



# County of Fairfax, Virginia

---

To protect and enrich the quality of life for the people, neighborhoods and diverse communities of Fairfax County

April 23, 2024

## ZONING ORDINANCE AMENDMENT – DATA CENTERS Staff Summary

---

### BACKGROUND

On March 19, 2024, the Board of Supervisors (Board) directed staff to prepare a Zoning Ordinance amendment to strengthen the current provisions for data centers and authorized the scheduling of public hearings on an amendment. The [Board Matter](#) stated that the public hearing before the Board should be scheduled for July 2024. Public hearings on a proposed Zoning Ordinance amendment relating to data centers are scheduled for:

- Planning Commission: June 5, 2024, at 7:00 p.m.
- Board of Supervisors: July 16, 2024, at 4:00 p.m.

This document provides a summary of potential options for consideration and draft text for discussion (Attachment 1). The draft text is based on the research included in the [Data Centers Report and Recommendations](#), dated January 9, 2024, and the discussions at the Board's Land Use Policy Committee meeting on March 12, 2024. Prior to the Planning Commission public hearing, a staff report with proposed text will be published.

---

### CURRENT REGULATIONS

The [Zoning Ordinance](#) currently allows data centers in the zoning districts shown in Table 1 below. Lot size and bulk regulations vary according to the zoning district. In addition, transitional screening and barriers are required in accordance with the recently amended [Section 5108](#) of the Zoning Ordinance. Among other provisions, these regulations require a 50-foot-wide landscaped transitional screening yard between industrial and residential uses.

The use standards for data centers include the building size thresholds for by-right development listed in the table below, as well as a requirement that, except in the I-4, I-5, and I-6 Districts, all equipment for cooling, ventilating, or otherwise operating the facility, including emergency power generators and other power supply equipment, be contained in an enclosed building.



PLANNING & DEVELOPMENT

**Department of Planning and Development**  
Zoning Administration Division  
12055 Government Center Parkway, Suite 807  
Fairfax, Virginia 22035-5507  
Phone 703-324-1314  
Fax 703-803-6372  
[www.fairfaxcounty.gov/planning-development](http://www.fairfaxcounty.gov/planning-development)

<b>Zoning District</b>	<b>By Right</b>	<b>Special Exception</b>
C-3 (Office) C-4 (High Intensity Office)	Up to 40,000 SF of GFA; or larger if repurposing a building existing on May 10, 2023	Required for larger size; or for increase in height or FAR
I-2 (Low Intensity Industrial) I-3 (Light Intensity Industrial)	Up to 80,000 SF of GFA; or larger if repurposing a building existing on May 10, 2023	Required for larger size; or for increase in height or FAR
I-4 (Medium Intensity Industrial) I-5 (General Industrial) I-6 (Heavy Industrial)	Yes (limited by district height of 75 feet and FAR of 0.5)	Required for increase in height or FAR
PRC (Town Center, Convention/Conference Center) PDC (Planned Development Commercial) PTC (Planned Tysons Corner Urban)	Yes, if shown on the development plan	n/a

*Table 1: Current Zoning Permissions<sup>1</sup>*

---

## POTENTIAL ZONING ORDINANCE REVISIONS

The overall approach of the draft text (Attachment 1) is to add new use standards and revise the existing use standards that apply to data centers permitted by right, and to allow a special exception (SE) application to modify certain of those standards. Similarly, the draft text proposes additional standards for data centers in P districts that could be modified by the Board. This approach recognizes that the potential impacts of a data center may vary based on its size, location, equipment, and other features, as well as the evolving nature of the data center industry. Further, the approach reflects the purpose of each zoning district and intends to guide data centers to the heaviest industrial districts.

### Permissions

The draft text revises the permissions for data centers to show that in all conventional districts where a data center is allowed, it could be approved by right, subject to use-specific standards, and an SE could be allowed to modify certain standards. For example, if a use standard specifies a maximum building size or a minimum distance to residential, then an SE could allow for a larger size or a lesser distance. To provide flexibility for the Board, the permission options are broadly proposed to allow the Board to adopt this permission structure (by right with use standards/modifications by SE) for certain districts, while regulations in other districts could require an SE for any data center or disallow any new data centers.

---

<sup>1</sup>Abbreviations used in the table: SF – square feet; GFA – gross floor area; FAR – floor area ratio.

The draft text does not propose any changes to the zoning districts in which data centers are allowed, except for the PRC District. While data centers are currently permitted in the PRC District, no existing or approved data centers are currently located in the PRC District. Additionally, no other industrial uses are allowed in the PRC District except for craft beverage production establishment and small-scale production establishment – uses with a customer focus that is compatible with the Town Center and Convention/Conference Center areas. Therefore, the draft text shows an option to remove the permission for data centers in the PRC District. Additionally, in the P districts, sometimes the proffers allow all or most of the uses permitted in the zoning district. To ensure that a data center is specifically planned for a particular location, the draft text revises the permissions in the P districts to SE (including the PRC District if the use is not removed).

**Use Standards**

Several new and revised standards are listed in Table 2 and further described below.

	<b>By-right standards</b>	<b>SE standards</b>
Equipment screening/enclosure	All districts	Same
Maximum size	C-3, C-4: 40,000 SF or repurposing I-2 – I-4: 80,000 SF or repurposing	Size limit may be exceeded; zoning district FAR still applies
Setback from residential	200 feet (up to 500 feet)	SE for lesser distance
Distance from Metro	½ mile	SE for lesser distance
Noise study	All districts	Same
Building design standards	Conventional districts: main entrance feature; variation in façade surface every 150 feet; minimum 30% fenestration	SE or development plan: submit architectural sketches, sight line studies; variation in massing if within 200 feet of residential

*Table 2: Data Center Use Standards*

In addition to the use-specific standards, all SE uses must comply with the general SE standards in the Zoning Ordinance and must be in harmony with the Comprehensive Plan. The general SE standards (subsection [4102.1.F](#)) include, among other standards, that the proposed use must not adversely affect the use or future development of neighboring properties. The Comprehensive Plan review includes the Policy Plan and any site-specific text and may recommend that issues such as green building and renewable energy commitments, stormwater quality, and other environmental topics be addressed. On December 6, 2022, the Board authorized consideration of a Comprehensive Plan [amendment](#) to update the Countywide Policy Plan. The first stage of community engagement is scheduled to begin in the summer of 2024.

Revised use-specific standards are shown in the draft text to mitigate potential impacts. Certain standards that apply to by right development could be modified as part of an SE process. In addition to the standards below, staff is reviewing whether additional provisions should be considered for surface containment around above-ground fuel tanks.

- Screening and enclosure of equipment – The Zoning Ordinance currently requires equipment for data centers (HVAC, generators, etc.) to be in an enclosed building, except in the I-4, I-5, and I-6 Districts. The draft text includes several revisions to this standard: (a) removes the exception for the I-4, I-5, and I-6 Districts; (b) adds that the purpose of the provision is to provide visual screening and reduce noise; (c) requires equipment to be fully enclosed, except where the Director of Land Development Services determines that it is not mechanically feasible and adds a requirement for a screening wall if the equipment cannot be fully enclosed; and (d) adds a requirement for a screening wall for any accessory electrical substation. The changes recognize that certain types of systems, such as a cooling tower, cannot be located within an enclosed building.
- Size thresholds for by-right data centers – The potential for certain localized impacts of data centers increases in accordance with the gross floor area. Size thresholds allow data centers to be approved by right up to a certain size, or larger with SE approval. In order to guide data centers to locate in the I-5 and I-6 Districts, the heaviest industrial areas in the County, no additional building size limit is proposed for these districts. Each district’s limitations on floor area ratio would continue to apply.
  - C-3 and C-4: These are commercial office districts. Recognizing that data centers are industrial uses which may not be compatible with the surrounding development, the Zoning Ordinance currently allows a maximum size of 40,000 square feet of gross floor area, or a larger size with repurposing of an existing building or with SE approval in a new building. No changes are proposed for these districts. However, options are included to remove the allowance for a larger by-right size with repurposing or to add a maximum size of 200,000 square feet of GFA for a data center proposed by right through repurposing.
  - I-2, I-3, and I-4: The draft text adds the I-4 District to the standard that currently applies to I-2 and I-3, which limits the maximum size of a data center to 80,000 square feet of gross floor area. As with the standard that applies to C-3 and C-4, the 80,000-square-foot limit can be exceeded with SE approval or with the repurposing of an existing building; options are included to remove the allowance for a larger by-right size with repurposing or to add a maximum size of 200,000 square feet of GFA for a data center proposed by right through repurposing.
- Setback from residential – Setbacks can minimize potential visual and noise impacts on surrounding areas. A new standard is included in the draft text that requires a data center building and/or its equipment (e.g., HVAC, generators) to be located a minimum distance from residential zoning, and a lesser distance would be allowed with SE approval. The proposed standard refers to an “R district” which includes both conventional and planned

district residential areas in accordance with subsection [9100.11](#) of the Zoning Ordinance. The draft standard includes a setback of 200 feet, but a broad range could be considered. This setback is based on a review of other setbacks in the Zoning Ordinance for uses which can have impacts on adjacent residential property including, among other uses, 100 feet for a barn for livestock or poultry with an agricultural operation, 150 to 250 feet for an extraction activity, and 250 feet for a crematory. In addition, Loudoun County, with the recent update of its zoning ordinance, requires a 200-foot setback for a data center from residential property.

- Distance from Metro – Because of the expectation for pedestrian activity and active street fronts, and the desire to put high-population and employment centers near transit, data centers would not generally be compatible with the type of development planned for transit station areas and other areas near Metro stations. Therefore, a standard is included in the draft text that would not allow a data center within ½ mile of a Metro station entrance without SE approval. The SE approval would allow an innovative data center form, such as wrapping a building with active uses, to be accommodated on a site-specific basis.
- Noise study – To ensure that data centers incorporate the features needed to mitigate potential noise impacts and comply with the Noise Ordinance, the draft text includes a standard requiring a noise study to be submitted for by right data centers as well as those undergoing rezoning or SE review. The standard also requires a post-construction noise study to confirm compliance with the Noise Ordinance prior to issuance of a Nonresidential Use Permit. Noise studies have been submitted as part of the review of certain data centers within Fairfax that have been approved by a rezoning or SE, and are required by other jurisdictions, including Loudoun County.
- Building design – A data center is an industrial building, and many have large blank facades. To facilitate a high-quality building design, standards are proposed for by-right data centers. The draft standards are objective and would require building designs that include a main entrance feature, façade variation, and a minimum amount of fenestration design features, which can include faux windows. For data centers undergoing rezoning or SE review, architectural renderings and sight-line studies would be required to demonstrate that the building would be reflective of a high-quality design. For data centers that are closer to residential areas, a variation in massing would also be required, such as changes in the building height.

### Submission requirements

The draft text includes new submission requirements for a rezoning or SE to support the use standards for a noise study and architectural depictions.

## **NEXT STEPS**

Community meetings are scheduled for:

Thursday, May 2, 2024, at 12:00 noon

Thursday, May 2, 2024, at 7:00 p.m.

Monday, May 6, 2024, at 7:00 p.m.

Wednesday, May 8, 2024, at 12:00 noon

All four meetings will be virtual and include the same content. The different dates and times are intended to provide flexibility for attendees. Information about these meetings is posted on this website: <https://www.fairfaxcounty.gov/planning-development/zoning-ordinance/amendments>.

In addition, questions and comments can be directed to Carmen Bishop, Deputy Zoning Administrator, at 703-324-1314, or [ffx-data-centers@PublicInput.com](mailto:ffx-data-centers@PublicInput.com). A staff report with the proposed amendment will be published before the Planning Commission public hearing.

---

## **ATTACHMENT**

1. Draft Zoning Ordinance Text for Discussion



## 4. Use Table for Planned Development Districts

**TABLE 4101.2: Use Table for Planned Development Districts**

✓ = permitted if shown on final development plan/PRC development plan and PRC plan;  
 ✓/SE = permitted if shown on final development plan/PRC development plan and PRC plan, or as special exception if not on plan(s)  
 SE = special exception; SP = special permit; blank cell = not allowed  
 A = allowed as accessory use only; A+ = permitted as an associated service use;  
 AP = allowed with approval of administrative permit

Use	PDH		PRC					PDC		PRM		PTC	PCC		Use-Specific Standards NOTE: General Standards also apply
	Principal	Secondary	Residential	Neighborhood Convenience Center	Village Center	Town Center	Convention/Conference Center	Principal	Secondary	Principal	Secondary		Principal	Secondary	
<b>Industrial Uses</b>															
Freight Movement, Warehousing, and Wholesale Distribution: uses involving the movement, storage, and distribution of goods. Goods are generally delivered to other firms or the final consumer.															
Data Center <b>OPTION 1</b>						✓	✓	✓ SE				✓ SE			4102.6.A
Data Center <b>OPTION 2</b>						✓ SE	✓ SE	✓ SE				✓ SE			4102.6.A

## 4102. Use Standards

**INSTRUCTION:** Revise the standards as shown below. Renumber/reletter as needed. *Options included below.*

## 6. Industrial Uses

### Freight Movement, Warehousing, and Wholesale Distribution

#### A. Data Center

##### Standards applicable to all data centers:

- (1) ~~In all districts except the I-4, I-5, and I-6 Districts, To provide visual screening and reduce noise levels, all equipment necessary for cooling, ventilating, or otherwise operating the facility, including power generators or other power supply equipment, must be contained within an fully enclosed, except where determined by the Director to not be mechanically feasible. building where the use is located. This includes emergency power generators and other emergency power supply equipment. If the equipment is not enclosed, it must be screened by a wall or similar barrier. In addition, any accessory electrical substation must be screened by a wall or similar barrier.~~



- (2) In the C-3 and C-4 Districts, the maximum building size is 40,000 square feet of gross floor area. However, this size limit may be exceeded:
  - (a) If the use is located in a building existing on ~~May 10, 2023~~ *(insert effective date of the amendment)*; or *[option to delete this allowance for a larger size in an existing building or to add a maximum size of up to 200,000 square feet of gross floor area when the use is located in an existing building]*
  - (b) With special exception approval in accordance with subsection 8100.3.
- (3) In the I-2, ~~and I-3,~~ and I-4 Districts, the maximum building size is 80,000 square feet of gross floor area. However, this size limit may be exceeded:
  - (a) If the use is located in a building existing on ~~May 10, 2023~~ *(insert effective date of the amendment)*; or *[option to delete this allowance for a larger size in an existing building or to add a maximum size of up to 200,000 square feet of gross floor area when the use is located in an existing building]*
  - (b) With special exception approval in accordance with subsection 8100.3.
- (4) Any data center building, equipment for cooling, ventilating, or otherwise operating the facility, power generator, or other power supply equipment must be located at least 200 feet from the lot line of an R district. A lesser distance may be allowed with special exception approval in accordance with subsection 8100.3. *[option for a minimum distance up to 500 feet, and for a different distance within the 500-foot limit for I-5 and I-6 than other districts]*
- (5) A data center building must be located at least one-half mile from a Metro station entrance. A lesser distance may be allowed with special exception approval in accordance with subsection 8100.3.
- (6) Prior to site plan approval, a noise study must be submitted demonstrating to the Zoning Administrator's satisfaction that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code. In addition, prior to issuance of a Nonresidential Use Permit, a post-construction noise study must be submitted demonstrating to the Zoning Administrator's satisfaction that the operation complies with the Noise Ordinance.

**Standards when permitted by right:**

- (7) A data center building must include a main entrance feature that is differentiated from the remainder of the building façade by a change in building material, pattern, texture, color, or accent material. The entrance feature must also either project or recess from the adjoining building plane.
- (8) All building façades must include:
  - (a) A change in the facade surface for every 150 horizontal feet of at least one of the following: building material, pattern, texture, color, or accent material; and
  - (b) Windows, doors, or similar fenestration design features such as faux windows, must be distributed horizontally and vertically across the façade and comprise a minimum of 30 percent of the individual façade.

**Standards when permitted by development plan or special exception:**

- (9) A data center building must be designed to minimize adverse visual impacts on surrounding development as demonstrated by the submission of elevations, architectural sketches, or sight line studies. The building should have a high-quality design as evidenced by the use of materials, color, and texture. If the building is located less than 200 feet *[distance to match the distance in*

A(4) above] from an R district, it should include changes in building height or other design techniques to provide variation in building mass as viewed from the nearby residential district.

**INSTRUCTION:** Add rezoning and special exception submission requirements for a data center. Renumber as needed.

## ARTICLE 8 - ADMINISTRATION, PROCEDURES, AND ENFORCEMENT

### 8101. Submission Requirements

#### 2. Zoning Map Amendments (Rezoning)

##### E. Supporting Reports and Studies

The following additional information must be submitted:

###### **(12) Data Center**

For a rezoning to allow a data center, the application requires the following additional information:

- (a) A noise study demonstrating that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code.
- (b) Architectural depictions of the proposed building and associated equipment as viewed from all lot lines and street lines.

#### 3. Special Exceptions, Special Permits, and Variances

##### D. Additional or Modified Submission Requirements for Specific Special Exception Applications

The following are additional or modified submission requirements for special exception applications for:

###### **(8) Data Center**

- (a) A noise study demonstrating that the operation of the data center will comply with the Noise Ordinance, Chapter 108.1 of the County Code.
- (b) Architectural depictions of the proposed building and associated equipment as viewed from all lot lines and street lines.