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GAZA
Georgia Association of Zoning Administrators



APA
GA

Data Center Ordinance Insight

How to Prepare Your Zoning Code for Data Centers

Presented by Nathan Brown, TSW



TSW

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Introduction

About TSW

- Based in Atlanta, GA
- Planning, Architecture, and Landscape Architecture
- Worked on many codes throughout the southeast with a heavy concentration in GA

About Me

- 12+ years in planning
- Code writing and comprehensive planning





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TSWs Coding Philosophy

Understand The Community

- Avoid preconceived notions
- Local stakeholders know their community best
- Engage residents and local leaders early

Consider Administrative Capacity

- Ease burden by creating streamlined, usable codes

Codes Need To Be Tailored To Local Needs

- Build on existing plans and policies
 - Comprehensive plans
 - Small Area Plans
 - LCI's



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2026 Gaza Summer Conference

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What is a Data Center?

- Generally speaking, a building that houses the infrastructure required to support computing functions
- Have been around since the internet became more prevalent in the 1990s
- Data centers have become essential infrastructure in today's society
- Recent trends – such as the rise of AI – are driving demand for more and larger facilities

A close-up photograph of server racks in a data center, showing rows of blue and yellow network cables plugged into ports.

Logos for the Carl Vinson Institute of Government, University of Georgia, GAZA, and APA CA, with a small number "5" to the right.

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2024 \$28.3 billion

US Dollars spent on Construction (US)

2014 \$1.8 billion

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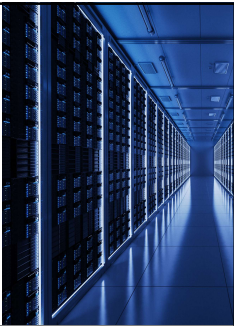
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What does a Data Center do?

Data Centers have multiple functions:

- Processing data
- Storing data (think "cloud")
- Support online activities and commerce like financial or health services, retail, etc.

Allows us to:





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Allows us to:

- Work remotely





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- Pay bills
- Stream
- Make Memes!



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There is no One-size Fits All Approach

Data Centers come in many different forms:

- Corporate/enterprise centers
 - Typically for a single user
 - Large organizations like national bank chains, corporations
 - Often located on-site or at a nearby off-site facility
- Colocation centers
 - "Retail" style centers
 - Leasable space for multiple users
- Wholesale
 - 3rd party developer that leases space to a single user
- Telecommunications
 - Takes incoming traffic from cell towers and switches the information from cellular signal to the internet
 - Typically smaller, often located near a cell tower or other WCF
 - Uses less energy
- Hyperscale
 - Single-user, typically individually owned
 - Think Meta, Google, Amazon
 - Large to massive in scale (This is what people think of when picturing a Data Center)



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There is no One-size Fits All Approach

Data Centers vary in Size

- Small-scale
 - Typically 2,000 sq. ft. or less
 - "Server room"
 - More likely to be an accessory use
- Mid-size
 - 2,001 to 100,000 sq. ft.
 - Can be accessory, but often a primary use
- Large
 - 100,000 to millions of sq. ft.
 - These are the hyperscale centers mentioned earlier





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How Data Centers Differ from other Industrial Uses

Low operational impact

- Low staffing needs
- Less vehicular traffic

High Infrastructure requirements

- Significant power and cooling needs
- Large electrical and mechanical equipment
- Redundant systems for uptime
- Above- and below-ground infrastructure
- 24/7 security and monitoring
- Tall building profile – up to 30’ for one story data center

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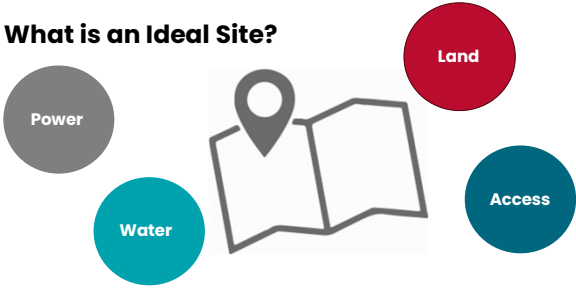
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What is an Ideal Site?



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Community Considerations

Potential Positive Impacts

- Tax revenue
- High-earning jobs
- Long-term business for trades
- Spin-off impacts
 - Additional investment near data centers
 - Biotech, innovation campuses, R&D, similar
- Opportunities to leverage private investment in community
 - STEM/education funding
 - Workforce training
 - Infrastructure investment





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Community Considerations

Challenges and Concerns

- Sustainability
- Grid impacts
 - 50-100 MW for hyperscale
- Noise/sound pollution
- Larger impervious areas
- Aesthetics/site design





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Community Considerations

Challenges and Concerns

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1 MW =



x 750



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50 MW =



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Planning for Data Centers

Use your Comprehensive Plan

- Establish a set policy
- Identify suitable/priority locations
 - Access to power and substations
 - Existing water infrastructure
 - Potential waste-water discharge
 - Ample land (especially for hyperscale DC)
- Create buffering and distance guidelines in comp plan

Engage the community

- Transparency
- Education and feedback
- Include direct questions in surveys, workshops, etc.



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Zoning for Data Centers

Define.

- Clearly define what a data center is**
- Even if you do not intend to allow it

Recommend 3 main types

- Minor, <50,000 sq. ft.
- Major, >50,000 sq. ft.
- Accessory

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Zoning for Data Centers

Decide.

Where it will be allowed

- Appropriate districts
 - Recommended: industrial
 - Other districts – office, high density commercial
 - May be limited by size/type
 - Best fit for each municipality

How will it be allowed

- Administrative approval
- Special use/conditional use
- Floor area limitations



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Zoning for Data Centers

Dictate.

Create clear, measurable standards tailored to what suits your community

- Setbacks
- Buffers
- Architectural
- Site design
- Noise suppression
- Lighting
- Water usage
- Lot sizes
- Parking (remember - much less needed)



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Zoning for Data Centers

Consider.

Adaptive Reuse

- Allow in existing industrial buildings, warehouses
 - Limited square footage
 - No new floor area for data center/servers
 - Allow office space additions

Decommissioning

- Uncertain future
- Technology advancements or changes completely
- What happens to these structures and sites?



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Example
Henry County, GA

Define:
A facility used for the storage, management, processing and transmission of digital data, including related electrical, mechanical, and security systems. Data Centers may include equipment for computing, backup power generation, and cooling systems but do not include telecommunication towers or traditional office uses.

Decide:
Allowed only in industrial districts (I-1 and I-2)
Require Special Use Approval by the Board of Commissioners

Dictate:
Use Standards include:
• Min. lot size of 20 acres
• Buffers of 200 feet (undisturbed/natural)
• Setbacks:
• ROW = 200'
• Nonresidential = 500'
• Residential = 1200'
• Architectural Design Standards
• Require change in height, transparency, materials
• Incorporate building recesses and modulation
• Established environmental performance standards
• Noise output:
• Appropriate testing times for generators, other equipment
• Prohibits open evaporative cooling
• Open Space Requirements
• 30% of the gross lot area
• Greenway trail (when part of county plan)
• Other use standards
• Must have Development Agreement with the Board of Commissioners
• Establishes basic context
• Energy reporting, Decommissioning, bonds and other financial assurances
• Details ironed out during Special Use process
• Allows exceptions for reuse of existing industrial buildings

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Example
Dahlonega, GA

Define:
A use primarily intended to house and operate computing machines and related hardware, including information technology systems infrastructure such as servers, data storage drives, and equipment serving digital needs relating to complex processes such as cloud computing, cybersecurity, e-commerce, communications, data processing, and artificial intelligence driven uses.

Decide:
Allowed only in industrial districts (I-1 and I-2)
Require Special Use Approval by the Board of Commissioners

Dictate:
Use Standards include:
• Floor area limitations
• Designed so that only accessory is allowed
• Greater of 2,000 sq. ft. or 10% of the total floor area for buildings on the lot
• 50% of all floor area must be used for other purposes
• Noise output
• Established timeframes
• Violations, including notices of violations and penalties, costs

NOTE
Also included definition of "Server Room" as an accessory use Server Room:
"One or more designated areas within a nonresidential principal use, except a data center, housing computer and network equipment, systems, servers, appliances, and other associated hardware components related to digital data operations for its own use and where the total floor area of all such areas does not exceed 2,000 square feet or 10% of the principal use, whichever is more."

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Example
Lexington, KY

Define:
A use primarily for the storage, management, processing, and transmission of digital data, housing computer and network equipment, systems, servers, appliances and other associated components related to digital data operations. May also include air handlers, power generators, water cooling and storage facilities, utility substations, and other associated utility infrastructure to support sustained operations at the data center. The term does not include server rooms.

Definition includes 2 types
Major: 150+ square feet
Minor: <50K square feet

Decide:
Major: Not allowed in any district
Minor: Allowed with Conditional Approval by Board of Adjustments in Warehouse and Light Industrial

Dictate:
Use Standards include:
• Mitigation plans for:
• Water consumption
• Energy/power consumption
• Noise
• Setbacks
• Residential = 1,000'
• Buffers
• 50' perimeter landscaping along all property lines
• Occupancy
• 50% of floor area of total site maximum
• Concurrency
• Includes specific considerations for the discretionary review
• Board of Adjustments must consider the effects of "noise, odor, traffic, dust, or damage to the environment or surrounding properties"
• Must consider the burden on public utilities

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Other Notable Examples

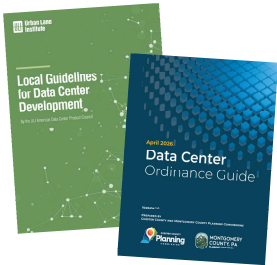
- DeKalb County, GA (ongoing)
 - Reference for how to define multiple typologies
 - Buffers, screening, architectural standards clearly spelled out
- Loudon County, VA
 - If your concern is architectural
 - Includes interesting alternative standards for meeting design standards
 - Green walls, main entry feature, others
- Columbia County, GA
 - Created a specialized district in which to house data center uses

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Literature

- Urban Land Institute
 - Local Guidelines for Data Center Development (2024)
 - Includes minor sample uses standards
 - Light touch
- Chester and Montgomery County Planning Commissions, PA
 - Data Center Ordinance Guide (2026)
 - Great resource with model ordinance language
- APA
 - Zoning for Data Centers and Cryptocurrency Mining (2022)

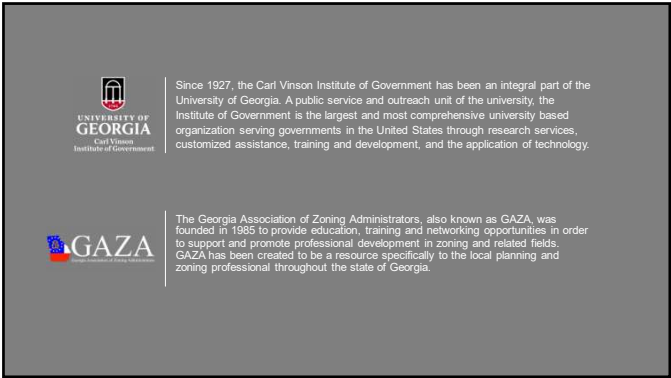
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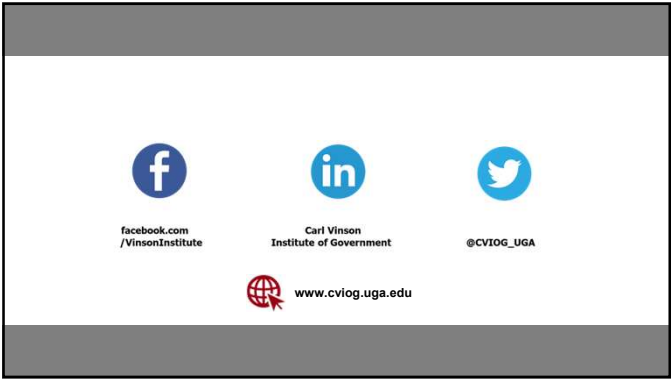
Questions?

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