

Data Centers: Myths and Facts

As part of its initial feasibility analysis, the City of Janesville has done research, connected with industry leaders, and visited communities with existing or data centers under construction. These efforts provided a better understanding and separated fact from myth by learning from the lived experience of communities that have similar projects. The City continues to work to understand the real impacts – both positive and negative – of a data center development to determine if and how to advance the project for our community.

Given the media profile of data center projects regionally and around the nation, here are the myths we were able to confirm or dispel through initial due diligence.

Data centers consume significant amounts of power. (TRUE)

Data centers require significant power to operate. However, as the technology evolves, data centers are being built with cutting-edge efficiency standards and are among the most energy-conscious facilities in the world. The power used is highly managed, planned, and often offset through renewable energy investments and efficiency measures coordinated with partners like Alliant Energy.

- **Read More:**
 - [Uptime Institute Global Data Center Survey](#)
 - [International Energy Agency](#)

Data centers escalate power costs for residents. (FALSE)

There are opportunities to build in provisions and protections to ensure that large industrial customers, like data centers, do not shift costs to residential or small business customers. These facilities operate under special rate structures and long-term agreements that protect all other ratepayers. While broader economic or supply-chain factors can influence overall energy markets, the presence of a data center itself will not directly raise the community's energy bill.

- **Read More:**

- [Alliant Energy](#)
- [PBS NewsHour: How data center power demand could help lower electricity prices](#)
- [Wisconsin State Journal](#)

Data centers would strain local energy grids. (FALSE)

Utilities often invest in stronger power lines, faster broadband, and more reliable infrastructure to support data centers. Project planning can work with energy partners in advance to expand capacity, invest in renewables, and strengthen infrastructure to meet future demand without disrupting service or cost stability. Additionally, Wisconsin is part of the Midcontinent Independent System Operator (MISO) network, which means that power can be added to the Wisconsin grid from Louisiana to Northern Canada.

- **Read More:**

- [Alliant Energy](#)

Data centers are noisy and create light pollution. (NO LONGER TRUE)

New technologies, like advanced cooling systems and sound-dampening enclosures, prevent operational noise from escaping. The typical modern data center building produces sound levels ranging from 50-70 dB, equivalent to the noise associated with light rain to that of a vacuum cleaner, making noise virtually unnoticeable from outside the facility. While modern technology has dramatically reduced these concerns, development agreements can also be written to meet specific standards for the community.

- **Read More:**

- [Future Bridge Americas](#)

Data centers use significant amounts of water. (NO LONGER TRUE)

As technology has evolved, modern data centers are designed to minimize water use. Cooling systems use hybrid cooling or closed-loop technology that drastically reduces water demand. Data centers use reclaimed water – not the same water you drink – and a large data center’s use averages 80,000 gallons a day, comparable to a mid-size dairy operation or craft brewery.

- **Read More:**
 - [Sustainability Magazine](#)
 - [World Economic Forum](#)

Data centers pose an environmental risk. (FALSE)

Modern data centers are clean, safe facilities that are increasingly carbon-neutral. Data centers often sign long-term renewable energy contracts, invest in solar and wind, and use battery or fuel-cell backups instead of diesel. These factors can be written into development agreements.

- **Read More:**
 - [Rambøll Group A/S](#)

A data center wouldn’t make a significant economic impact in our community. (FALSE)

While there is still much to learn and understand about the costs and benefits of a data center development, there are clear indications that a project in Janesville could have a significant economic impact. First, there is the obvious tax revenue growth. Second, there is the immeasurable value of a data center taking on one of the most serious environmental concerns in our community – the brownfield remediation of the former GM/JATCO site, estimated at \$35M. Finally, direct and indirect job creation and infrastructure investments benefit the entire community’s economic ecosystem. Development of the GM/JATCO site turns an economic drain into an economic driver and allows City staff to focus resources on other catalytic projects in the community.

- **Read More:**

- [Northern Virginia Technology Council](#)

Data centers create direct and indirect local jobs. (TRUE)

During the construction phase, a large data center project could bring in thousands of jobs over six years. Once operational, the site could employ hundreds of direct employees with salaries ranging from \$80,000 to six figures. The project would also require skilled contractors and partners from Wisconsin-based employers for ongoing facility maintenance, supply chain, and technical services.

- **Read More:**
 - [McKinsey & Company](#)

Wisconsin is a desirable location for data centers. (TRUE)

Reliable power, renewable energy, and water availability make Wisconsin an attractive location for data centers. Our background in manufacturing and agricultural heritage means that communities understand large-scale utilities, zoning, and environmental compliance. A dependable infrastructure and Midwest work ethic also make it ideal for digital infrastructure.

At-a-Glance

Power	Water	Noise	Jobs
<ul style="list-style-type: none"> ✓ Data centers do not cause higher electric rates for <u>local residents or businesses</u>. ✓ Power for a data center does not necessarily come from WI. Our network can source power from Louisiana to Northern Canada. ✓ Strategic planning and rate protections are in place to ensure fairness. ✓ Large energy users help modernize and strengthen the grid for everyone's benefit. 	<ul style="list-style-type: none"> ✓ The data center will use modern, efficient cooling technology that keeps water use low. ✓ Water use is in line with other industrial uses common in our region. ✓ Projects can set and enforce strong standards to protect community resources. 	<ul style="list-style-type: none"> ✓ New technologies have mitigated noise concerns with early data center developments. ✓ Modern data centers operate quietly in their neighborhoods. ✓ Residents and businesses can expect a calm, peaceful environment near the data center. 	<ul style="list-style-type: none"> ✓ Data Centers create thousands of jobs during construction ✓ Once operational, the facility would employ 500 – 600 direct, high-paying, skilled positions on campus. ✓ Data center demand for maintenance, supply chain, and technical service providers creates additional indirect jobs. ✓ City staff can focus attention and resources on other high-potential opportunities in our community