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# Data Center Development

RECOMMENDATIONS FOR  
LOCAL COMMUNITIES

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MAY 2026

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Cuyahoga County Data Center Working Group



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# Data Centers in Cuyahoga County

## Local Context

The rise of artificial intelligence (AI), cloud computing, and other digital services is fueling data center infrastructure expansion across the country, and Ohio is quickly becoming a data center hub. As the demand for data centers increases, municipalities in Cuyahoga County need to prepare for what this means for their communities.

The U.S. data center sector is expected to grow nearly 30% by 2034, with nearly 200 data centers already operating in Ohio, including several dozen already in Cuyahoga County.

**But this growth comes at a cost.** Hyperscale data centers create pressure on land, energy, and water systems, sometimes consuming more than 2 million gallons of fresh water a day. And the direct economic benefits they provide to communities are often limited to just near-term construction-phase jobs.

The State of Ohio has recently paused its sales tax exemption for data centers because it resulted in a loss of \$1.5 billion in taxes with minimal job creation. Local communities can learn from these results and take caution when considering incentives for data centers.

At the same time, data centers put a lot of pressure on our electricity infrastructure and rising demand is driving up utility costs.

Communities across Ohio are raising concerns about land conversion, noise, emissions from onsite power generation, and opaque permitting processes.

One of the most visible examples is H5 Data Centers' Cleveland Data Center on St. Clair Avenue in downtown Cleveland, which is currently undergoing an expansion. Attention from large-scale data center developers is shifting to Northeast Ohio as available land and power capacity in central Ohio shrinks.

Most recently, a hyperscale complex proposal in Cleveland's Slavic Village neighborhood was rejected by the City of Cleveland. Cuyahoga County's status as an urban area with access to Lake Erie means there is high potential for further data center development. This raises questions about infrastructure adequacy, community impacts, and environmental sustainability for local governments and residents. The purpose of this guide is to provide information and recommendations to help municipalities navigate data center development.



**Figure 1** Proposed Data Center Location in Cleveland's Slavic Village Neighborhood

## What is a Data Center?

A data center is a facility that houses and operates computer systems, servers, and data storage and processing equipment. Within a data center, other infrastructure is also typically required, including cooling systems, power generators, substations, and network hardware. Data centers range in size and capacity, depending on their purpose. Commonly developed data centers can be categorized as enterprise, colocation, or hyperscale. Enterprise data centers manage information technology for a single organization, often within larger corporate campuses. Colocation data centers provide operational services to one or more companies that lease space and equipment within the center. Hyperscale data centers have immense data processing capabilities and are built by one company with specific needs. Hyperscale data centers require the largest facilities, and therefore, are the largest consumers of resources.



Pre-AI-era data center might have spanned 100,000 to 300,000 square feet in a single building. The data centers of today could be as large as dozens of football fields.

[Inside a multibillion-dollar AI data center powering the future of the American economy | Fortune](#)

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# Effective Local Actions

## Moratorium

Given the concerns that communities have about data center development, a temporary moratorium can be an effective and appropriate response. A data center moratorium is a temporary pause on new construction and permitting to allow local or state governments time to evaluate and plan for the impacts of rapid digital infrastructure growth. As of April 2026, at least 12 U.S. states and dozens of municipalities have introduced or enacted such pauses. [The City of Cleveland is currently considering a data center development moratorium.](#) During a moratorium, municipalities can assess infrastructure capacity, analyze fiscal and environmental tradeoffs of development, receive community input, and update zoning codes to limit community and environmental harm.

A successful six-month moratorium allowed [the City of Aurora, Illinois](#) to create comprehensive regulations for future data centers. The new requirements in Aurora establish a transparent development process, performance standards, and specific energy standards.

## Zoning

Zoning is an important tool to address community and environmental concerns regarding data centers. Zoning can shape data center development projects by requiring infrastructure analysis, environmental review, community input, noise and setback standards, compliance monitoring, and decommissioning planning.

Data center zoning classifications matter because of their large-scale operational impact. Creating a specific data center use category is one option. If current zoning code doesn't address data centers specifically, consider which existing use category is most appropriate based on adequate operational standards.

Standard industrial setbacks may be insufficient for data centers with significant noise, light, and generator emissions. Requiring meaningful landscaping and screening standards, especially in areas near residents, schools, and parks, is important.

Conditional use permits allow communities to attach binding conditions to data center development effects. These conditions can include noise limits, water and energy use limits, reporting and transparency requirements, aesthetic standards, and traffic management plans. The conditions should be specific, measurable, and enforceable.

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The [City of Lancaster, Pennsylvania](#) and the [City of Columbiana, Alabama](#) introduced amendments to their zoning codes that define a data center and require setbacks, buffers, screening, and a public comment process. The amendments also restrict noise levels, air pollution, energy use, water use, and waste.

## Community Benefits Agreements

Community Benefits Agreements (CBA) are a legal tool to establish accountability and transparency between developers and community stakeholders. These contracts secure specific commitments from developers to limit community harm and ensure community benefits. Common commitments include local hiring requirements, water use limitations, energy grid upgrade funding, environmental protections, and noise mitigation.

**The Brookings Institution has published [guidance on CBAs for Data Centers](#) and there are examples in the [Sabin Center's CBA database](#).**

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# Recognizing a Data Center Developer

Because data center projects have historically been done under strict NDAs, developers often follow recognizable patterns. Communities can look for these indicators:

Indicator	Details
Confidential or vague project descriptions	<ul style="list-style-type: none"><li>• “Light industrial”</li><li>• “Technology park”</li><li>• “Advanced manufacturing”</li><li>• “Utility-intensive facility”</li></ul>
Large land assemblages	<ul style="list-style-type: none"><li>• 100–300+ acres</li></ul>
Anonymous LLCs	<ul style="list-style-type: none"><li>• Shell companies created shortly before acquisition with names unrelated to tech</li></ul>
High electrical demand	<ul style="list-style-type: none"><li>• Inquiries to the utility about 50–200+ MW loads</li><li>• Requests for new substations or major transmission upgrades</li></ul>
High water demand	<ul style="list-style-type: none"><li>• Requests for tens of millions of gallons per day</li></ul>
Zoning or permitting flexibility requests	<ul style="list-style-type: none"><li>• Tall, windowless buildings</li><li>• Large generator allowances</li><li>• Large setbacks</li></ul>
Emphasis on fiber and network proximity	<ul style="list-style-type: none"><li>• Fiber trunk line access</li><li>• Long-haul network availability</li><li>• Right-of-way access</li></ul>
State economic development engagement	<ul style="list-style-type: none"><li>• Early contact with JobsOhio</li><li>• Sales tax exemption applications to Ohio Tax Credit Authority (paused as of May '26)</li><li>• NDA briefings for local officials</li></ul>

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# What to Ask When Approached

The goal of the initial conversation with a potential data center developer is to understand the project scope as well as the potential benefits and risks before any commitments are made.

Here is a checklist of questions to ask developers, adapted from a variety of resources, including the [Alliance for the Great Lakes](#):

- Who is the actual end user/operating company?
- What is the proposed site, acreage, and current zoning?
- What is the proposed megawatt power load? What utility will serve it?
- What is your expected load-growth trajectory over the next several years? Have you been in contact with Ohio Edison/First Energy yet?
- Is there confirmed grid capacity? What upgrades to the local distribution or transmission system will be required? Who will pay for these upgrades?
- What types of backup generation will you use?
- Will any renewable energy sources be used?
- What is the estimated peak water consumption and annual water consumption?
- What is the source of the water (surface water, groundwater, municipal supply)?
- How will wastewater or discharge be handled and monitored?
- What cooling technology will be used?
- What is the construction timeline and how many construction jobs are projected (local vs. regional)?
- How many permanent on-site operations jobs are projected?
- Are there plans for future expansion beyond the initial proposal?
- What environmental studies have been or will be conducted?
- What is the expected lifespan of the facility?
- What decommissioning commitments will you make?
- Have you engaged with adjacent property owners?
- Are you willing to enter a community benefits agreement?

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## What to Ask For

If data center development is planned, strategies that will mitigate community and environmental harm must be considered. To limit as much risk as possible, municipalities should seek binding written commitments, such as Community Benefit Agreements (CBAs).

The following checklist should be considered when planning and establishing Community Benefit Agreement terms:

### Economy

- Establish a defined number of local and regional hire construction jobs, with a preference for union labor at prevailing wages.
- Establish a minimum number of permanent on-site jobs, with defined salary floors.
- Ask for and review a detailed financial model showing net fiscal impact on the municipality over time.
- Confirm local business procurement commitments for services such as maintenance, landscaping, and security.

### Energy

- Receive written confirmation from the utility on available grid capacity and the timeline for any required upgrades.
- Determine generator fuel type and total backup generation capacity.
- Confirm that grid upgrades will be paid for by the developer.
- Publish monthly and annual energy data in a publicly accessible format.
- Commit to energy efficiency strategies such as using waste heat in ventilated air systems or water heating systems.
- Install on-site solar, storage or microgrids.
- Commit to 100% renewable electricity use by a defined date.
- Meet or exceed energy-use intensity (EUI) performance standards.

### Water

- Conduct a water use assessment to determine if the site's water consumption will allow for enough water access for all consumers, even in drought years.
- Establish a cap on water consumption with a rate structure that reflects the actual cost of water service and infrastructure impact.
- Publish monthly and annual water data in a publicly accessible format.
- Install high-efficiency cooling systems (closed-loop or immersion).
- Use reclaimed, recycled, or non-potable water instead of drinking water.
- Conduct wastewater discharge water quality testing.
- Install real-time water-use and groundwater monitoring systems.

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## Land

- Plan decommissioning bonds or financial assurance for site cleanup.
- Incorporate green infrastructure (rain gardens, green roofing, bioswales, etc.) in facility development to reduce stormwater runoff, urban heat island effect, noise pollution, and air pollution.
- Achieve LEED Gold or higher, Envision, or an equivalent performance standard for facility building structures.
- Include screening, landscaping, and architectural standards to mitigate visual impact.
- Conduct a noise study and establish a binding decibel limit at the nearest residential property line.
- Restrict construction hours and haul routes.

## What Not to Do

- ✗ Do not sign a non-disclosure agreement (NDA).
- ✗ Do not accept the developer's economic impact projections without independent review.
- ✗ Do not allow a zoning measure or conditional use permit to be treated as a formality.
- ✗ Do not accept assurances about water use, energy use, noise, or emissions that are not written into binding agreements with measurable limits and enforcement mechanisms.
- ✗ Do not rush to a quick agreement or development plan without careful review and research.

# Links and Resources

## Cleveland News

- [Cleveland rejects permit for hyperscale data center in Slavic Village | Ideastream Public Media](#)
- [More details emerge on Cleveland data center – NEOtrans](#)
- [\\$1.6B data center planned in Cleveland – NEOtrans](#)
- [Cleveland City Council proposes moratorium on data center development](#)
- [Downtown Cleveland's Largest Data Center Plans Major Expansion](#)
- [Opinion: As data centers surge, Ohio must protect communities and control costs - Crain's Cleveland Business](#)
- [Is Northeast Ohio ready for AI data centers? Sustainability's a factor | Ideastream Public Media](#)

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## State and Federal News

- [Data Center Development in the Great Lakes... | The Joyce Foundation](#)
- [No Harm Data Centers Act \(H.R. 8033\) - GovTrack.us](#)
- [House Bill 392 | 136th General Assembly | Ohio Legislature](#)
- [House Bill 695 | 136th General Assembly | Ohio Legislature](#)
- [House Bill 646 | 136th General Assembly | Ohio Legislature](#)
- [House Bill 706 | 136th General Assembly | Ohio Legislature](#)
- [Senate Bill 374 | 136th General Assembly | Ohio Legislature](#)
- <https://www.news5cleveland.com/news/local-news/ohios-spending-billions-on-tax-breaks-for-data-centers-now-an-incentive-battle-is-brewing>
- [Data Center Tariff](#)
- [Ohio Water Quality Impact from Data Centers - Circle of Blue](#)
- [Ohio data center ban advocates are trying to get 413,000 signatures by July 1 • Ohio Capital Journal](#)
- [Data Centers Won Billions in Tax Breaks. Some States Are Balking](#)
- [Ohio towns are pushing back against data centers – to varying degrees of success | The Statehouse News Bureau](#)

## General Information

- [AGL DataCenter Playbook 2026 Final.pdf](#)
- [Data Centers and the Climate Landscape: An Actionable Resource for US Mayors](#)
- [Policies for Data Centers, 2026](#)
- [Data-Centers-Fact-Sheet.pdf](#)
- [Diesel Generators at Data Centers: Status, Impacts, and Protective Practices](#)

## Model Zoning and Ordinances

- [New Data Center and Warehouse Regulations | City of Aurora, IL](#)
- [Data-Center-Zoning-Ordinance First-Draft 10-6-25.pdf](#)
- [Chapter 18.47: Data centers. - City of Columbiana, AL](#)
- [2026-Data-Center-Ordinance Ver10](#)

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# County Contacts

Questions? Contact Chris Alvarado, Cuyahoga County Director of Regional Collaboration at [calvarado@cuyahogacounty.gov](mailto:calvarado@cuyahogacounty.gov)

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## Cuyahoga County Data Center Working Group

- Cuyahoga County Planning Commission
- Cuyahoga County Department of Sustainability
- Cuyahoga County Regional Collaboration
- Cuyahoga Green Energy
- Cuyahoga County Department of Economic Development
- Cuyahoga County Fresh Water Institute
- Cleveland Foundation Public Service Fellows