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Data Centers in Colorado – Local Governments Take the Lead in Regulating Siting

Artificial intelligence (AI) gets headlines every day. And AI doesn't function without data centers that provide the massive physical infrastructure, power, and specialized chips required to train and run complex AI models.

A Worldwide Phenomenon

Here are some essential facts gathered by Programs that are drawing attention at the state and local level:

- There are currently 11,426 data centers globally located in 179 countries.
- Demand for data centers is predicted to nearly **triple** by 2030.
- Between now and 2030, companies worldwide are expected to invest nearly **$7 trillion** in building and upgrading data centers.
- Global data center power usage is expected to increase to **219 GW** over the next five years, enough to power roughly 180 million U.S. homes.
- On average, data centers cover **100,000 square feet**, but hyperscale data centers are as large as **10 million square feet**.
- Data centers are present in **more than 170 countries**, and nearly 40% are located in the U.S.
- Large data centers use **up to five million gallons of water** per day for cooling purposes.
- U.S. states with multiple data centers create **more than $30 billion** in additional economic output annually.

How Many Are There in the U.S.?

The interactive website Data Center Map identifies 4,420 currently operating data centers in the U.S. Colorado has 57, but the largest include Virginia with 632; 473 in Texas; 287 in California; 239 in Illinois; and 224 in Ohio.

Axios Media reports that there are nearly **3,000** data centers under construction or planned across the U.S., with individual estimates placing the number of sites actively under construction at roughly **480** to **1,200. That number varies** depending on how developers track early-stage site grading versus vertical builds.

A recent analysis published by *Forbes Advisor* shows that, from 2023 to 2030, the expected annual AI growth rate is 36.6%, with 72% of businesses having adopted AI for at least one business function including improved customer relationships, increased productivity, and efficient content generation.

Who Uses AI?

A Pew Research Center report published on March 12 identified how Americans view AI. Some of the key findings include:

1. Half of U.S. adults say the increased use of AI in daily life makes them feel more concerned than excited.
2. U.S. adults are generally concerned about AI's effect on creativity and relationships but are more open to using it for data analysis.
3. Americans are more optimistic about AI in medical care but pessimistic about its impact on education and jobs.
4. Roughly two-thirds of U.S. teens ages 13 to 17 (64%) say they use an AI chatbot.
5. About six-in-10 say students at their school use chatbots to cheat at least somewhat often. This includes about a third who say it happens extremely or very often.
6. A growing share of U.S. workers say at least some of their work is done with AI, but a majority of American workers (65%) still say they don't use AI much or at all at work.
7. More than 30% of Americans said they interact with AI at least several times a day, up from 22% in February 2024.

8. Younger adults are more likely than older Americans to be aware of and use AI.
9. Approximately one in 10 parents said that their five- to 12-year-olds use AI chatbots.
10. On the political spectrum, Democrats have less trust than Republicans do in the government's regulation of AI use.

When Compared to a Traditional Data Center, How Different is an AI Data Center?

An AI data center is significantly different than a traditional data center. These specialized facilities are designed to support the training, deployment, and delivery of AI applications and services and are equipped with high-performance computing, networking, and storage infrastructure, along with advanced power and cooling systems, which are needed to efficiently manage the intensive demands of AI workloads. As described in an article by *IBM Think*,

> [C]onventional data centers are more likely to be designed for and contain central processing units (CPUs). Whereas AI-ready data centers require high-performance graphics processing units (GPUs) and their IT infrastructure considerations, such as advanced storage, networking, energy and cooling capabilities. Often, the sheer number of GPUs necessary for AI use cases also requires far more square footage.

Here's What the Colorado Legislature Failed to Do in 2026

With 57 data centers already operating in Colorado and more in varying stages of design and development, the state legislative session in 2026 considered two opposing bills: one providing incentives to draw data centers to Colorado (HB 26-1030); the other designed to control negative impacts (SB 26-102). Both failed to pass.

HB 26-1030. Supporters of growth pushed House Bill 26-1030 to make Colorado economically competitive with neighboring states like Wyoming and Texas.

*Tax Incentives***.** The bill offered a 100% state sales and use tax exemption for up to 20 years for certified data centers on computer equipment, software, and energy systems, with a possible extension of 10 years based on satisfaction of post-certification requirements.

*Investment Requirements***.** Operators were required to invest a minimum of $250 million in data center infrastructure within five years, create new full-time jobs, and meet detailed labor and wage standards.

*Energy and Water Standards***.** Certified data centers were required to use predominantly clean/renewable energy and pass detailed water stewardship and efficiency requirements.

*Postponed Indefinitely***.** The bill was opposed by environmental and fiscal groups who argued it would strain the state budget and electric grid. The House Energy and Environment Committee voted to postpone it indefinitely.

SB 26-102. Environmental groups and consumer advocates backed Senate Bill 26-102 that was designed to establish strict guardrails. The bill applied to new data centers with a peak load above 30 megawatts (MW) or multiple facilities totaling more than 60 MW, and it applied to existing data centers that expanded to exceed those same thresholds.

As described at the Colorado General Assembly website, the bill had six components:

*Renewable Energy Matching***.** Starting in 2031, applicable data centers would have been required to either purchase, generate, or acquire enough renewable electricity to cover 100% of their annual electricity consumption. Those data centers would also have been required to meet an "hourly matching" requirement set by the Colorado Public Utilities Commission (PUC). If 100% hourly matching was technically and economically feasible, the data centers would be responsible for this requirement. If it was not feasible, the PUC would set a percentage requirement.

*Payment for Infrastructure Costs***.** Additionally, data center operators would have been required to enter into utility contracts for at least 15 years or provide upfront payment. They would have also been required to pay for certain infrastructure and resource costs needed for the facility. Operators would have been required to contribute to utility demand-side management programs.

*Protection for Other Utility Customers***.** Utilities would have been prohibited from interconnecting or supplying electricity to data centers unless the data center would

not harm reliability, preventing the utility from meeting clean-energy targets, or increasing the utilities' greenhouse-gas emissions.

*Water-Use and Environmental Reporting***.** Data center operators would also have had to report annual electricity and water consumption beginning in 2028, comply with operational water-management requirements, and comply with on-site back-up generation requirements.

Rules for Disadvantaged Communities. If located in or expanding within a disproportionately impacted community, data center operators would have had to undergo a cumulative impacts analysis by an independent contractor, conduct public hearings and community outreach, and enter into a community benefit agreement prior to development.

Labor Standards. Finally, all applicable data centers would have needed to comply with certain labor standards.

*Postponed Indefinitely***.** The proposed bill was assigned to the Senate Transportation and Energy Committee, where the nine-member Committee voted unanimously to postpone the bill indefinitely.

Data Center Land Use in Colorado

Despite the legislature's failure to either provide tax incentives or impose statewide requirements and regulations, local governments have been increasingly regulating data centers through zoning ordinances, special-use permits, and temporary moratoriums. Most of the regulations have focused on electrical infrastructure, water consumption, noise and nuisance, environmental impacts, and land-use compatibility. Some of the counties taking the lead are Weld County, Larimer County, the City and County of Denver, and Logan County.

Weld County

In April 2026, the Weld County board of commissioners approved Code Ordinance 2026-01, which addressed the addition of data centers to Chapter 23 of the Weld County Code. The Weld County website describes the County Commissioners' action. Clarifying language in the new code provisions defines a data center as:

> A building or buildings used to house information technology or telecommunications equipment with which digital information is processed, transferred, and/or stored, with no limitation on peak electrical load. A data center may include associated ancillary structures, including but not limited to offices, security buildings, cooling water tanks, and backup power systems with a total generation of less than fifty megawatts.

The new code provisions also require data center applicants to submit a "Will Serve" letter for electricity and proof of water. Future data center applications will also be designated as a "Use by Special Review" in the I-1 industrial zone and as a "Site Plan Review" in the I-2 and I-3 industrial zones. The new code prohibits data centers in agricultural zones. Lastly, noise regulations were added, establishing a dBC noise limit of 65 decibels at the property line for data centers.

Larimer County's Moratorium

Larimer County does not have a comprehensive ordinance or other regulation concerning data centers. As a result, on January 27, 2025, the Board of County Commissioners established a temporary moratorium, prohibiting any new land use applications for data centers.

After a public hearing on February 9, 2026, the temporary moratorium was extended until August 25, 2026, in order to give the board enough time to develop regulations that address the main concerns. Some of the most significant impacts being considered are water consumption, power usage, possible nuisances, and zoning location determinations. The county is wary of the amount of water needed to cool large-scale data centers.

Echoing the objections of their constituents, the County Commissioners expressed concern about the large amount of electricity needed to operate these centers. The county will be looking into possible noise, aesthetic, and heat effects of data centers. Until then, the temporary moratorium means that the county will not be accepting applications for large data center sitings.

The Moratorium in Denver

Similar to Larimer County, Denver also recently imposed a one-year moratorium on data centers that went into effect on May 21, 2026. Mayor Mike Johnston proposed the moratorium and was backed by council members Paul Kashmann and Darrell Watson.

Like Larimer County, Denver currently does not have any permitting requirements or regulations for data centers. The moratorium will give officials time to conduct studies and research.

Some of the major areas of study include the impacts from noise, air pollution, and construction, and will focus on changes to Denver's zoning, building, and energy codes. Importantly, this moratorium will not affect data centers currently operating or permitted for construction.

Denver has seen intense opposition to data centers, especially in the Elyria-Swansea neighborhood. CoreSite, a business that works to empower AI workloads through "interconnected data center solutions" has a 180,000 square-foot data center under construction, and local residents have voiced strong opposition. Although the Denver moratorium will not stop this particular data center from being built, any future data centers will not be built for at least one year until officials are able to study the impacts of data centers and incorporate regulations accordingly.

Logan County's Comprehensive Special Use Permit Regulations – a Template for Other Counties and Municipalities

Logan County, in northeast Colorado bordering Nebraska, recently developed some of the state's most comprehensive data center Special Use Permit (SUP) regulations.

Resolution 2026-5 went into effect on February 17, 2026, and applies to all data center facilities (DCF) with a Nameplate Capacity equal to or greater than 1 MW. Even a cursory review of the regulations confirms the exceptional level of constituent concerns that had been expressed to the county commissioners about the potential impacts of any data center in the county.

Comprehensive Impact Analyses. Among other things, the regulations require data center applicants to submit a location map, a conceptual site plan, a description of potential access routes, road surface materials, dust control measures, and a proposed road maintenance program. In addition, a general impact analysis which focuses on Logan County services and capital facilities must describe "baseline conditions and the impacts that the proposed use may cause."

A wildlife impact and mitigation plan must be submitted to the U.S. Fish and Wildlife Service and Colorado Parks and Wildlife for review, and absent mitigation that must be approved by the Board of County Commissioners, construction is prohibited within a defined critical habitat area.

Notice to Mineral and Land Owners. Notice must be provided to mineral estate owners within the project site and to individual property owners within one mile of the exterior project boundary.

Plan Submittal to the U.S. Department of War1. Interestingly, although there are no active military installations in Logan County, the regulations require the applicant to submit the complete plan for the facilities to the U.S. Department of War for review and consideration.

Pre-construction Materials Submittals. The SUP application must include: a detailed site plan; plans for septic systems, water supplies, waste disposal, water and wind erosion control; analyses of erosion, sedimentation and flooding; geotechnical data; baseline sols reports; road use agreement for use of county roads; certification that the facility will be:

> Maintained and operated in accordance with manufacturer(s) specifications, Owner Environmental Health and Safety Plans, and applicable Occupational Health and Safety Administration (OSHA) requirements to ensure the safety of site personnel and the public.

Liability Insurance. The applicant must also provide evidence of "liability insurance to cover loss or damage to persons and structures during construction and operation of the facility."

And It Doesn't Stop There. Both sections 1-103 and 1-104 of the new code authorize the county to "request additional information that may be required to evaluate the proposed DCF."

Local Government Isn't Waiting for the State Legislature to Act

Data centers are essential to the efficient use of AI. But they come with what some describe as overpowering environmental and economic risks. With the Colorado legislature's inability to adopt statewide regulations, local governments will continue to address the issues themselves.

At a minimum, the state will see more moratoriums like those in Larimer County and the City and County of Denver. At the next level will be more of the somewhat modest zoning regulations like those in Weld County. But, more ominously for date center developers, it is likely that several Colorado cities and counties will follow the lead of Logan County and its Resolution 2026-5 – comprehensive regulations that address virtually every troublesome impact that these facilities bring with them.

This blog post was drafted by John L. Watson and Robin L. Nolan, attorneys in the Denver, Colorado, office of Spencer Fane. For more information, visit www.spencerfane.com

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1"It is interesting to note that the Logan County code language, in fact, refers to the "Department of War." Legally, the agency remains the "Department of Defense." The creation and official renaming of executive departments require an act of Congress. However, pursuant to Executive Order 14347 signed by President Trump on September 5, 2025, the Department of Defense now operates under the "Department of War" as an official secondary name. The Pentagon has updated exterior plaques, websites (war.gov), and stationary. Defense Secretary Pete Hegseth has also adopted the title "Secretary of War". Both the House Armed Services Committee and the Senate Armed Services Committee have approved drafts of the annual defense policy bill to formally make the name change."

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