



The top **4 myths** about data centers

What communities should know
about **the infrastructure**
powering today's digital world



Understanding today's data centers

When people hear the term data center, it's easy to assume they're all built and operated the same way. Much of the recent conversation around data centers has been driven by massive AI campuses making headlines for their size, power requirements, and infrastructure needs. Those facilities are important, but they represent only one segment of the industry.

Enterprise data centers serve a different role.

Rather than powering a single AI platform, enterprise data centers support thousands of everyday operations, helping hospitals, banks, universities, manufacturers, governments, and businesses securely store, process, and connect the information people rely on every day.

More comparable to an office building than a manufacturing plant, the needs of an enterprise data center are much lower than AI factories.

Understanding the distinction is important because many of the common myths surrounding data centers are actually based on assumptions about hyperscale AI facilities, not enterprise environments.

The **four myths explored in this guide** focus on enterprise data centers like those operated by Flexential.

Let's separate myth from reality.

		
AI factory/hyperscale data center		Enterprise data center
Purpose		
Large scale AI models and services		Digital operations for many organizations
Who they serve		
Single tenant AI operator		Multi-tenant industries (hospitals and banks, to universities and governments)
Scale		
100 MW–1+ GW		5-30 MW
Water need		
High		Low
Noise impact		
Moderate to high		Low to non-existent
Community impact		
Large resource consumption		ESG aligned

The infrastructure behind everyday life

Most people interact with enterprise data centers thousands of times each day without ever realizing it.

When a patient accesses a medical record, a first responder receives critical information, a customer completes an online purchase, or an employee joins a virtual meeting, **an enterprise data center is working behind the scenes to make it possible.**

Community-focused data centers, like those operated by Flexential, are the physical foundation of today's digital economy. These highly secure facilities store, process, and protect the information that power the services businesses, governments, and communities rely on every day.

For decades, organizations have relied on enterprise data centers to support critical operations, protect sensitive information, and deliver essential services. As our lives become increasingly connected, their importance has only grown.

Much like roads, utilities, and transportation networks support the movement of people and goods, enterprise data centers enable the movement of information.

How Flexential supports critical services

Flexential helps organizations build, connect, and protect the digital infrastructure that powers critical services, from healthcare and financial institutions to higher education and growing businesses.

Services communities rely on:

- Hospitals and healthcare systems
- Emergency communications
- Banking and financial services
- Government services
- E-commerce and local businesses
- Transportation and logistics networks



Digital infrastructure has become as essential to modern life as roads, utilities, and transportation networks.

Powering economic growth and community development

Flexential data centers do more than support technology. They help create the foundation for economic growth, innovation, and long-term community investment.

As businesses become increasingly digital, access to reliable infrastructure has become a competitive advantage. Communities with strong digital infrastructure are better positioned to attract investment, support business expansion, and enable the technologies that drive innovation and economic opportunity. **The impact of digital infrastructure can be seen in three key areas: economic growth, business enablement, and long-term community value.**

Economic growth

Reliable infrastructure helps attract investment, support business expansion, and create opportunities for innovation. As organizations modernize their operations, communities with strong digital infrastructure are increasingly viewed as attractive places to do business.

Business enablement

Organizations across healthcare, financial services, education, manufacturing, and government depend on digital infrastructure to operate, innovate, and serve customers. The stronger the digital foundation, the greater the opportunity for growth.

Community value

The impact of an enterprise data center extends beyond the facility itself. Long-term infrastructure investments can contribute to local tax revenue, create skilled employment opportunities, and help build the foundation for sustained economic development.

\$32.5M

Average annual economic impact generated by a new data center
– U.S. Chamber of Commerce



As communities become more connected, digital infrastructure is increasingly becoming a driver of economic growth.

THE DIFFERENCE

Not all data centers are built the same

Data centers are often discussed as though they all serve the same purpose. In reality, facilities can vary significantly in size, design, operating models, and the customers they support. Some facilities are designed for the world's largest cloud providers and technology platforms. Others are built to support the organizations communities depend on every day.

Different models. Different priorities.

While all data centers deliver critical digital infrastructure, they are designed to serve different types of customers and workloads. Healthcare providers, financial institutions, government agencies, and enterprise businesses often require flexible infrastructure solutions, diverse connectivity options, and access to local expertise and support.

Understanding these differences helps communities better evaluate the role a particular facility plays and the organizations it is designed to serve.

The Flexential approach

Flexential combines the scale, reliability, and operational excellence organizations expect from a leading infrastructure provider with a partnership-driven approach designed to support diverse business needs.

By serving a broad mix of customers across industries, Flexential helps organizations build, connect, and protect their digital infrastructure while adapting to changing technology and business needs.



The conversation around data centers often treats every facility as though it's the same. That's simply not true.

Flexential was built differently. We serve the organizations communities rely on every day, and we design our infrastructure with long-term partnerships and responsible growth in mind."

— Ryan Mallory
CEO, Flexential



The facilities that support communities best are those designed around their unique needs.

Myth vs. reality:

Four common myths of data centers

As data centers become more visible in communities, questions naturally follow. Understanding the realities behind some common myths helps create a more informed conversation about how facilities are designed, operated, and integrated into the communities they serve.

1

Myth #1:
Data centers
are incredibly noisy

Reality: Flexential facilities are designed with **enclosed equipment, significant setbacks, acoustic barriers, and limited generator testing** to minimize noise impacts.

How Flexential approaches this:

- Industry-leading noise abatement strategies
- Generator testing limited to fewer than 50 hours annually
- Sound attenuation and acoustic barriers
- Approximately 900-foot setback from surrounding areas

Flexential data centers are designed to operate quietly and minimize disruption.

2

Myth #2:
Data centers
waste water

Reality: Flexential air-cooled facilities can **operate without using water for cooling**, helping preserve local water resources.

How Flexential approaches this:

- Water Usage Effectiveness (WUE) of 0
- Air-cooled cooling systems
- No evaporative cooling or cooling towers
- No additional municipal water infrastructure required

Flexential water-efficient designs help preserve local resources.

3

Myth #3:
Data centers
drain local power
resources

Reality: Flexential infrastructure planning occurs in partnership with utilities, and **growth is designed to occur gradually over time.**

How Flexential approaches this:

- Utility-coordinated infrastructure planning
- Infrastructure upgrades funded by Flexential
- Existing transmission access and utility-confirmed capacity
- Supports long-term grid resiliency

Flexential reliable infrastructure planning approach helps support both business growth and grid resiliency.

4

Myth #4:
Data centers
emit harmful
radiation

Reality: Flexential data center equipment **operates under strict federal safety standards** and poses no public health risk.

How Flexential approaches this:

- Equipment meets federal safety requirements
- Shielded systems and regulated operations
- Zero public health risk
- Fully compliant and monitored environments

Flexential facilities are highly regulated and designed for safe operation.

Designed for responsible growth

A well-designed Flexential data center has a smaller day-to-day community footprint than many traditional commercial or industrial developments.

Unlike facilities (i.e., Big Box Retailers) that generate significant traffic, consume large amounts of water, or place heavy demands on local services, Flexential enterprise data centers are designed to operate quietly, efficiently, and reliably behind the scenes.

At Flexential, responsible growth starts with thoughtful design. From efficient cooling systems and noise mitigation strategies to utility coordination and long-term planning, every aspect of a facility is designed to balance customer requirements with community priorities.

Low community impact by design:

Minimal traffic	Low noise	No cooling water consumption	Efficient power usage	Minimal demand on public services
Small operational teams and limited daily visitors result in minimal traffic and congestion.	Modern sound attenuation technologies and limited generator testing help minimize disruption.	Air-cooled facility designs eliminate water usage for cooling operations.	Purpose-built infrastructure and close utility coordination support efficient operations and long-term reliability.	Data centers require relatively few emergency services and place limited demands on local resources.



Enterprise data centers are designed to support communities while maintaining a low day-to-day operational footprint.

The Flexential approach to community impact

- Air-cooled facilities with a WUE of 0
- Industry-leading noise mitigation practices
- Utility-coordinated power planning
- Efficient facility operations
- Long-term infrastructure investments

Creating long-term value for communities

The benefits of digital infrastructure extend well beyond technology.

As communities continue to embrace digital transformation, enterprise data centers are increasingly viewed as long-term investments that support economic resiliency, workforce development, and future growth.

Unlike many infrastructure projects, Flexential data centers become part of the long-term fabric of a community. They support organizations that drive local economies, create opportunities for skilled careers, and help establish the digital foundation needed to compete in an increasingly connected world.

Building for the future

Strong digital infrastructure helps communities prepare for what's next.

From supporting innovation and attracting investment to enabling essential services and emerging technologies, Flexential enterprise data centers provide the foundation for long-term growth and economic resilience.

Growing responsibly

Long-term infrastructure investments require long-term thinking. Flexential facilities are designed around efficiency, sustainability, and responsible resource management. With thoughtful planning, enterprise data centers can support growing digital demand while remaining aligned with community priorities.

Creating lasting value

The value of digital infrastructure isn't measured only by the technology it supports today. Investments in reliable digital infrastructure help strengthen economic resilience, innovation, and long-term competitiveness.

"The communities best positioned for future growth will be those supported by reliable digital infrastructure."

– Ryan Mallory, CEO, Flexential



Strong communities and strong digital infrastructure increasingly go hand in hand.

Powering what's next

The demand for digital services continues to accelerate. Artificial intelligence, cloud computing, connected devices, and data-intensive applications are transforming how organizations operate and how communities connect. As these technologies evolve, the infrastructure supporting them becomes increasingly important.

Flexential data centers are more than places where information is stored. They are critical infrastructure that powers innovation, economic opportunity, and digital transformation. By supporting the organizations and services communities rely on every day, they help lay the foundation for what's next.

At Flexential, we believe the greatest long-term value comes from infrastructure designed around the needs of the communities it serves.

Not all data centers are created equal.

Flexential is committed to maximizing efficiency, with a sustainable approach to data center services. [Learn how in our annual ESG Report.](#)

The Flexential difference

- 40+** data centers
- 18** high-growth markets
- 3M+** square feet of footprint
- 500+ MW** critical load UPS capacity
- 360+** on-net carriers
- 100+ Gbps** scalable backbone
- 32** cloud on-ramps
- 100%** uptime commitment

For more than two decades, Flexential has helped organizations build, connect, and protect critical digital infrastructure. Our focus is simple: deliver secure, reliable infrastructure while building long-term partnerships with the communities we serve.

[Learn more about the Flexential commitment to community-focused digital infrastructure.](#)