

UW–MADISON

DATA CENTER

WORKING GROUP

DATA CENTERS IN WISCONSIN: WHAT COMMUNITIES SHOULD KNOW

Produced by the UW–Madison Data Center Working Group on November 16, 2026 .

The Purpose of this Report

This report has two purposes. First, it is a practical resource for Wisconsin communities, local officials, town boards, tribal governments, community organizations, and residents who are actively navigating decisions about data center development. Each section is written to be specific and actionable without requiring a technical background. Second, it serves as a curated reference to scholarship produced by members of the UW–Madison Data Center Working Group and the broader research community, giving local decision-makers access to the best available evidence.

Authors

Anna Haensch, Nicholas Mailloux, John Parrish, Daniel Foth, Matt Kures, Esther Kang, Corbett Grainger, Karl Green, Ken Genskow, Ross T. Milton, Steve Loheide

Citing This Report

Anna Haensch, Nicholas Mailloux, John Parrish, Daniel Foth, Matt Kures, Esther Kang, Corbett Grainger, Karl Green, Ken Genskow, Ross T. Milton, Steve Loheide, *Data Centers in Wisconsin: What Communities Should Know*, University of Wisconsin–Madison Data Center Working Group (2026), doi.org/10.21231/zdfs-r035

Table of Contents

Executive Summary **2**

Introduction **4**

1.1 Data Center Basics 4

1.2 The Connection Between Data Centers and AI 4

1.3 The Wisconsin Outlook in 2026 4

1.3.1 Legislative Action 5

1.3.2 Community Reception 5

Utility and Natural Resource Impacts **6**

2.1 Electricity 6

2.2 Water 7

2.2.1 Water Use 7

2.2.2 Water Quality 7

2.3 Land Use 8

2.4 Air Quality 8

Economic Impacts **9**

3.1 Jobs 9

3.2 Sales and Property Tax 10

3.2.1 Data Center Sales and Use Tax Exemption (DCSTE) 10

3.2.2 Tax Increment Financing (TIF) 11

3.3 Infrastructure Burden and Lifecycle Costs 12

Tools and Recommendations **12**

4.1 Community Benefit Agreements (CBAs) 12

4.2 Zoning and Land Use Authority 13

4.3 TIF Negotiation Leverage 13

4.4 Utility Ratepayer Protection 14

4.5 Temporary Data Center Moratorium 14

Conclusions **15**

Authors & Collaborators **15**

Authors 15

Acknowledgements 15

Executive Summary

Hyperscale data centers are arriving in Wisconsin, bringing large and interconnected impacts on energy, water, land, and local economies. Hyperscale data center developments are neither all good nor all bad, and Wisconsin communities and state and local governments play a critical role in shaping eventual outcomes. This report is a guide for local decision makers. It outlines the key resource and economic impacts of hyperscale data centers and presents concrete recommendations to address these impacts.

Key Resource and Economic Impacts

This report is focused on hyperscale data centers, which require large parcels of land, purpose-built facilities, and significant expansions to the state and local utility infrastructure. Some of the most significant impacts related to this are:

- **Data centers are driving significant growth in energy demand.** Wisconsin peak load is expected to grow by over 40 percent in the next six years, with over 72 percent of that growth attributable to the three data center campuses currently under development. This growth is occurring within a broader increase in US electricity demand driven by AI usage, electrification, and manufacturing.
- **Data center design determines overall energy and water use.** Data centers can be designed with a range of cooling systems and there is a tradeoff between water and energy use. The systems that use less direct water for cooling tend to use more energy. In 2023, indirect water use (for electricity generation) was more than 10x the direct water use (for cooling) in US data centers.
- **How we meet energy demand will impact water use and air quality.** Generating electricity from fossil fuels requires more water than renewable energy sources, and burning fossil fuels emits carbon dioxide, methane, and other greenhouse gases as well as regional air pollutants. As a result, the environmental impacts associated with data center growth depend not only on electricity demand but also on how that demand is met. For example, greater reliance on renewable energy, retirement of coal-fired generation, and limited use of on-site diesel generators can reduce impacts on water use, greenhouse gas emissions, and local air quality.
- **Timelines for financing and equipment turnover are mismatched.** Tax Increment Financing, a commonly used tool for financing data center infrastructure development, operates on a decades-long time horizon while the underlying servers that make up 60 percent of the data centers' overall cost have a lifespan of 3-5 years. Developer agreements should include provisions for data center decommissioning and contingency plans for early obsolescence.

- **Impacts on local employment are uncertain.** The effects of data center construction and operation on employment remain somewhat uncertain due to their relatively new prominence in the development landscape. Measures of direct, indirect, and induced employment are highly location- and scale-dependent and should be approached with caution.

Recommendations

The impacts of hyperscale data center developments are significant but can be shaped and managed. Since data center developments move quickly, governments and communities should prepare proactively for engagement with potential developers.

- **Identify areas of local discretionary authority.** Municipalities should revise comprehensive plan documentation and establish zoning codes that address the new and distinct challenges posed by hyperscale data centers. At the same time, municipalities should identify and plan for all points of local discretionary authority, such as annexation and Tax Increment Financing.
- **Establish a plan for transparency and community feedback.** Local governments should ensure there are proper channels and frameworks for community feedback and engagement, and preemptively establish standards for transparency throughout the process. This includes identifying key community stakeholders and local staff members to establish Community Benefits Agreements and ensure continuity of oversight through the project lifetime.
- **Act at the state level to ensure ratepayer protection.** At the state level, the intense infrastructure demands of hyperscale data centers suggest the need for comprehensive legislation to address large-load utility customers, similar to recent ad hoc solutions like the Alliant service agreement in Beaver Dam and We Energies' Very Large Customer tariff proposal. Mandatory energy and water use reporting would also be useful in helping communities plan for data centers.
- **Consider a temporary moratorium.** A temporary data-center moratorium can give governments and communities time to establish zoning and planning frameworks, engage stakeholders, develop transparency measures, and assess policy and infrastructure needs before reviewing or approving proposed developments.

A local government that is well prepared will be ready to make decisions in its best interest, and in the best interest of Wisconsin.

Introduction

1.1 Data Center Basics

A data center is a building that houses computers that serve up data, computation, and cloud resources for people and organizations located elsewhere. When you stream a video, send an email, or ask a question of an AI assistant, your request travels to a data center where it is processed, and the response is sent back to you.

There are many kinds of data centers, and their classification depends on ownership and intended use. Most mid-to-large sized organizations (like hospitals and universities) have historically built and operated their own on-premises enterprise data centers for their own internal IT infrastructure.[1] Smaller organizations used to run their computing on-site in an IT closet with a handful of computers. As compute needs have grown in size and complexity, organizations of all sizes are opting to outsource their computing.[2] This usually means renting space and equipment in a shared facility that serves multiple businesses and is owned and managed by a third party. In the industry, this is called a colocation data center. These facilities have the benefit of increased efficiency and cost savings compared to the same capacity spread across multiple smaller sites.[3]

Recent growth in digital services, artificial intelligence (AI), and cloud computing, has led to the development of hyperscale data centers. Although they are not defined by precise size thresholds, these data centers are significantly larger than the other two classes, housing more than 2,000 computer servers[4] in buildings that occupy more than 30,000 square feet of space[5] and often drawing in excess 100 MW of power.[6]

1.2 The Connection Between Data Centers and AI

Hyperscale data centers are currently experiencing a significant period of growth and public attention driven by widespread AI acceleration. These data centers are typically filled with AI-specialized servers, which, in contrast to conventional servers, are typically accelerated with technology like Graphics Processing Units (GPUs) that allow servers to carry out fast computations with massive amounts of data in parallel.[7] Massive clusters of networked GPUs like those found in hyperscale data centers are essential for training state-of-the-art AI models.[8] Once trained, AI models are stored at data centers where inference is performed, to generate results for user queries.

Accelerating domestic data center growth to enable greater US AI capacity has been a prominent and explicit policy goal of the Trump Administration, established through a series of executive orders.[9]

1.3 The Wisconsin Outlook in 2026

Hyperscale data centers require large parcels of land, abundant and reliable electrical power, high-speed fiber-optic network connectivity, and access to water for cooling and electricity generation.[10] While this particular constellation of resources is relatively common, data center developers are further drawn in by tax incentives and a favorable regulatory environment. Wisconsin offers all of these things, and relative to coastal markets such as Northern Virginia, Silicon Valley, the Pacific Northwest, Wisconsin also offers lower land costs, available water, and a cooler climate that has the potential to reduce cooling costs, provided that data centers are designed with that in mind.[11]

As of the writing of this report, there are several hyperscale data center projects currently under construction in the state of Wisconsin. Most prominent among these projects are Meta's 700,000 square foot AI-workload campus in Beaver Dam;[12] Vantage Data Centers' "Lighthouse" data center in Port Washington developed in partnership with OpenAI and Oracle as part of the Stargate initiative;[13] and, Microsoft's multi-site campus in Mount Pleasant,[14] whose Phase 1 "Fairwater" site is operational as of June 23, 2026.[15]

Beyond these under construction or consideration, there have been many other hyperscale projects that have been paused or canceled. These include a proposed development in Menomonie, WI which was paused indefinitely on Sept. 17, 2025 via an executive action by the mayor of Menomonie;[16] Microsoft's "Project Nova" in Caledonia, WI which was dropped by Microsoft on Oct. 8, 2025 after significant community pushback;[17] a QTS development in DeForest, WI which was determined "not feasible"[18] and dropped by the DeForest Village Board on Jan. 27, 2026[19] after the proposed land annexation was deemed "against

public interest";[20] a proposal letter of intent between Viridian Acquisitions and the town of Janesville, WI which was allowed to lapse by the Janesville City Council on June 22, 2026;[21] and a Grant County data center proposal by an undisclosed developer which was quietly withdrawn in Spring 2026.[22] The up-to-date status of data center development in Wisconsin is tracked by the *Wisconsin Data Center Map* project.[23]

1.3.1 Legislative Action

Within this broader context, two notable bills were introduced in the 2025-2026 legislative session. The first, *2025 Wisconsin Assembly Bill 722*, was introduced on December 3, 2025, but never advanced out of committee.[24] Among its key provisions were required wage rates for data center construction and operational workers, the creation of a dedicated data center energy rate class, and renewable resource tariff and energy reporting requirements. The second, *2025 Wisconsin Assembly Bill 840* was introduced on January 9, 2026.[25] It passed the full Assembly on January 20, 2026, and died in the Senate. Among its key provisions were ratepayer protection mechanisms, a renewable energy co-location requirement, closed-loop (or similarly low-water) cooling mandate, water use disclosure, a reclamation bond, and land restoration requirements for canceled or abandoned projects.

1.3.2 Community Reception

Across Wisconsin and the nation, developers and industry advocates have presented hyperscale data center projects as an opportunity to bring economic development and substantial private investment to local communities. However, a nationwide movement of opposition to data centers sparked in 2023, and over the last 12 months pushback has escalated in Wisconsin and around the country. This has led to many local town halls and forums focused on aspects of data center development. As an example, on March 10, 2026, the town of Beaver Dam held a 'People's Town Hall'[26] facilitated by the Beaver Dam Education on Data Centers Group.[27] Drawing on the traditional two minute public comment period,[28] the citizen-led event framed community and speculative concerns within domains of expertise that included a former executive at a finance and technology company, legal staff at an environmentally conscious nonprofit firm, independent climate scientists, and residents whose homes are near the perimeter of the proposed site, alongside an appearance by Wisconsin-based journalist and comedian Charlie Berens. The collective knowledge braiding together community concern with domain expertise is a throughline that binds Beaver Dam's 'People's Town Hall' to other community-led events in places such as the Village of DeForest, Village of Cassville, City of Beloit, and City of Kenosha. Each emphasizes the following: this concern is nonpartisan and motivated by a collective demand for equitable

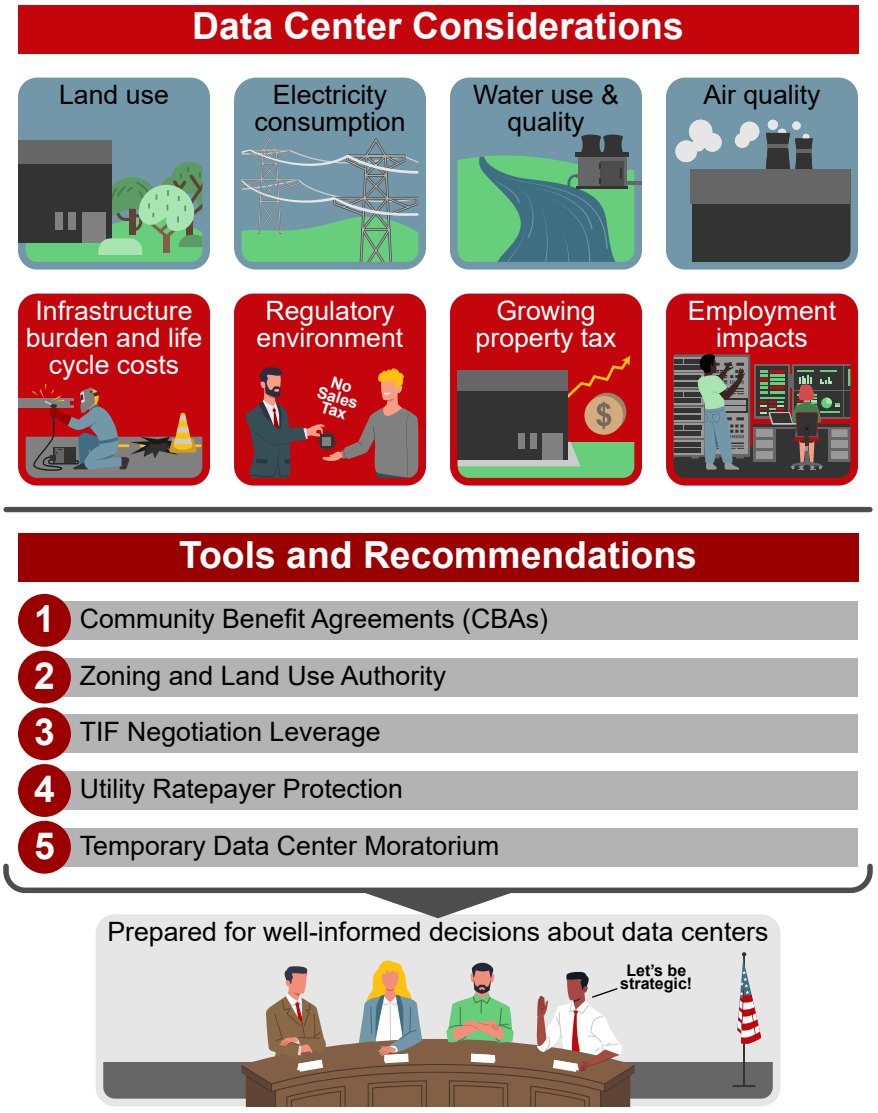


Figure 1. Data Center Considerations and Policy Tools.

and accessible open processes in governance, administration, deliberation, and assessment.[29]

The response to hyperscale data centers demonstrates how communities ground their call to action in localized participatory land-use processes and protocols. This requires moving beyond a simple binary framework that assumes a 'good' and 'bad' actor, and instead, requires looking closely at the complex conditions in which local government, community members, and state entities navigate, particularly in parts of WI. The slogan "dairyland, not data land,"[30] captures what many residents are worried about and points to a legacy that has weakened local open processes and the conditions required to develop them. Community members are asking for a legitimized say in determining how their towns change, and what happens to their shared resources.

Utility and Natural Resource Impacts

2.1 Electricity

Power is measured in Watts (W), which describe the rate at which energy is being consumed. Data centers running AI workloads require massive amounts of power. A typical server in a hyperscale data center is rated at 10 kW[31] of power, and there are usually thousands of these servers running simultaneously.[32] Individual servers fluctuate in what percentage of their rated 10 kW is actually being drawn at a given time, from around 20 percent when idle, to 70 percent for training models, and highly variable (and challenging to model) for inference tasks.[33] In addition to the substantial power draw for running computation, between 30 percent and 40 percent of a data center's total energy consumption is used for cooling.[34] This high variability in AI server power usage leads to what is often called "lumpy" power usage, with intermittent spikes and drops instead of a predictable and steady baseline.

Electricity consumption is typically measured in Watt-hours (Wh), which describe the amount of energy used by a 1 W device running over a period of one hour. For example, a 60 W lightbulb running for 1 hour uses 60 Wh of energy. Putting this in a relative context, an LED lightbulb uses less than 1 kWh per month, a standard refrigerator uses around 100 kWh per month, and an average WI home uses around 8.4 MWh per year.[35] Viewed another way, a 1 GW data center would use up to 8,760 GWh of electricity annually, which is enough to power more than one million households. According to a 2024 Lawrence Berkeley National Laboratory (LBNL) report, the total US data center energy consumption was 176 TWh in 2023, with a projected growth reaching between 325 and 580 TWh in 2028.[36]

Figure 2 shows the amount of electricity being used by the US electrical grid during peak demand. The estimated total for 2024 is 774 GW, and the forecast total for 2030 is between 880 and 980 GW. This is in the context of substantial increases in electrical demand worldwide. In the US, electrical demand

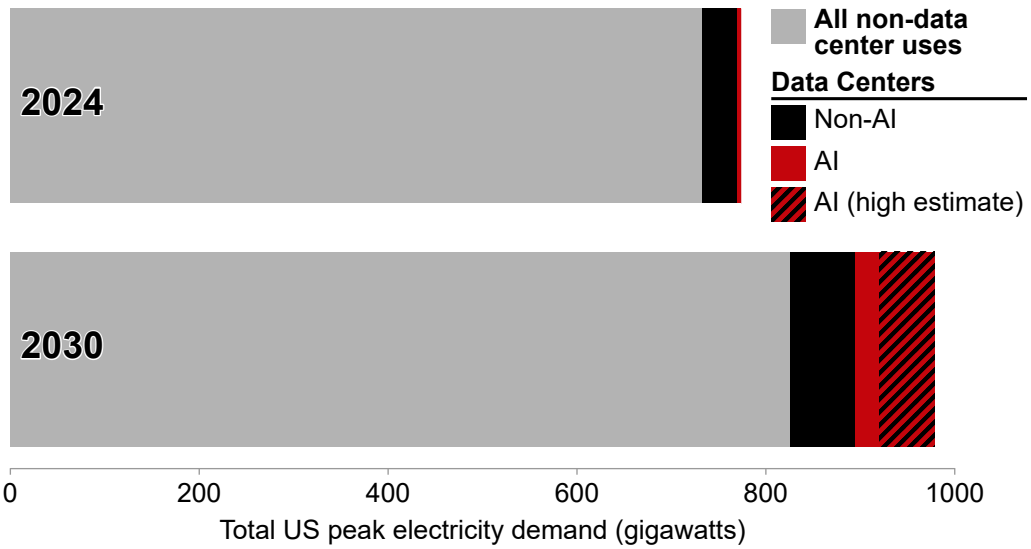


Figure 2. Peak US Electricity Demand by End Use.

Data Sources: International Energy Agency, "World Energy Outlook 2025"; Center for Strategic and International Studies, "The Electricity Supply Bottleneck on U.S. AI Dominance, 2025"; U.S. Dept. of Energy, "Resource Adequacy Guide," 2025; Goldman Sachs, "AI to drive 165 percent increase in data center power demand by 2030," 2025.

increased by 2.1 percent on average for each of the last five years, after 15 years of stable demand, and this is predicted to continue through 2050.[37] Data centers are a major driver of this forecast growth, accounting for roughly half of projected demand increases according to some estimates.[38] Given the proprietary nature of data center operations it is challenging to separate data center workloads by type (i.e., AI workloads and non-AI workloads. In Figure 2 we provide a range of estimates for data center demand growth derived from a combination of government, policy think tank, and industry reports.[39] Electrification in the building and transportation sector (e.g., heat pumps and EVs), as well as reshored and new manufacturing facilities, are also large contributors.[40]

The region of the electrical grid that serves Wisconsin (the Midcontinent Independent System Operator or "MISO") is among the regions considered "high risk" in terms of resource projections and ability to meet demand forecasts.[41] According to the 2026 Draft Strategic Energy Assessment published by the Public Service Commission, Wisconsin peak load is expected to grow by over 40 percent in the next six years, with over 72 percent of that growth attributable to the three active data center developments underway as of this writing.[42]

As of the writing of this report, actual data center electricity demand has tracked toward the lower end of forecast ranges. For example, 2024 data center electricity consumption in the United States was 183 TWh, which was at or below the LBNL report forecast.[43] This means that although energy demand is very likely to increase, the overall shortfall might be less significant than what has been forecasted. It should be noted that most forecasts are based on some combination of limited publicly available data, proprietary market analysis, and estimates from data center equipment ordering and shipments. Better and more timely public reporting on data center energy demands would enable more accurate forecasts and better inform utility planning.

2.2 Water

2.2.1 Water Use

Data centers draw large amounts of electricity to power their servers, and nearly all of that energy is ultimately converted to heat as the chips perform computations. In order to protect the chips, data centers need cooling systems to remove the heat. Consequently, data centers use water both directly, through on-site cooling systems, and indirectly, through the water used to generate the electricity they consume. It was estimated that in 2023, US data centers consumed (i.e., withdrew and did not return to the watershed) 17 billion gallons of water for cooling compared to 211 billion gallons of water for electricity generation (either on-site or off-site).[44] The total amount of water withdrawn was significantly higher, with some of it being discharged back into the watershed.

A data center's on-site water use depends on how much heat its computing infrastructure generates and the cooling technology used to manage it. Closed-loop cooling systems recirculate water and other fluids and use substantially less water than evaporative systems that lose water to evaporation as part of the design. While evaporative cooling systems have the highest direct water use, they tend to be more energy efficient than other cooling systems, so there is a tradeoff.[45] Beyond the cooling, the amount of water used depends on the fuel source and design of the facility generating the electricity used by the data center.

Hyperscale data centers that use open-loop evaporative cooling can significantly affect local water resources because they withdraw surface water or groundwater that is ultimately lost to evaporation. Even though the earth's water cycle is closed, loss to evaporation means that water returns to the earth in a different watershed from where it was initially extracted. In many cases, potable water must be used to avoid clogs and bacterial growth in pipes.[46] Data centers often draw from municipal water systems that have already pumped and treated water using energy and public infrastructure which has a cost to communities.

For facilities that rely on closed-loop or waterless cooling technologies, a larger share of water impacts may occur at the power plants that generate their electricity, which may be located in a different community. Advances in cooling system design and technology have potential to reduce water use.

2.2.2 Water Quality

Data centers can impact water quality by discharging cooling water with elevated temperatures and altered

chemical composition. When water used in a cooling process is discharged to surface water (or groundwater) at high temperatures, the thermal loads can negatively affect aquatic species. Water quality may also be reduced when cooling systems are flushed for cleaning and maintenance, removing process chemicals (refrigerants, corrosion inhibitors, etc.); for hyperscale centers, these waste streams require treatment at an in-house or municipal wastewater treatment facility.

Some data centers use a two-phase immersion cooling design that uses PFAS-based chemicals.[47] These chemicals are effective coolants, but PFAS persist in the environment and have been linked to health risks, which has drawn regulatory scrutiny.[48] There is currently work underway to design alternative non-PFAS coolant.[49]

2.3 Land Use

Land use issues with hyperscale data centers are similar to those of other large industrial campus facilities. Constructing a new hyperscale facility often involves converting farmland or open space to accommodate large buildings and related infrastructure. New data centers would be required to follow local zoning requirements and state and local regulations for stormwater protections and construction site erosion controls (see 4.2, Zoning and Land Use Authority). Larger campuses also have the potential to include landscape and habitat restoration projects that may improve ecological conditions compared to previous uses (e.g., row-crop agriculture).

2.4 Air Quality

The impact of data centers on air quality is most significant in the location where the electricity powering the data center is being produced, which might be geographically different from the data center itself. Data centers have a high electricity demand, much of which is met with fossil fuels, whether from grid-connected or on-site behind-the-meter energy resources. In 2024, natural gas (40 percent) and coal (32 percent) together made up the majority of net electric power generation in Wisconsin, followed by nuclear at 15 percent, solar at 4.4 percent, hydroelectric at 3.2 percent, and wind at 3.1 percent.[50] Fossil fuel energy sources such as coal and natural gas emit carbon dioxide, methane, and other greenhouse gases as well as regional air pollutants including particulate matter, sulfur dioxide (SO_2), nitrogen oxides (NO_x), and volatile organic compounds (VOCs). SO_2 and NO_x can form *fine particulate matter ($PM_{2.5}$)* pollution after being released into the atmosphere. *Ground-level ozone* pollution, the main component of smog, is created by chemical reactions involving NO_x and VOCs in the presence of sunlight. $PM_{2.5}$ and ozone exposure are associated with adverse health effects, including premature death, hospital admissions, and emergency department visits from cardiovascular, respiratory, and neurological diseases. Clean energy sources such as solar and wind, on the other hand, do not emit air pollution at the point of generation.

For *grid-connected* data centers that tie into the wider electric grid, electricity demand is supplied by a variety of fossil fuel and clean energy sources – just as it is for households and businesses. It is not always easy to determine the air pollution effects from grid-connected data centers since grid operators may increase generation from different types of existing energy sources to meet increased demand. The contribution of energy sources to the overall energy mix is also changing. As of May 2026, there was 4.6 GW of new electricity generation capacity planned for 2026–2029 in Wisconsin: 3,033 MW of solar, 1,182 MW of natural gas, 319 MW of battery storage, and 67 MW of onshore wind.[51] In addition to planned new capacity, existing coal power plants have had their scheduled retirement dates pushed back,[52] citing projected demand growth that is partly driven by data center development.

Because connecting to the electric grid can take years, some data center developers are instead turning to on- or near-campus generating capacity that operates independently of the grid. This arrangement is known as "behind-the-meter" generation. The vast majority of planned behind-the-meter capacity is from natural gas turbines and engines.[53] Co-locating fossil fuel infrastructure with data centers can introduce new large sources of air pollution. Beyond behind-the-meter generation for normal operations, data centers more commonly have on-site backup generators to provide power during outages and emergencies. The use of backup generators, which typically run on diesel fuel, is limited to 100 hours per year for non-emergencies,[54] so their effect on air quality is often constrained to the hours and days during and after their use. However,

given their substantial energy draw, a single hyperscale data center may require hundreds of onsite generators to ensure continuous power. As a result, even short operating periods can produce substantial emissions.[55]

Economic Impacts

3.1 Jobs

Job creation is among the most frequently cited benefits of proposed data center developments. While there are several methodologies for estimating the employment impacts of economic development activities, the effects of data center construction and operation remain somewhat uncertain due to their relatively new prominence in the development landscape. Currently, there is a limited but growing literature that examines the employment impacts of data center development. The results from these studies vary widely, with a recent national analysis estimating that data centers entering a county produce gains of 4 to 5 percent in private sector employment.[56] In contrast, an analysis of Texas data center development showed zero net job growth associated with data centers.[57]

Other reports consider data center employment impacts through the use of *input-output (I-O) modeling*.[58] I-O modeling is a widely used technique that examines purchasing relationships among industries and institutions to estimate how activity in one sector, such as data center employment, affects other industries in a region through supply-chain spending.[59]

Given the proposed number of jobs at the data center (i.e., direct employment), I-O modeling can estimate the number of *indirect* jobs, or jobs that are supported in other industries as a result of the data center making purchases throughout its supply chain. Depending on the type of I-O model used, an estimate of *induced* jobs may also be generated. Induced jobs are those that are supported as a result of employees at the data center and in its supply chain spending their earnings in the local economy. The direct, indirect and induced estimates combine to estimate the total number of jobs supported.

An employment multiplier is a commonly reported measure calculated by I-O modeling. An employment multiplier estimates how many indirect and induced jobs are supported by the addition of a single job at a data center.

Results of an I-O model can vary according to a number of factors, so precise values will not be presented here. Industry studies typically report larger multipliers, while other analyses tend to show more modest multipliers.[60] Given the variability in these values, when presented with data center employment impacts resulting from I-O modeling, communities may want to ask questions about the assumptions and parameters used in the analysis to understand how the number should be interpreted.

Caution should be exercised in applying a multiplier generated in another geographic area to a local context. For instance, statewide estimates of data center employment impacts should not be used in a smaller geographic area. The statewide impact number is likely inflated as it can capture larger supply-chain and commuting pattern interactions than those found in a smaller geography. Furthermore, an employment impact estimated for one county is not interchangeable with another county. Also, it should be noted that some employment impact estimates consider the impact of data centers operating in other locations making local purchases through supply chains. These employment impacts do not result from the construction or operation of a local data center but reflect the broader data center industry's effects on the local economy.

The type of data center and industry sector being modeled is also critical. Hyperscale data centers, colocation facilities, or other smaller operations may have different labor demand or inter-industry purchasing patterns impacting the model. Moreover, the industry sector could be customized to reflect the purchasing patterns of the specific data center in question, or it could rely on a broad industry category that may capture other types of economic activities.

Finally, analyses of employment estimates should consider details about the types of jobs being estimated. Estimates might include the impacts arising from constructing and operating the data center or only operating the data center.[61] If construction impacts are included, they will be limited to a discrete time period, while operational impacts are ongoing. Communities should also consider the quality of data center jobs, including whether they offer competitive wages and benefits.

3.2 Sales and Property Tax

3.2.1 Data Center Sales and Use Tax Exemption (DCSTE)

In 2023, Wisconsin enacted a sales and use tax exemption to incentivize data center development in the state. Introduced as Senate Bill 308 on May 24, 2023, the proposal created a sales and use tax exemption for data center equipment or software, as certified by the Wisconsin Economic Development Corporation (WEDC).[62] The bill received broad support from business associations and the technology and energy industries,[63] and the companion bill rapidly advanced through the Wisconsin Assembly.[64] Although the Assembly version passed on June 21, 2023, it failed to advance in the State Senate. However, on June 26, 2023, the Joint Committee on Finance added similar statutory provisions to Senate Substitute Amendment 2, the executive budget act of the 2023 legislature.[65] The 2023-2025 biennial budget was approved by Governor Evers on July 5, 2023, and enacted as 2023 Wisconsin Act 19.[66]

With respect to data centers, Act 19 amended the Wisconsin tax code to add data center property and equipment to the list of existing sales and use tax exemptions; directed WEDC to "certify a qualified data center for the purposes of the sales and use tax exemption"; and set October 1, 2023, as the effective date for the exemption. The WEDC Board of Directors unanimously approved the Data Center Sales and Use Tax Exemption (DCSTE) program guidelines on September 19, 2023.[67] Generally, the DCSTE program exempts data center developers from sales and use tax on materials used to build and maintain data centers.[68] According to the Annual Report on Economic Development, as of July 1, 2026, WEDC awarded the tax exemption to four recipients in Mount Pleasant (Microsoft Corporation), Verona (Epic Hosting, LLC), Beaver Dam (Degas, LLC), and Port Washington (Oracle America Cloud).[69]

How does Wisconsin compare to its neighbors and other states across the country? According to a report by the National Conference of State Legislatures (NCSL),[70] 38 states offer tax incentives targeted for data centers as of July 2025 (see Figure 3). Only the ten states depicted in grey in the map below along with Alaska and Hawaii do not offer incentives specific to data centers.

The NCSL report also notes "all states that offer a data center tax incentive provide state sales tax exemptions" even though policies and incentive program administration vary from state to state.

While these incentives are intended to attract investment and data center development, they also result in foregone state tax revenue. Based on an analysis by the Wisconsin Department of Revenue and the Legislative Fiscal Bureau, every $1 billion in data center project costs amounts to $40 million in foregone state tax revenue during the initial construction phase, and an additional $10 million annually for ongoing operations.[71] The same report estimates that, based on announced and planned investments as of March 2026, Wisconsin is estimated to forgo $1.5 billion in initial sales tax revenue, and an additional $369 million annually.[72] This forgone revenue needs to be balanced against uncertainty around jobs and other economic activity.

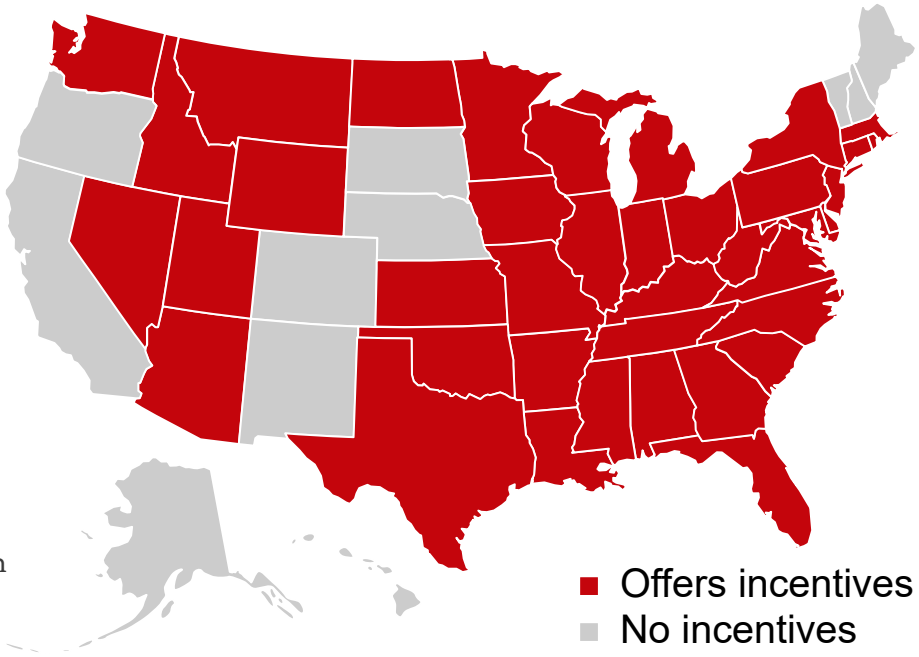


Figure 3. US States Currently Offering Data Center Tax Incentives, 2026.

Data Source: National Conference of State Legislatures, "Subsidizing Servers: How States Are Competing to Attract Data Centers," April 1, 2026.

3.2.2 Tax Increment Financing (TIF)

Some municipalities may consider using Tax Increment Financing (TIF) to support public infrastructure improvements associated with large-scale data center developments. Under Wisconsin's TIF framework, a municipality establishes a Tax Incremental District (TID), a geographically defined area with a fixed base property value at the time of its creation. The municipality may then incur debt to finance eligible public improvements within the district, with repayment supported by future tax increments generated from increases in property value above the established base. Typically, TIDs remain active for 20 to 30 years, subject to statutory limitations established under Wisconsin law.[73]

For data center projects, TIF arrangements typically follow a structure in which the developer pays for the infrastructure and the municipality repays it through TIF proceeds, rather than taking on debt itself. Municipalities and developers generally negotiate specific TIF terms through a Development Agreement. Such agreements commonly address project timelines, developer performance requirements, reimbursement schedules, infrastructure obligations, and clawback provisions intended to protect public interests if project commitments are not fulfilled. These terms are largely negotiated at the local level and are subject to limited direct state oversight.

A significant consideration for communities evaluating large-scale data center investments is Wisconsin's TIF value limitation and the municipality's TIF capacity. State law generally prohibits a municipality from creating a new TID when the estimated market value of taxable property within existing TIDs equals or exceeds 12 percent of the municipality's total market value of taxable property.[74] Consequently, in municipalities with relatively modest tax bases, the valuation generated by a major data center project may substantially exceed the remaining available TIF capacity, placing them over the limit and preventing them from opening a future TID.

When a municipality reaches the 12 percent TIF value limitation, additional TIDs generally cannot be created unless sufficient value capacity is restored through the closure of existing districts, the termination of a specific TID, or substantial growth in the municipality's overall equalized value that reduces the proportion of value contained within TIDs.

As an example, the Wisconsin Department of Revenue's 2025 Statement of Assessment reported the City of Port Washington's assessed value at $1,833,234,600, corresponding to an equalized value of approximately $1,900,925,500.[75] According to the Wisconsin Department of Revenue's 2025 TIF Value Limitation Report, Port Washington had approximately $83,305,100 of value within TID increments, representing 4.38 percent of its equalized value. Based on the statutory 12 percent limitation, the City would have had approximately $144.8 million of remaining TIF value capacity available before reaching the threshold established under state law.

Publicly available information regarding the proposed Vantage Data Center development indicates that more than $175 million in municipal utility and infrastructure improvements may be required to serve the project area.[76] If the project ultimately reaches the anticipated assessed value projections discussed in public planning documents, the resulting increment could substantially exceed the City's remaining 12 percent TIF capacity limitation. Relative to Port Washington's 2025 equalized value of approximately $1.9 billion, a fully developed data center with an assessed value exceeding $2.1 billion would represent a transformational increase in the local tax base and would significantly surpass the City's available TIF capacity under conventional statutory limits. As long as this TID remained open, the municipality would be prevented from opening any new TIDs.

Recognizing the unique scale of certain strategic economic development projects, Wisconsin Act 16, effective July 2025, provides specific statutory exceptions that allow both Port Washington and Beaver Dam to exceed the standard 12 percent TIF value limitation.[77] These legislative exceptions were enacted to accommodate exceptionally large data center developments whose projected property values would otherwise exceed the TIF capacity limits applicable to municipalities under existing law.

A broader issue with using TIF to finance data centers is that it ties up the property tax increment for use within the TID until the project is closed. This

means the district captures all the added property tax revenue and no new revenue flows to the county or school district until the TID is closed. Depending on the particulars of the deal, the property tax revenue generated by the data center may not be used for purposes local residents are likely to care about (or can relieve them of their tax burden) until the TID closes, which may be a long time.

3.3 Infrastructure Burden and Lifecycle Costs

Data centers place concentrated demands on the systems and infrastructure that keep a community running. A single facility can require dedicated power, large volumes of water for cooling, substantial land, and high-capacity fiber, and each of those demands draws on resources and infrastructure that also serve existing residential and commercial users. The electrical load can strain the local grid, cooling water draws against the same supply residents depend on, and both construction and operation generate secondary pressures: heavy truck traffic on local roads, added demand on police, fire, and EMS, and, during build-out, a surge of workers that many communities cannot house given existing shortages of hotel, rental, and permanent housing. These burdens rarely stop at municipal boundaries, so neighboring communities are often affected without ever being party to the decision.

The cost profile of a data center is front-loaded and surprisingly short-lived. Upfront capital for a one-gigawatt facility can reach tens of billions of dollars,[78] and annual operating costs can approach $1 billion.[79] Critically, the servers that account for roughly 60 percent of a facility's total cost of ownership have an expected life of only three to five years. As a result, the economic assumptions behind a project can shift quickly, and a facility might wind down or close well before a community expects.[80] Moreover, the precise methods of disposal, reuse and reclamation of data center server components can have a significant impact on the overall environmental burden.[81]

While retired servers hold significant material-recovery value, site decommissioning carries a substantial bill. Hyperscale data center facilities span millions of square feet with complex infrastructure, electronic waste, advanced cooling systems, power distribution units, and network cabling, all of which require teardown, disposal, restoration and remediation at the end of a data center's life. Communities that fail to secure decommissioning provisions in advance, such as performance bonds or other financial guarantees, may face financial risks if operations end unexpectedly. These risks can include cleanup costs, stranded infrastructure investments, lost anticipated tax revenue, and ongoing demands on public services.

Tools and Recommendations

4.1 Community Benefit Agreements (CBAs)

A Community Benefit Agreement (CBA) is an agreement signed by the developer and one or more community parties (local government, community organizations, tribal governments), that guarantees a community receives benefits beyond the project's core economic incentives (e.g., jobs and tax revenue). CBAs are among the most powerful tools available to communities because they are negotiated before development begins, when community leverage is greatest.

CBAs can take on multiple forms such as legally binding contracts between developers and local/tribal governments and community organizations; developer-funded Community Benefit Funds dedicated to community-established priorities; direct investment through one-time or recurring payments; and non-financial benefits like workforce training or the development of community infrastructure.

While CBAs are common in energy utility projects like wind and solar, they are still relatively new in the domain of data centers.[82] Columbia Law School is compiling a database of CBAs, but as of writing, there is only one active entry for data centers.[83] CBAs differ from developer agreements, such as the agreement between the City of Port Washington and Vantage[84] or the draft pre-annexation agreement from the QTS DeForest project,[85] specifically in who is party to the negotiation. A CBA explicitly draws from community input, while a developer agreement is a more standard two-party contract. The World Resources Institute maintains a database of a variety of community benefit frameworks including CBAs, host community agreements, project workforce agreements, and community benefit plans.[86]

4.2 Zoning and Land Use Authority

In the absence of a statewide regulatory framework for data centers, local governments (cities, villages, towns, and counties) may use their local land use authorities, such as zoning, to regulate data centers.[87] Wisconsin has almost two thousand local units of government each with a unique perspective on land use.

Local governments must adopt a local comprehensive plan as a prerequisite for enacting and amending zoning and other implementation tools. Comprehensive plans provide the opportunity for local governments to address numerous community issues that relate to data centers including housing; transportation; utilities and community facilities; agricultural, natural and cultural resources; economic development; intergovernmental cooperation; and land use.[88] Local citizens are involved in developing the plan. The adopted plan provides guidance for local government decisionmakers because zoning and other tools, such as farmland preservation plans, must be consistent with the local comprehensive plan[89] and tax increment financing districts must conform to the local comprehensive plan.[90]

A local zoning ordinance identifies different districts (zones) within a community and regulates property use within those districts to advance public health, safety, and welfare. If a local government wants to zone for data centers, the local zoning ordinance should define what the community means by "data center," identify districts in the community where data centers may locate, and include various standards and requirements that a proposed data center must meet. These requirements may include size limitations, design standards, performance standards, environmental standards, and other conditions.

With the advent of large-scale data centers, some local governments in Wisconsin have amended their zoning ordinances to regulate data centers.[91] Others have adopted temporary moratoria on permitting data centers while they study possible amendments to their ordinances to address potential data centers (discussed in more detail in Section 4.5).[92]

While special zoning such as shoreland and floodplain zoning are mandated by the state, general zoning is not. All cities and most villages (the incorporated areas of the state) have zoning ordinances. Towns (the unincorporated areas of the state) may have their own zoning ordinance or, if the county has a zoning ordinance, may elect to have the county zoning ordinance apply within the town. Many towns in Wisconsin have no zoning. County zoning authority is limited. It generally does not apply within cities and villages and only applies in towns that elect to have the county zoning ordinance apply within the town. Local governments may also adopt non-zoning ordinances, such as licensing ordinances, to regulate data centers.

The amount of land needed for hyperscale data centers often results in developers focusing on large tracts of undeveloped land, often farmland, located in towns. Cities and villages have limited authority to regulate land uses beyond their borders. Data center developers may petition to have an adjacent city or village annex the land to the city/village to connect to city/village utilities and services.

4.3 TIF Negotiation Leverage

TIDs are overseen by a Joint Review Board (JRB) whose members represent taxation jurisdiction within the specific TID (school district, technical college, county, municipality) and one public member.[93] The JRB is responsible for approving or denying the creation or amendment of any TID and consequently any potential TIF financing, as well as approving or amending any project costs.[94] As such, this is a local decision and a municipality is under no obligation to create a district or to structure it on the developer's preferred terms. On April 7, 2026, Port Washington voters approved a ballot measure requiring voter approval before the city can create, adopt, or approve a TIF for any project projected to cost more than $10 million.[95] Similar measures are expected to appear on ballots in November 2026.[96] Given its discretionary nature, these negotiations also present an opportunity for local governments to require energy efficiency or other design constraints as a condition for TIF funding. Local governments generally cannot mandate energy-efficiency standards beyond those required by state building codes. However, TIF negotiations may provide an opportunity to encourage or require additional efficiency measures as a condition of receiving public support.

4.4 Utility Ratepayer Protection

Communities can advocate for ratepayer protections at the state level through the Public Service Commission (PSC) and through state legislation.

The rapid growth of large-load data centers will require substantial new investment across the entire electricity supply chain—not only in transmission and distribution infrastructure, but also in new generation capacity to meet the additional demand. Because these investments are large, long-lived, and often driven by the demand of a small number of customers, they raise distinct concerns about how costs and risks are allocated between data centers and existing ratepayers.

Power costs associated with large-load data centers are currently being addressed through ad hoc PSC decisions such as the recent decisions regarding the Alliant service agreement in Beaver Dam[97] and We Energies' Very Large Customer tariff proposal.[98] Legislation was proposed at the state level to address some of the concerns related to pass-through costs to ratepayers,[99] but this is still an ongoing issue.

One increasingly common tool is the use of bespoke tariffs for very large customers. Rather than folding data center demand into standard rate classes, utilities and regulators can negotiate customer-specific tariff structures that assign the incremental costs of new generation, transmission, and distribution to the large users driving those costs. Well-designed bespoke tariffs can include minimum take-or-pay commitments, long contract terms, and cost-causation provisions that protect existing ratepayers from subsidizing infrastructure built primarily to serve a single facility.

A related concern is the risk of stranded assets. If utilities build generation and network capacity to serve data centers that later reduce operations, relocate, or fail to materialize—whether due to shifts in the industry, technological change, or the speculative nature of some announced projects—the resulting underused assets could leave remaining ratepayers responsible for the fixed costs. Tariff and contract design that allocates this risk to large customers, for example through long-term commitments and exit provisions, can mitigate the exposure of the broader ratepayer base.

Transparent reporting of energy and water consumption would also be a significant benefit for resource and utility planning and related research and forecasting.

4.5 Temporary Data Center Moratorium

A recent Gallup poll showed that, nationally, 48 percent of respondents strongly opposed and an additional 23 percent somewhat opposed local construction of an AI data center.[100] According to the same poll, only 7 percent strongly favored, and 20 percent somewhat favored local construction of an AI data center.[101] According to Gallup, the opposition is tied to environmental and quality of life concerns. With half of the opponents mentioning the excessive use of resources (water, energy, and pollution concerns). In response, many local governments are passing data center moratoria (12 to 18 months) to better prepare for data center impacts and establish suitable zoning codes.

Several local-level moratoria have already been enacted. In January 2026, the Madison City Common Council voted to adopt a temporary data center moratorium on facilities over 10,000 square feet while the city develops a permanent regulatory framework.[102] In July 2026, the City of Cottage Grove passed a similar moratorium,[103] as did Dane, Green, Dodge, Door, Manitowoc and La Crosse counties.[104] As of the writing of this report, many other localities are considering similar actions.

While a bill for a Wisconsin state-level moratorium was introduced in the previous legislative session,[105] the idea didn't gain much support at the time. As of writing, New York is the only state with an active moratorium, which was imposed by a legislative order from the governor.

At the federal level, Senator Bernie Sanders introduced the Artificial Intelligence Data Center Moratorium Act in March 2026,[106] which would impose a moratorium on new data center construction until federal legislation addressing the public risks of artificial intelligence is enacted. As of writing, this bill is still pending. Whether or not a moratorium is ultimately adopted, temporary pauses can provide communities time to evaluate zoning, infrastructure, resource, and governance con-

siderations before large-scale development proposals move forward.

Conclusions

Hyperscale data center development presents Wisconsin communities with a complex set of interconnected economic, infrastructure, environmental, and governance considerations. The utility and land-use implications of hyperscale development pose a new challenge for the state of Wisconsin and the bodies that oversee our infrastructure and planning processes. The economic impacts of hyperscale data centers are neither all good nor all bad. They have the potential to create jobs, expand local tax bases, and stimulate the Wisconsin economy, but care must be taken to understand the scale and distribution of these impacts. Transparency will be essential to maintaining public trust and enabling communities and governments to plan for the energy, water, and infrastructure demands of future development.

Communities should prepare proactively to engage with data-center developers. This preparation may include adopting zoning regulations that address the new challenges posed by data centers; discussing transparency standards in advance; maintaining sufficient staff capacity to manage negotiations and related review processes; and establishing clear channels and procedures for community input and engagement. Because development decisions often move quickly, communities that prepare in advance will be better positioned to make informed decisions and shape outcomes that align with local priorities.

Authors & Collaborators

Authors

The following faculty, staff, and researchers from University of Wisconsin–Madison contributed to the writing of this report:

- **Anna Haensch**, Data Science Institute
- **Nicholas Mailloux**, Nelson Institute for Environmental Studies
- **John Parrish**, Division of Extension
- **Daniel Foth**, Division of Extension
- **Matt Kures**, Division of Extension
- **Esther Kang**, School of Human Ecology
- **Corbett Grainger**, Agricultural and Applied Economics
- **Karl Green**, Division of Extension
- **Ken Genskow**, Planning and Landscape Architecture Natural Resources Institute
- **Ross T. Milton**, La Follette School of Public Affairs
- **Steve Loheide**, Civil and Environmental Engineering

Report graphics by **Kate Baldwin**, design by **Kevin Berger**.

Acknowledgements

We would like to to thank **James Jerden** for careful copyediting and the following individuals who provided technical reviews for this report:

- **Paul Wilson**, Nuclear Engineering and Engineering Physics, University of Wisconsin–Madison
- **Kathy Cramer**, Political Science, University of Wisconsin–Madison
- **Mike Graham**, Chemical and Biological Engineering, University of Wisconsin–Madison
- **Kyle Cranmer**, Data Science Institute, University of Wisconsin–Madison
- **Kathy Kuntz**, Dane County Office of Energy & Climate Change
- **Nick Zavos**, League of Wisconsin Municipalities

We acknowledge the work of **Cris Carusi**, **Melanie Hebl**, and **Chloe Larsh** for their coordination and support of the report development and the Nelson Institute for Environmental Studies Strategic Communications Team for the graphic design.

Endnotes

1 Congressional Research Service, "Data Center Energy Infrastructure: Federal Permit Requirements," Ashley J. Lawson et al., December 12, 2025, congress.gov/crs-product/R48762.

2 Uptime Institute, "The majority of enterprise IT is now off-premises," Max Smolaks, February 21, 2024, https://journal.uptimeinstitute.com/the-majority-of-enterprise-it-is-now-off-premises/; see also Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 37, escholarship.org/uc/item/32d6m0d1.

3 Environmental Research Letters, "The environmental footprint of data centers in the United States," Md Abu Bakar Siddik et al., May 2021, iopscience.iop.org/article/10.1088/1748-9326/abfba1/meta.

4 American Association for the Advancement of Science, "A Primer for Local Governments: Understanding Data Centers," August 2025, aaas.org/sites/default/files/2025-09/Data%20Center%20Fact%20Sheet%20-%20Aug2025.pdf.

5 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 35, escholarship.org/uc/item/32d6m0d1.

6 Congressional Research Service, "Data Centers and Their Energy Consumption: Frequently Asked Questions," Ashley J. Lawson et al., May 12, 2026, congress.gov/crs-product/R48646.

7 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 16, escholarship.org/uc/item/32d6m0d1.

8 "Computing Power and the Governance of Artificial Intelligence," Sastry et al., February 14, 2024, p. 20, arxiv.org/pdf/2402.08797; Epoch AI, ""The Rising Costs of Training Frontier AI Models," Ben Cottier et al., February 7, 2025, arxiv.org/pdf/2405.21015.

9 The White House, "Executive Order 14154: Unleashing American Energy," January 20, 2025, whitehouse.gov/presidential-actions/2025/01/unleashing-american-energy/; The White House, "Executive Order 14179: Removing Barriers to American Leadership in Artificial Intelligence," January 23, 2025, whitehouse.gov/presidential-actions/2025/01/removing-barriers-to-american-leadership-in-artificial-intelligence/; The White House, "Executive Order 14318: Accelerating Federal Permitting of Data Center Infrastructure," July 23, 2025, whitehouse.gov/presidential-actions/2025/07/accelerating-federal-permitting-of-data-center-infrastructure/.

10 Congressional Research Service, "Data Center Energy Infrastructure: Federal Permit Requirements," Ashley J. Lawson et al., December 12, 2025, congress.gov/crs-product/R48762; Intel, "Selecting a Data Center Site: Intel's Approach," Marissa Mena et al., February 2014, media14.connectedsocialmedia.com/intel/02/11447/IT_Best_Practices_Data_Center_Site_Selection.pdf; Brookings Institution, "AI, data centers, and water: A growing need for regional coordination amid economic development potential," Joseph W. Kane, November 20, 2025, brookings.edu/articles/ai-data-centers-and-water/.

11 Milwaukee Journal Sentinel, "Wisconsin data center boom will demand massive water, energy resources," Caitlin Looby, April 9, 2026, jsonline.com/story/news/environment/2026/04/09/wisconsins-ai-data-center-boom-raises-concerns-about-water-supply/89245542007/.

12 Meta, "Hello, Beaver Dam!" Press Release, November 12, 2025, datacenters.atmeta.com/2025/11/hello-beaver-dam/.

13 Vantage Data Centers, "OpenAI, Oracle and Vantage Data Centers Announce Stargate Data Center Site in Wisconsin," October 22, 2025, vantage-dc.com/news/openai-oracle-and-vantage-data-centers-announce-stargate-data-center-site-in-wisconsin/.

14 Wisconsin Public Radio, "Microsoft pauses construction on portions of Mount Pleasant project," Joe Schulz, January 2, 2025, wpr.org/economy/microsoft-pauses-construction-on-portions-of-mount-pleasant-project.

15 Microsoft, "Microsoft completes construction on first datacenter facility in Mount Pleasant, Wisconsin," Press Release, June 23, 2026, news.microsoft.com/source/2026/06/23/microsoft-completes-construction-on-first-datacenter-facility-in-mount-pleasant-wisconsin/.

16 Wisconsin Public Radio, "Menomonie mayor puts $1.6B data center proposal on hold," Rich Kremer, September 23, 2025, wpr.org/news/menomonie-mayor-puts-data-center-proposal-on-hold.

17 Wisconsin Public Radio, "Microsoft scraps plans for Caledonia data center site, working to find an alternate location," Joe Schulz, October 8, 2025, wpr.org/news/microsoft-caledonia-data-center-site-ozaukee-county.

18 Village of DeForest, "Village of DeForest Statement," Press Release, January 27, 2026, deforestwi.gov/m/newsflash/Home/Detail/75.

19 Wisconsin Public Radio, "DeForest announces it won't move forward with controversial $12B data center," Tom Kertscher, January 28, 2026, wpr.org/news/deforest-wont-move-forward-data-center.

20 Village of DeForest, "Village Board Summary and Recommendation Sheet," February 3, 2026, meetings.vi.deforest.wi.us/OnBaseAgendaOnline/Documents/DownloadFileBytes/MEMO%20-%20for%20-%20DISCUSSION%20AND%20POSSIBLE%20ACTION%20TO%20REJECT%20PETITION%20FOR%20DIRECT%20.pdf?documentType=1&meetingId=4214&itemId=40344&publishId=29569&isSection=False&isAttachment=True.

21 Janesville Gazette, "Janesville will allow Letter of Intent with Viridian to expire," Kylie Balk-Yaatenen, June 22, 2026, gazettextra.com/news/janesville-will-allow-letter-of-intent-with-viridian-to-expire/article_2defc8db-69ef-4ea9-9385-6786a09432d4.html.

22 Wisconsin Watch, "A $2 billion proposal, then silence: How a Driftless Area data center deal fell apart," Tom Kertscher, June 22, 2026, wisconsinwatch.org/2026/06/a-2-billion-proposal-then-silence-how-a-driftless-area-data-center-deal-fell-apart/.

23 Haensch, A. Wisconsin Data Center Map. Version v1.0.0, Zenodo, 21 Sept. 2026, doi.org/10.5281/zenodo.22883215.

24 Wisconsin State Legislature, 2025-2026 Session, "2025 Assembly Bill 722," docs.legis.wisconsin.gov/2025/proposals/ab722.

25 Wisconsin State Legislature, 2025-2026 Session, "2025 Assembly Bill 840," docs.legis.wisconsin.gov/2025/proposals/ab840.

26 WMTV, "Beaver Dam's Meta AI data center sparks volunteer town hall to address community impacts," Sam Swartz, March 10, 2026, wmtv15news.com/2026/03/11/beaver-dams-meta-ai-data-center-sparks-volunteer-town-hall-address-community-impacts/.

27 Beaver Dam Data Center Awareness, "Protect Our Community," bddatacenteredu.com/.

28 Daily Citizen, "Beaver Dam residents question public-comment limits," Terri Pederson, May 6, 2026 wiscnews.com/news/community/bdc/article_030be79f-d82b-4b3c-a5d4-4739d70c1180.html.

29 The Guardian, "The fight against AI datacenters isn't just about tech – it's about democracy," Astra Taylor and Saul Levin, May 8, 2026, theguardian.com/commentisfree/2026/may/08/ai-datacenters-democracy.

30 Wisconsin Public Radio, "'Dairyland, not data land': Wisconsinites continue to protest data center projects," Evan Casey, December 3, 2025, wpr.org/news/wisconsinites-data-center-projects-continue-protest; The Cap Times, Cover Image, January 7, 2026, madisoncaptimes-wi.newsmemory.com/.

31 1 GW = 1,000 MW; 1 MW = 1,000 kW; 1 kW = 1,000 W

32 NVIDIA, "Introduction to NVIDIA DGX H100/H200 Systems," Press Release, docs.nvidia.com/dgx/dgxh100-user-guide/introduction-to-dgxh100.html.

33 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 26, escholarship.org/uc/item/32d6m0d1.

34 Journal of Systems Architecture, "A survey on data center cooling systems: Technology, power consumption modeling and control strategy optimization," Q. Zhang et al., Oct. 2021, sciencedirect.com/science/article/abs/pii/S1383762121001739.

35 Wisconsin Energy Institute, "2024 was the dawn of Wisconsin's solar era, but there are clouds on the horizon," Chris Hubbuch, April 1, 2025, energy.wisc.edu/news/2024-was-dawn-wisconsins-solar-era-there-are-clouds-horizon; U.S. Energy Information Administration, "Use of energy explained," eia.gov/energyexplained/use-of-energy/electricity-use-in-homes.php.

36 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 5, escholarship.org/uc/item/32d6m0d1.

37 U.S. Energy Information Administration, "Annual Energy Outlook 2026," April 8, 2026, p. 14, eia.gov/outlooks/aeo/narrative/.

38 International Energy Agency, "Electricity 2026," p. 155, iea.blob.core.windows.net/assets/b73798cb-e452-42b9-9d8a-07542de7a041/Electricity_2026.pdf.

39 U.S. Department of Energy, "Evaluating the Reliability and Security of the United States Electric Grid," July 2025, p. 18, energy.gov/sites/default/files/2025-07/DOE%20Final%20EO%20Report%20(FINAL%20JULY%207).pdf; International Energy Agency, "World Energy Outlook 2025," 12 November 2025, iea.org/reports/world-energy-outlook-2025; Center for Strategic and International Studies, "The Electricity Supply Bottleneck on U.S. AI Dominance," Cy McGeady et al., March 3, 2025, csis.org/analysis/electricity-supply-bottleneck-us-ai-dominance; Goldman Sachs, "AI to drive 165% increase in data center power demand by 2030," February 4, 20256, goldmansachs.com/insights/articles/ai-to-drive-165-increase-in-data-center-power-demand-by-2030.

40 International Energy Agency, "Electricity 2026," p. 18, iea.blob.core.windows.net/assets/b73798cb-e452-42b9-9d8a-07542de7a041/Electricity_2026.pdf.

41 North American Electric Reliability Corporation, "Long Term Reliability Assessment," January 2026, p. 12, nerc.com/globalassets/our-work/assessments/nerc_ltra_2025.pdf.

42 Public Service Commission of Wisconsin, "Draft Strategic Energy Assessment 2026 - 2032," apps.psc.wi.gov/ERF/ERFview/viewdoc.aspx?docid=595734,see especially Figure 1.1 of the PSC report.

43 International Energy Agency, "Energy and AI," April 10, 2025, p. 260, iea.org/reports/energy-and-ai.

44 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 55, escholarship.org/uc/item/32d6m0d1; UW-Milwaukee Center for Water Policy, "AI-Data Centers: Legislative Model to Promote Transparency and Environmental Protections, Legislative Model," Emilie Washer, Tressie Kamp and Melissa Scanlan, March 9, 2026, uwm.edu/centerforwaterpolicy/center-for-water-policy-releases-ai-data-centers-legislative-model-to-promote-transparency-and-environmental-protections/.

45 Lawrence Berkeley National Laboratory, "2024 United States Data Center Energy Usage Report," Shehabi et al., 2024, p. 44, escholarship.org/uc/item/32d6m0d1.

46 Communications of the ACM, "Making AI Less 'Thirsty'," Pengfen Li, June 17, 2025, dl.acm.org/doi/10.1145/3724499.

47 Heatmap, "Forever Chemicals Want a Piece of the Data Center Boom," Jeva Lange, August 31, 2026, heatmap.news/climate/data-centers-pfas.

48 United States Environmental Protection Agency, "Administrator Zeldin Announces Major EPA Actions to Combat PFAS Contamination," Press Release, April 28, 2025, epa.gov/newsreleases/administrator-zeldin-announces-major-epa-actions-combat-pfas-contamination.

49 Microsoft, "Transforming R&D with agentic AI: Introducing Microsoft Discovery," Press Release, May 19, 2025, azure.microsoft.com/en-us/blog/transforming-rd-with-agentic-ai-introducing-microsoft-discovery/.

50 U.S. Energy Information Administration, "Historical State Data, EIA-923 Power Plant Operations Report," eia.gov/electricity/data/state/.

51 U.S. Energy Information Administration, "Monthly Update to Annual Electric Generator Report," eia.gov/electricity/data/eia860m/.

52 Alliant Energy, "Wisconsin energy companies announce plan to continue operations at Columbia Energy Center, commit to exploring conversion to natural gas," Press Release, December 4, 2024, alliantenergy.com/news/news-center/2024/12/120424-columbia-energy-center; Alliant Energy, "Alliant Energy takes next step in the company's energy transition," Press Release, May 23, 2024, alliantenergy.com/news/news-center/2024/05/052324-generationupdate; We Energies, "We Energies announces updated timeline for Oak Creek plant retirements," Press Release, June 25, 2025, news.we-energies.com/we-energies-announces-updated-timeline-for-oak-creek-plant-retirements/.

53 Cleanview, "Bypassing the Grid: How Data Centers Are Building Their Own Power Plants," Michael Thomas, February 3, 2026, newsletter.cleanview.co/p/bypassing-the-grid-how-data-centers.

54 Code of Federal Regulations, "Subpart ZZZZ—National Emissions Standards for Hazardous Air Pollutants for Stationary Reciprocating Internal Combustion Engines," June 15, 2004, ecfr.gov/current/title-40/chapter-I/subchapter-C/part-63/subpart-ZZZZ.

55 Data Center Frontier, "Minnesota PUC Says No to Amazon's Bid to Fast-Track 250 Diesel Generators for Data Center," David Chernicoff and Matt Vincent, March 7, 2025, datacenterfrontier.com/energy/article/55269574/minnesota-puc-says-no-to-amazons-bid-to-fast-track-250-diesel-generators-for-data-center.

56 "The Local Economic Effects of Data Center Entry," Daniel Yue et al., April 3, 2026, dx.doi.org/10.2139/ssrn.6497238.

57 The Country Economist, "Data centers and local job creation," Michael J. HIcks, November 10, 2025, michaeljhicks.substack.com/p/data-centers-and-local-job-creation.

58 PwC Report, "Economic Contributions of Data Centers in the United States." centerofyourdigitalworld.org/2026-impact-study; See also Bureau of Business Research, "Economic and Fiscal Impacts of Sarpy County Data Centers," April 8, 2019, omahachamber.org/wp-content/uploads/2025/10/Sarpy-DC-Impact-Final-Report.pdf.

59 Department of Agricultural and Applied Economics, Economic Development Administration, University Center, Division of Extension University of Wisconsin-Madison "The Contributions of Agriculture to the Wisconsin Economy," Steven Deller et al., 2024, Appendix B, aae.wisc.edu/wp-content/uploads/2024/11/The-Contribution-of-Agriculture-to-the-Wisconsin-Economy.pdf.

60 University of Wisconsin, Center for Research on the Wisconsin Economy, "Winning the AI Race: Who Should Pay for Wisconsin's Data Center Boom?" Junjie Guo and Ananth Seshadri, August 4, 2026, p. 2, crowe.wisc.edu/wp-content/uploads/sites/633/2026/08/DataCenters.pdf.

61 Wisconsin Public Radio, "Wisconsin Today: Which Wisconsin businesses are set to profit off the data center boom?," July 20, 2026, wpr.org/shows/wisconsin-today-2/rodriguez-drops-out-businesses-benefitting-from-data-centers-world-horseshoe-championships.

62 S.B. 308, 106th Leg., 2023–2024 Reg. Sess. (Wis. 2023), docs.legis.wisconsin.gov/2023/proposals/sb308.

63 Wis. Ethics Commission, "Lobbying Activity on Senate Bill 308," (2023–2024 Reg. Sess.), lobbying.wi.gov/What/BillInformation/2023REG/Information/21596.

64 A.B. 302, 106th Leg., 2023–2024 Reg. Sess. (Wis. 2023), docs.legis.wisconsin.gov/2023/proposals/ab302.

65 S. Sub. Amend. 2 to S.B. 70, 106th Leg., 2023–2024 Reg. Sess. (Wis. 2023) (offered by J. Committee on Finance), docs.legis.wisconsin.gov/document/amends/2023/REG/SB70-SSA2.pdf.

66 S.B. 70, 106th Leg., 2023–2024 Reg. Sess. (Wis. 2023), docs.legis.wisconsin.gov/2023/proposals/sb70.

67 Wisconsin Economic Development Corporation. Meeting/Teleconference of the Board of Directors, September 19, 2023, wedc.org/transparency/committee-meetings-and-materials/.

68 Wisconsin Economic Development Corporation, "Data Center Sales and Use Tax Exemption," wedc.org/programs/data-center-sales-and-use-tax-exemption/.

69 Wisconsin Economic Development Corporation, "Annual Report on Economic Development, WEDC Award FY26 Q3," wedc.org/transparency/annual-report-on-economic-development/.

70 National Conference of State Legislatures, "Subsidizing Servers: How States Are Competing to Attract Data Centers," April 1, 2026, ncsl.org/fiscal/subsidizing-servers-how-states-are-competing-to-attract-data-centers.

71 Legislative Fiscal Bureau, Memorandum from Sydney Tarnow and John D. Gentry to Senators Hesselbein and Habush Sinykin, March 18, 2026, p. 2, acrobat.adobe.com/id/urn:aaid:sc:VA6C2:4e59ce46-3402-4031-8e8d-26345d84d973; see also Wisconsin Watch, "Wisconsin data center tax break to cost state more than $2 billion," Tom Kertscher, April 24, 2026, wisconsinwatch.org/2026/04/wisconsin-data-center-tax-break-to-cost-state-more-than-2-billion-lost-revenue/.

72 Legislative Fiscal Bureau, Memorandum from Sydney Tarnow and John D. Gentry to Senators Hesselbein and Habush Sinykin, March 18, 2026, p. 4, acrobat.adobe.com/id/urn:aaid:sc:VA6C2:4e59ce46-3402-4031-8e8d-26345d84d973.

73 Wis. Stat. § 66.1105 Tax Increment Financing (2023–24), docs.legis.wisconsin.gov/statutes/statutes/66/xi/1105.

74 Wis. Stat. § 66.1105(4)(gm)4.c. (2023–24), docs.legis.wisconsin.gov/statutes/statutes/66/xi/1105/4/gm/4/c.

75 Wis. Department of Revenue, 2025 TIF Value Limitation Report, August 8, 2025, p. 40, revenue.wi.gov/slfreportstif/2025tiflim.pdf.

76 City of Port Washington, "Wis., Tax Incremental District No. 5 Project Plan," October 16, 2025, p. 26, portwashingtonwi.gov/home/showpublisheddocument/6274/638962047469930000.

77 2025 Wis. Act 16 (codified at Wis. Stat. § 66.1105(17)(i)), docs.legis.wisconsin.gov/2025/related/acts/16.

78 Epoch AI, "Servers account for 60% of the total cost of ownership of a one-gigawatt AI data center," Amelia Michael and Ben Cottier, May 14, 2026, epoch.ai/data-insights/ai-datacenter-cost-breakdown.

79 *Id.*

80 *Id.*

81 33rd CIRP Conference on Life Cycle Engineering, "Life Cycle Assessment of Rack Servers with Circular Strategies," Ritbik Kumar, et al., 2026, doi.org/https://doi.org/10.1016/j.procir.2026.05.110.

82 U.S. Department of Energy, "Wind energy community benefits guide," 2023, energy.gov/eere/wind/windexchange/windexchange/wind-energy-community-benefits-guide.

83 Sabin Center for Climate Change Law, "Community Benefits Agreements Database," Columbia Law School, climate.law.columbia.edu/content/community-benefits-agreements-database.

84 Development Agreement Between the City of Port Washington and Vantage Data Centers Management Company, LLC, August 19, 2025, https://www.wpr.org/wp-content/uploads/2025/08/CITY-OF-PORT-WASHINGTON.pdf.

85 Draft Pre-Annexation Agreement between QTS Madison I, LLC and the Village of DeForest, hdp-us-prod-app-deforest-engage-files.s3.us-west-2.amazonaws.com/5717/6798/3333/DeForest_Pre-Annexation_Agreement_Draft.pdf.

86 World Resources Institute, "Database of Community Benefits Frameworks Across the US," wri.org/cbf-database.

87 For more detail on local land use authority, see Brian W. Ohm, Wisconsin Land Use & Planning Law (University of Wisconsin Law School, 2022), law.wisc.edu/clew/publications/land_use.html.

88 Wis. Stat. § 66.1001(2) (2023–24), docs.legis.wisconsin.gov/statutes/statutes/66/x/1001/2.

89 Wis. Stat. § 66.1001(3) (2023–24), docs.legis.wisconsin.gov/statutes/statutes/66/x/1001/3; Wis. Stat. § 91.10(2) (2023–24), docs.legis.wisconsin.gov/statutes/statutes/91/ii/10/2.

90 Wis. Stat. § 66.1105(4)(g) (2023–24), docs.legis.wisconsin.gov/statutes/statutes/66/xi/1105/4/g; Wis. Stat. § 60.85(3)(g) (2023–24), docs.legis.wisconsin.gov/statutes/statutes/60/x/85/3/g.

91 See Town of Saratoga, Wis., "Data Facility Operations Ordinance, Ordinance No. 3-18-2026," March 18, 2026, saratogawisconsin.org/dbimages/Data%20Operations%20Ordinance.pdf; See also City of Wausau, Wis., "Common Council Meeting Agenda Packet," July 14, 2026, wausauwi.portal.civicclerk.com/event/1967/files/report/1732.

92 See Manitowoc County, Wis., "Ordinance No. 2026/2028-10," as introduced, Apr. 28, 2026, wpr.org/wp-content/uploads/2026/04/Manitowoc-County-moratorium.pdf; See also Wisconsin Public Radio, "Superior joins growing number of Wisconsin communities to pass data center moratorium," Danielle Kaeding, June 17, 2026, wpr.org/news/superior-joins-growing-number-of-wisconsin-communities-to-pass-data-center-moratorium.

93 Wisconsin Department of Revenue, "Tax Incremental Financing (TIF) Manual," p. 26, revenue.wi.gov/DOR%20Publications/tif-manual.pdf.

94 Wisconsin Department of Revenue, "Tax Incremental Financing (TIF) Manual," p. 26, revenue.wi.gov/DOR%20Publications/tif-manual.pdf.

95 Petition for the Enactment of an Ordinance by Direct Legislation Pursuant to Section 9.20, Wisconsin Statutes, ballotpedia.s3.amazonaws.com/images/5/54/Watermark_Ordinance_Direct_Legislation_Petition_SD_Review_11.10.25_%283%29.pdf.

96 Wisconsin Public Radio, "Port Washington voters pass referendum fueled by concerns about data center project," Joe Schulz, April 8, 2026, wpr.org/news/port-washington-referendum-concerns-data-center-project.

97 Wisconsin Public Service Commission, "PSC Ensures Stronger Public Transparency, Customer Protections in Review of Alliant Energy's Data Center Service Agreement," Press Release, May 7, 2026, psc.wi.gov/Documents/PressReleases/05.08.26PressRelease.PDF.

98 Wisconsin Public Service Commission, "PSC Overhauls We Energies' Data Center Tariff, Makes Improvements to Protect Existing Customers," Press Release, April 24, 2026, psc.wi.gov/Documents/PressReleases/04.24.2026PressRelease.PDF.

99 A.B. 722, 107th Leg., 2025–2026 Reg. Sess. (Wis. 2025), docs.legis.wisconsin.gov/2025/related/proposals/ab722; A.B. 840, 107th Leg., 2025–2026 Reg. Sess. (Wis. 2026), docs.legis.wisconsin.gov/2025/related/proposals/ab840.

100 Gallup, "Americans Oppose AI Data Centers in Their Area," May 13, 2026, news.gallup.com/poll/709772/americans-oppose-data-centers-area.aspx.

101 Gallup, "Americans Oppose AI Data Centers in Their Area," May 13, 2026, news.gallup.com/poll/709772/americans-oppose-data-centers-area.aspx.

102 City of Madison, "Temporary Data Center Moratorium," Press Release, January 13, 2026, cityofmadison.com/dpced/about/temporary-data-center-moratorium.

103 Channel 3000, "Cottage Grove passes unanimous moratorium on large data center development," Samantha Calderon Jul 21, 2026, channel3000.com/news/cottage-grove-passes-unanimous-moratorium-on-large-data-center-development/article_6996c282-2eca-4731-8e17-e0b49d2baeae.html.

104 Wisconsin Public Radio, "Manitowoc County Board approves 18-month data center moratorium," Joe Schulz, April 30, 2026, wpr.org/news/manitowoc-county-board-approves-18-month-data-center-moratorium; County of Dane Wisconsin, "Dane County Board Introduces Moratorium on Data Center Development," Press Release, May 26, 2026, danecounty.gov/PressDetail/11883; Beloit Daily News, "Green County joins the growing list of Wisconsin counties passing data center moratoriums," Alex Gary, July 15, 2026, beloitdailynews.com/news/local-news/green-county-joins-the-growing-list-of-wisconsin-counties-passing-data-center-moratoriums/article_644bfc7d-ebfb-4fa4-8ac7-c46b9d28d300.html; WXOW, "La Crosse County Board approves data center moratorium," Jack Mulvaney, June 18, 2026, wxow.com/news/la-crosse-county-board-approves-data-center-moratorium/article_89162c21-3240-4d86-9e2d-8a6c3489ddc8.html.

105 A.B. 1099, 107th Leg., 2025–2026 Reg. Sess. (Wis. 2026), docs.legis.wisconsin.gov/2025/proposals/ab1099.

106 Artificial Intelligence Data Center Moratorium Act, S. 4214, 119th Cong. (2026), congress.gov/bill/119th-congress/senate-bill/4214.



UW–MADISON

DATA CENTER

WORKING GROUP