesel generators as a quick alternative source of power is common. Though generators are only meant to be used in an emergency, they can pose additional concerns for carbon emissions.

Data centers are also water hungry, which presents a separate and significant concern. Data centers generally rely on either water-intensive evaporative cooling or air-cooled systems to remove heat from servers and maintain safe operating temperatures. In evaporative systems, water circulates through cooling equipment to absorb heat, then is routed to cooling towers where a portion evaporates in the process. This evaporated water is effectively "consumed" because it is no longer available for local use.

Proponents often describe this water use as "renewable" because evaporated water eventually returns in the form of rain through the water cycle. However, this framing obscures the reality that water is withdrawn from specific local watersheds and "returned" on different timelines, and often in different places, meaning it may not be available when communities need it most, particularly during hot, dry periods when cooling demand is highest and water supplies are already strained.⁸

Myth 4: Data centers are going to spur a lot of job generation: FALSE

While data center projects can create substantial construction employment during multi-year buildouts, permanent onsite employment is typically far more limited. A 2023 report from Virginia's Joint Legislative Audit and Review Commission found that a 250,000-square-foot data center can employ up to approximately 1,500 workers during construction, but only about 50 full-time employees after it is completed.⁹

Myth 5: Data centers will increase utility costs, even if they are not in your neighborhood: TRUE

Utility costs depend on wholesale energy prices from power plants, capacity costs, and distribution costs. Data centers can affect all three of these components. A single large data center focused on AI and cloud services can annually consume as much electricity as 100,000 households.¹⁰ Capacity

planning was not prepared for the unprecedented pace of rising demand driven by data centers. The resulting gap in supply, along with the need for investment in new power plants and grid upgrades, can increase system-wide costs. Those costs are often allocated regionally by the grid operator, meaning that projected demand growth from data centers located outside your immediate locality can still raise your utility bills.^{11 12}

Myth 6: There is nothing we can do about it: FALSE

Pennsylvania communities and state decision-makers have meaningful tools to prevent harmful outcomes and establish clear rules for data center development. At the state level, the legislature can establish statewide land-use standards and reporting rules and set guardrails on tax incentives. At the local level, the Pennsylvania Municipalities Planning Code, which authorizes municipalities to adopt and enforce land-use ordinances, including zoning rules and performance standards, can be strengthened to guide where large facilities can locate and what impacts they must mitigate.¹³

Footnotes

1. "PA Data Center Proposals," accessed January 17, 2026, <https://www.padatacenterproposals.com/>.
2. Data Center Map, "Pennsylvania Data Centers," accessed January 17, 2026, <https://www.datacentermap.com/usa/pennsylvania/>.
3. "PA Data Center Proposals" Source: PA Data Center Proposals, accessed January 17, 2026, <https://www.padatacenterproposals.com/>.
4. Laila Kearney and Anushree Ashish Mukherjee, "PJM Unveils Plan to Tackle AI-Driven Power Demand Surge," Reuters, January 16, 2026, <https://www.reuters.com/legal/litigation/pjm-unveils-plan-tackle-ai-driven-power-demand-surge-2026-01-16/>.
5. BBC News, "A Humming Annoyance or Jobs Boom? Life Next to 199 Data Centers in Virginia," October 26, 2025, accessed January 17, 2026, <https://www.bbc.com/news/articles/c93dnnxewdvo>.
6. Northern Virginia Technology Council, "Virginia Data Centers Supported 78,140 Jobs and \$31.4 Billion in Economic Output in 2023," May 1, 2024, <https://www.nvtc.org/press-releases/virginia-data-centers-supported-78140-jobs-and-31-4-billion-in-economic-output-in-2023/>.
7. U.S. Energy Information Administration, "Pennsylvania State Profile and Energy Estimates," accessed January 17, 2026, <https://www.eia.gov/state/analysis.php?sid=PA>.
8. Amber X. Chen, "A.I. Is on the Rise, and So Is the Environmental Impact of the Data Centers That Drive It," Smithsonian Magazine, September 29, 2025, accessed January 17, 2026, <https://www.smithsonianmag.com/science-nature/with-ai-on-the-rise-what-will-be-the-environmental-impacts-of-data-centers-180987379/>.
9. Joint Legislative Audit and Review Commission (JLARC), "Data Centers in Virginia," accessed January 17, 2026, <https://jlarc.virginia.gov/landing-2024-data-centers-in-virginia.asp>.
10. Rebecca Leppert, "What We Know About Energy Use at U.S. Data Centers Amid the AI Boom," Pew Research Center, October 16, 2025, <https://www.pewresearch.org/short-reads/2025/10/16/what-we-know-about-energy-use-at-us-data-centers-amid-the-ai-boom/>.
11. Rachel Reed, "How Data Centers May Lead to Higher Electricity Bills," Harvard Law School, September 3, 2025, <https://hls.harvard.edu/today/how-data-centers-may-lead-to-higher-electricity-bills/>.
12. Scott Matthews, "Data Center Growth Could Increase Electricity Bills 8% Nationally and as Much as 25% in Some Regional Markets," Carnegie Mellon University, July 9, 2025, <https://www.cmu.edu/work-that-matters/energy-innovation/data-center-growth-could-increase-electricity-bills>.
13. Pennsylvania General Assembly, Pennsylvania Municipalities Planning Code (Act 247 of 1968), 53 P.S. §§ 10101–11202, accessed January 17, 2026, <https://www.legis.state.pa.us/WU01/LI/LI/US/HTM/1968/0/0247..HTM>.