



City Council of Monterey Park
The City Council Acting on Behalf of the Successor Agency of the Former Redevelopment Agency, the Housing Authority, the Monterey Park Financing Authority and the Monterey Park Geologic Hazard Abatement District Agenda

Special Meeting
Monterey Park City Hall Council Chambers
320 W. Newmark Avenue, Monterey Park, CA 91754

Wednesday, January 21, 2026
6:30 PM

Mission Statement

The mission of the City of Monterey Park is to provide excellent service, foster growth and opportunity, and create a joyous and collaborative environment.

Land Acknowledgment

We would like to acknowledge that the land we inhabit today was once known as Tovangaar, the home of the Gabrieleño-Tongva people. We show our respect to the Gabrieleño-Tongva people, as well as all Indigenous people, past, present, and future, and honor their labor as original caretakers of this land. We commit to uplifting the Gabrieleño-Tongva people, invite you to acknowledge the history, and join us in caring for this land.

General Information

Documents related to an Agenda item are available to the public in the City Clerk's Office located at 320 West Newmark Avenue, Monterey Park, CA 91754, during normal business hours and at www.montereypark.ca.gov/agendas.

Per the Americans with Disabilities Act, if you need special assistance to participate in this meeting, please call City Hall at (626) 307-1359 for reasonable accommodation at least 8 hours before a meeting. Council Chambers are wheelchair accessible.

Pursuant to Government Code § 54954.3(a), the public may address the City Council only on matters listed on this Agenda. No other public comment will be accepted. Pursuant to Rule 5 of Resolution No. 12226 (adopted February 17, 2021), speakers are limited to a total of five minutes for Public Comment. If desirable, the Mayor and City Council may change the amount of time allowed for speakers. Written Communication will be accepted up to 3 hours before the meeting by completing an online form at www.montereypark.ca.gov/writtencomm.

1. Call to Order

Mayor

2. Roll Call

Henry Lo, Vinh Ngo, Jose Sanchez, Thomas Wong, Elizabeth Yang

3. Telecommunications Announcement, if requested

4. Public Communications

5. New Business

5.A. Consideration and possible action to adopt an urgency ordinance implementing interim development regulations for data centers within Saturn Park upon a four-fifths vote

It is recommended that the City Council consider:

1. Adopting an Urgency Ordinance upon 4/5 vote pursuant to Government Code § 65858 establishing a moratorium on new data centers within Saturn Park for 45 days; and
2. Taking such additional, related action that may be desirable.

CEQA (California Environmental Quality Act):

Adopting the draft Urgency Ordinance is exempt from further environmental review under the California Environmental Quality Act (California Public Resources Code §§ 21000, *et seq.*, "CEQA") and CEQA Guidelines (14 California Code of Regulations §§ 15000, *et seq.*) because it establishes temporary rules and procedures for minor alterations in land use. The Urgency Ordinance, therefore, is categorically exempt from further CEQA review under CEQA Guidelines § 15305. Further, the adoption of the Urgency Ordinance is also exempt from review under CEQA pursuant to CEQA Guidelines § 15061(b)(3) because the Ordinance is for general policies and procedure-making. This Ordinance does not authorize any new development entitlements. Any proposed project that will utilize the changes set forth in this Ordinance is subject to environmental review as part of the entitlement review of the project. The Ordinance will not adversely impact the environment and is therefore exempt from the provisions of CEQA.

5.B. Receive and File Regarding Council Member Thomas Wong's Participation on the Saturn Park Advisory Review Committee (SPARC)

(This item will be rolled over to the Jan. 21, 2026 Regular Meeting as Consent Calendar Item No. 10.E.)

It is recommended that the City Council consider:

1. Receiving and filing the attached staff report regarding Council Member Thomas Wong's participation on the Saturn Park Advisory Review Committee (SPARC); and
2. Taking such additional, related action that may be desirable.

6. Adjournment



City Council Staff Report

Date: January 21, 2026
Agenda Item Number: 5.A.

To: The Honorable Mayor and City Council
From: Karl Berger , City Attorney
Subject: Consideration and possible action to adopt an urgency ordinance implementing interim development regulations for data centers within Saturn Park upon a four-fifths vote

Recommendation:

It is recommended that the City Council consider:

1. Adopting an Urgency Ordinance upon 4/5 vote pursuant to Government Code § 65858 establishing a moratorium on new data centers within Saturn Park for 45 days; and
2. Taking such additional, related action that may be desirable.

CEQA (California Environmental Quality Act):

Adopting the draft Urgency Ordinance is exempt from further environmental review under the California Environmental Quality Act (California Public Resources Code §§ 21000, *et seq.*, "CEQA") and CEQA Guidelines (14 California Code of Regulations §§ 15000, *et seq.*) because it establishes temporary rules and procedures for minor alterations in land use. The Urgency Ordinance, therefore, is categorically exempt from further CEQA review under CEQA Guidelines § 15305. Further, the adoption of the Urgency Ordinance is also exempt from review under CEQA pursuant to CEQA Guidelines § 15061(b)(3) because the Ordinance is for general policies and procedure-making. This Ordinance does not authorize any new development entitlements. Any proposed project that will utilize the changes set forth in this Ordinance is subject to environmental review as part of the entitlement review of the project. The Ordinance will not adversely impact the environment and is therefore exempt from the provisions of CEQA.

Executive Summary:

On November 6, 2024, the City Council adopted new zoning regulations for Saturn Park based upon recommendations from the Saturn Park Advisory Review Committee (SPARC). The draft ordinance proposed to the City Council at that time included regulations for design and studies governing data centers. Following City Council consideration of those draft regulations, however, the Council ultimately decided that requiring a development agreement for all data centers would ensure comprehensive City oversight of such projects.

Since then, it is apparent that the City Council may wish to reconsider regulations governing

data centers. While the City Council generally considered all issues identified by recent public communications in 2024, it is apparent that it is in the public interest to revisit those issues.

To give the City Manager and City Attorney additional time to craft refined regulations that the City Council may wish to reconsider, I request that the City Council adopt interim regulations and a moratorium on processing land use applications for any data center within Saturn Park. If adopted, the draft urgency ordinance included with this report would prohibit the City from processing any pending applications for a data center and prevent acceptance of any new applications. Additionally, it would require the City Manager, or designee, to prepare a draft environmental impact report (DEIR) for any pending application once the City Council considers and, hopefully, adopts new land use regulations for data centers. This initial moratorium would last at least 45 days but may be extended up to a total of two years.

Background:

2024 City Council Actions and SPARC Recommendations

On October 2, 2024, the City Council considered the SPARC recommendations and directed the City Manager and City Attorney to draft amendments to MPMC Chapter 21.14 to include regulations governing data centers. The Council specifically requested that regulations address concerns related to energy, water, air quality, noise, and building design.

Originally Proposed Regulations (November 6, 2024)

On November 6, 2024, draft ordinances included with the staff report proposed regulations integrating sustainability requirements and comprehensive design standards:

Sustainability Requirements

- Requirement for Leadership in Energy and Environmental Design (LEED®) certified building designs
- On-site electric vehicle charging stations
- Noise reduction for generators and mechanical equipment

Development Standards

- Data center definition
- Development standards for lots, yards, building height, floor area ratio, and off-street parking
- Required walls and landscaping
- Specific design standards for data centers addressing screening and aesthetics

Design Guidelines Resolution

The staff report also included a proposed resolution implementing design guidelines for data centers that would have governed:

- Architectural aesthetics to enhance the Saturn Park community
- Integration with surroundings
- Design standards specific to data center operations

The City Council continued the design guidelines resolution to a future meeting without adoption.

City Council Modifications and Adopted Approach

The most significant change made by the City Council during its deliberation was the addition of a mandatory development agreement requirement for all data centers. The MPMC now includes the following language in MPMC § 21.14.220:

Section 21.14.220 Data Centers -- Development Agreement Requirements:

"Data centers are permitted only with a development agreement in accordance with Chapter 21.44 of this code."

This requirement fundamentally alters the historical regulatory approach to data processing facilities. Rather than allowing such uses with a conditional use permit or a permitted principal use, data centers – as now defined in the MPMC – may only be developed pursuant to a development agreement approved by the City Council and adopted by ordinance (which is subject to referendum).

Implications of Mandatory Development Agreement Requirement

Approving a development agreement is a discretionary, legislative, decision that may be made by the City Council in its sole discretion. This means that data center projects cannot proceed solely under the "by-right" standards previously part of the MPMC's zoning regulations. Instead, each data center must negotiate a development agreement with the City, providing greater opportunity for:

- Community input and negotiation
- Project-specific conditions addressing environmental, traffic, and design concerns
- Public benefits requirements specific to each project
- Ongoing oversight and compliance mechanisms

Need for Further Refinement

Adopting a moratorium will provide the City Manager and City Attorney an opportunity to give the City Council an informed recommendation regarding new regulations governing data centers in Saturn Park. If adopted by a 4/5 vote of the City Council, the urgency ordinance would impose a temporary moratorium on processing pending applications for data center entitlements within Saturn Park and prohibit new applications from being accepted. The temporary moratorium would expire on March 7, 2026 unless extended before that time.

Strategic Plan Goal:

N/A

Fiscal Impact:

There are no identifiable fiscal impacts with adopting the draft urgency ordinance.

Attachments:

1. Draft Urgency Ordinance
2. November 6, 2024 Staff Report with attachments

ATTACHMENT 1
Draft Urgency Ordinance

ORDINANCE NO. _____

**AN INTERIM ORDINANCE PROHIBITING PROCESSING OF
PENDING, AND ACCEPTANCE OF NEW, DATA CENTER LAND
USE APPLICATIONS WITHIN SATURN PARK TO CONSIDER
ADOPTING ADDITIONAL REGULATIONS FOR SUCH LAND
USES**

The City Council for the City of Monterey Park does ordain as follows:

SECTION 1: This Ordinance is adopted pursuant to Government Code §§ 36937, 65858, and other applicable laws.

SECTION 2: *Findings.* The City Council finds, determines and declares as follows:

- A. The City may adopt and enforce all laws and regulations not in conflict with the general laws and the City holds all rights and powers established by California law.
- B. On November 6, 2024, the City Council adopted new regulations governing data centers in Saturn Park. As codified at Monterey Park Municipal Code (“MPMC”) § 21.14.220, data centers may only be permitted within Saturn Park pursuant to the terms of a development agreement approved by the City Council.
- C. While the provisions of the development agreement law (Government Code §§ 65864–65869.5) make it plain that any decision regarding data centers within Saturn Park are completely discretionary for the City Council, additional regulations governing data center provide certainty to the public and private property owners regarding the City’s overall expectations for developing such land uses. Such regulations were first considered by the City Council on November 6, 2024 and should be reexamined to protect public health, safety, and welfare. The City requires additional time to study which regulations are in the public interest.
- D. To prevent frustration of these studies and the implementation of new regulations, the public interest, health, safety, and welfare require enactment of this Ordinance. The absence of this Ordinance would impair the orderly and effective implementation of contemplated MPMC amendments, and any further authorization of data center land uses within Saturn Park during the period of the moratorium may conflict with or frustrate the contemplated updates and revisions of the MPMC.

- E. Based on the foregoing, the City finds that that this Ordinance is necessary in order to protect the City from the potential effects and impacts of data center land uses and the accompanying impacts from energy use, noise, air quality, aesthetic impacts to the City, and other similar or related effects on property values and the quality of life in the City's neighborhoods.
- F. The City Council further finds that this moratorium is a matter of local and City-wide importance and is not directed towards any business that currently seeks to utilize MPMC Chapter 21.14.
- G. The City Council finds that this Ordinance is authorized by the City's police powers. The City Council further finds that the length of the moratorium imposed by this Ordinance will not in any way deprive any person of rights granted by state or federal laws, because the moratorium is short in duration and essential to protect the public health, safety and welfare.

SECTION 3: *Environmental Assessment.* Adopting the draft Urgency Ordinance is exempt from further environmental review under the California Environmental Quality Act (California Public Resources Code §§ 21000, *et seq.*, "CEQA") and CEQA Guidelines (14 California Code of Regulations §§ 15000, *et seq.*) because it establishes temporary rules and procedures for minor alterations in land use. The Urgency Ordinance, therefore, is categorically exempt from further CEQA review under CEQA Guidelines § 15305. Further, the adoption of the Urgency Ordinance is also exempt from review under CEQA pursuant to CEQA Guidelines § 15061(b)(3) because the Ordinance is for general policies and procedure-making. This Ordinance does not authorize any new development entitlements. Any proposed project that will utilize the changes set forth in this Ordinance is subject to environmental review as part of the entitlement review of the project. The Ordinance will not adversely impact the environment and is therefore exempt from the provisions of CEQA.

SECTION 4: *Interim regulations.* The following provisions are adopted as interim requirements for issuing permits pursuant to the MPMC for data center land uses within Saturn Park, and any construction or operation in the City in conflict with these provisions is expressly prohibited:

- A. **Restricted Activities.** For a period of 45 days after adoption of this Ordinance, the City will not process any pending application for a data center land use within Saturn Park or accept new applications for data center land uses.
- B. "Data center" is defined at MPMC § 21.14.210.

- C. Based upon a review of the City's entire administrative record including, without limitation, from the City Council's previous meetings in October and November 2024, along with a cursory review of information within the public domain, there is a plethora of substantial evidence demonstrating a reasonable argument exists that any proposed data center in California "may have a significant effect on the environment" necessitating a fair-argument that any application for a data center requires preparation of an environmental impact report (EIR). Publicly available materials document that large data centers have high and continuous electricity demand, often supported by diesel or gas backup generation with associated air quality, greenhouse gas, and noise impacts; that they may place significant demands on local water supplies for cooling; and that they can drive related infrastructure and land use changes, all of which have been specifically identified as needing robust CEQA analysis. In light of CEQA's requirement that an EIR be prepared whenever there is substantial evidence, in view of the whole record, that a project may cause a significant environmental effect, and the well-established "low threshold" nature of the fair-argument test, this body of evidence supports a finding that any data center proposal in California presents at least a reasonable argument of potentially significant environmental impacts such that an EIR is required. Accordingly, the City Manager, or designee, is directed to require that any applicant with a pending data center application prepare an EIR in accordance with applicable law to fully inform decision-makers regarding potential significant impacts of such land uses.
- D. The City Manager, or designee, must review any application for a data center land use entitlement to determine compliance with the provisions of this Ordinance. City employees, and City boards and commissions, are directed to refrain from accepting or processing any application for any land use entitlement, including, without limitation, use permits, variances, building permits, licenses and certificates of occupancy, necessary for constructing, placing, or operating data centers within the Saturn Park area, and to refrain from processing any land use entitlement for any pending applications already received. These prohibitions will remain effective for 45 days following adoption of this Ordinance.
- E. The City Manager and City Attorney are directed to draft regulations that are substantially similar to those previously considered on November 6, 2024 to govern data centers within Saturn Park. Noticing for a public hearing to consider adopting such proposed regulations should occur forthwith to ensure timely public input regarding such regulations and provide certainty to private

property owners contemplating data center developments within Saturn Park regarding the City's expectations and regulation of such land uses.

SECTION 5: Construction. This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council's intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 6: Enforceability. Repeal of any provision of the MPMC does not affect any penalty, forfeiture, or liability incurred before, or preclude prosecution and imposition of penalties for any violation occurring before this Ordinance's effective date. Any such repealed part will remain in full force and effect for sustaining action or prosecuting violations occurring before the effective date of this Ordinance.

SECTION 7: Validity of Previous Code Sections. If this entire Ordinance or its application is deemed invalid by a court of competent jurisdiction, any repeal or amendment of the MPMC or other city ordinance by this Ordinance will be rendered void and cause such previous MPMC provision or other the city ordinance to remain in full force and effect for all purposes.

SECTION 8: Severability. If any part of this Ordinance or its application is deemed invalid by a court of competent jurisdiction, the city council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 9: Publication. The City Clerk is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within fifteen (15) days after the passage and adoption of this Ordinance, cause it to be published or posted in accordance with California law.

SECTION 10: *Report.* Pursuant to Government Code § 65858, the City Manager, or designee, must prepare a report for City Council consideration describing the measures taken to address the conditions which led to adoption of this Ordinance. This report must be provided to the City Council so that it may be considered and issued not later than 10 days before this Ordinance expires.

SECTION 11: *Effective Date.* This Ordinance will become effective immediately upon adoption pursuant to Government Code §§ 36937 and 65858 for the immediate preservation of the public peace, health, safety, and welfare. Pursuant to those statutes this Ordinance is adopted by a four-fifths vote.

SECTION 12: *Expiration Date.* After adoption, this Ordinance will be

repealed by operation of law on March 7, 2026, unless a subsequent ordinance is adopted by the City Council that extends this date.

PASSED AND ADOPTED this 21st day of January, 2026.

Elizabeth Yang, Mayor

ATTEST:

Maychelle Yee, City Clerk

APPROVED AS TO FORM:

Karl H. Berger, City Attorney

ATTACHMENT 2

November 6, 2024 Staff Report with attachments



City Council Staff Report

DATE: November 6, 2024

AGENDA ITEM NO: Public Hearing - 4A

TO: The Honorable Mayor and City Council
FROM: Director of Community Development
SUBJECT: Consideration and possible action to adopt regulations governing data centers within Saturn Park in accordance with Section 3(A) of Ordinance No. 2198 (adopted by voters as Measure JJ on November 3, 2020).

RECOMMENDATION:

It is recommended that the City Council consider:

1. Opening the public hearing and taking testimonial and documentary evidence;
2. After closing the public hearing and considering the evidence submitted during that public hearing:
 - a. Adopting an Urgency Ordinance (Attachment 1) upon 4/5 vote pursuant to Government Code § 65858 amending Monterey Park Municipal Code ("MPMC") Chapter 21.14 to add regulations governing data centers in accordance with Section 3(A) of Ordinance No. 2198 (adopted by voters as Measure JJ on November 3, 2020);
 - b. Introducing and waiving first reading of Ordinance No. _____ (ZCA-24-02) (Attachment 2) amending Monterey Park Municipal Code ("MPMC") Chapter 21.14 to add regulations governing data centers in accordance with Section 3(A) of Ordinance No. 2198 (adopted by voters as Measure JJ on November 3, 2020); and
 - c. Adopting Resolution No. _____ (Attachment 3) adopting design guidelines for data centers in accordance with MPMC Chapter 21.14; and
3. Taking such additional, related, action that may be desirable.

CEQA (California Environmental Quality Act):

Pursuant to the California Environmental Quality Act (Public Resources Code §§ 21000, et seq.; "CEQA") and the regulations promulgated thereunder (14 Cal. Code of Regs. §§ 15000, et seq.; the "CEQA Guidelines"), the City reviewed the environmental impacts of the proposed regulations. No additional environmental review is required for these regulations pursuant to CEQA Guidelines § 15060(c)(2), § 15378(b)(5) § 15301 § 15303 and § 15061(b)(3). These regulations are exempt from additional CEQA review because the regulations would amend existing zoning to govern data centers within Saturn Park in accordance with the voter enacted Land Use Element. This will not have a direct or reasonably foreseeable indirect physical change in the environment and does not qualify as a "project" under CEQA because it will not make physical changes to the environment. Additionally, the regulations are exempt from additional CEQA review under the

commonsense exemption that it will not affect the environment. Any future data center project applications will require separate environmental review as required by applicable law.

EXECUTIVE SUMMARY:

On October 2, 2024, the City Council considered the Saturn Park Advisory Review Committee's ("SPARC's") recommendation regarding potential future land uses as part of implementation of the Land Use and Urban Design Element ("LUE") to the General Plan. The City Council directed staff to draft amendments to MPMC Chapter 21.14 affecting properties within Saturn Park, including conducting research and developing regulations governing data centers to address concerns related to energy, water, air quality, noise and building design.

ZCA-24-02 proposes regulations for data centers within Saturn Park which implement the LUE. As a separate document, design guidelines for data centers are included for City Council consideration.

BACKGROUND:

TYPE OF ACTION: LEGISLATIVE

Decision-Making Body: Pursuant to MPMC § 2.56.020(c), the City Council is the City's Planning Agency for this matter. In considering the recommended actions, the City Council acts in its discretionary legislative capacity (formulating rules that apply to all future cases).

For the proposed Zoning Ordinance Text Amendment, the City Council must make the findings in MPMC § 21.38.050:

- That the proposed text amendment is consistent with the goals, policies, and objectives of the General Plan;
- That the proposed text amendment will not adversely affect surrounding properties; and
- That the proposed text amendment promotes public health, safety, and general welfare and serves the goals and purposes of the MPMC's zoning regulations.

These findings are included in the draft ordinances; the facts upon which these findings rely are also included with the draft documents.

EXISTING DATA CENTER REGULATIONS

The current regulations within MPMC Chapter 21.14 were enacted by the voters in 1998 and are generally identified as "Office Professional" or "O-P." To avoid confusion with other zoning regulations that were adopted by the City Council in 2013, the regulations affecting Saturn Park were designated as "O-P (Voter Enacted)."

The City is currently processing an application for a “data center” at 1977 Saturn. One of the City Council’s topics of discussion – which was also discussed by the SPARC – is the public interest in regulating data centers within Saturn Park. While the proposed use at 1977 Saturn was classified as a “data processing facility,” voters in 1998 could not have contemplated a “data center” use.

CURRENT AND PROPOSED DEFINITIONS

The MPMC does not current define a data center; data processing facilities are defined as

“a building, dedicated space within a building, or group of buildings primarily used for the processing, storage, and management of electronic data on less than an acre of land. This type of facility typically involves activities such as data entry, storage, conversion, and analysis for onsite use.”

Should the proposed regulations be adopted, the MPMC would be amended to include the following definition of a “data center”:

“a building, dedicated space within a building, or group of structures located on one or more acres of land used to house a large group of networked computer systems used for data storage and processing for off-site users, to be used for the remote storage, processing, or distribution of large amounts of data. Such facilities may also include air handlers, power generators, water cooling and storage facilities, utility substations, back-up batteries, fire suppression systems, enhanced security features, and other associated utility infrastructure to support operations. This definition does not apply to smaller data processing facilities that are located on less than one acre of land and where such facilities are accessory or incidental to another primary use.”

This definition more accurately describes the data centers utilized nationwide for cloud storage; data transmissions; and other internet related activities. It also reflects the resource intense nature of such land uses.

PROPOSED REGULATIONS

The proposed regulations would help mitigate the impact of data centers on both surrounding land uses and on environmental resources. These efforts are reflected in:

- Aesthetics – the proposed design guidelines would craft data center buildings that are more than a box with wires. Such structures should help enhance the Saturn Park community and its surroundings with attractive architectural.
- Leadership in Energy and Environmental Design (“LEED®”) certified building designs for sustainable construction – this will help alleviate the impact of data

centers on energy, water, and other resources. The intent is to encourage use of renewable resources and reduce electrical use.

- Public benefits – the regulations would require data centers to execute a development agreement with the City to ensure that the community benefits from the presence of these land uses. Because data centers do not “sell” anything, they are not generally a significant source of tax revenue (other than limited property taxes). A development agreement will help not only protect the investment of data center developers but also provide a vehicle by which benefits may flow to the City.
- Green technology – among other things, data center would be required to provide onsite electric vehicle charging stations. Additionally, such uses must ensure that noise emanating from generators, etc., are reduced to the extent practicable.

LEGAL NOTIFICATION:

The legal notice of this hearing was posted at City Hall, Monterey Park Bruggemeyer Library, and Langley Center and published in Monterey Park Press on October 24, 2024, with affidavits of posting on file.

2024-25 STRATEGIC PLAN GOAL:

The proposed code amendments meet the 2024-25 Strategic Plan Goal to “Strengthen our local economy and enhance housing opportunities” by providing a framework from which data centers will be allowed to be built in a sustainable way that will create benefits to the community.

FISCAL IMPACT:

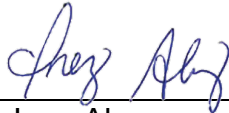
There are no identifiable fiscal impacts associated with adopting the Ordinance itself (other than costs associated with codifying the Ordinance).

Respectfully submitted and prepared
by:



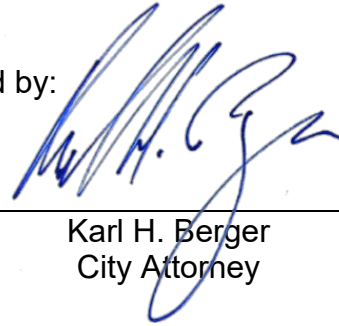
Jessica Serrano
Director of Community
Development

Approved by:



Inez Alvarez
City Manager

Reviewed by:



Karl H. Berger
City Attorney

ATTACHMENTS:

1. Urgency Ordinance No. ____ amending the Monterey Park Municipal Code
2. Regular Ordinance No. ____ amending the Monterey Park Municipal Code
3. Resolution No. ____ adopting design standards that apply to data center developments
4. Data Center Research:
 - a. County of Fairfax, Virginia – *Data Centers Report and Recommendations*, dated January 9, 2024
 - b. Article – *As Data Centers Zap Power, Some Pols Ponder The Unthinkable: Pulling The Plug*, dated October 9, 2024
 - c. Article – Recommendations for Proposed Zoning Ordinance Amendment for Data Center Impacts in Fairfax County, dated May 20, 2024
5. Notice of Determination

ATTACHMENT 1

Urgency Ordinance No. _____ amending the
Monterey Park Municipal Code

ORDINANCE NO.

AN URGENCY ORDINANCE AMENDING MONTEREY PARK MUNICIPAL CODE CHAPTER 21.14 (ZCA-24-02) TO AMEND REGULATIONS GOVERNING DATA PROCESSING FACILITIES IN ACCORDANCE WITH SECTION 3(A) OF ORDINANCE NO. 2198 (ADOPTED BY VOTERS AS MEASURE JJ ON NOVEMBER 3, 2020).

The City Council of the City of Monterey Park does ordain as follows:

SECTION 1: The City Council finds and declares that:

- A. This Ordinance is adopted pursuant to the voters' directives in Ordinance No. 2198, as adopted November 3, 2020 via Measure JJ.
- B. Based upon recommendations of the Saturn Park Advisory Review Commission ("SPARC"), the City Council will be considering expansion of uses within Saturn Park.
- C. As a preliminary matter, however, the City Council finds that there is a current interest by developers to construct "data centers" within Saturn Park. A review of the Monterey Park Municipal Code ("MPMC") confirms that the "data center" land use is not considered as part of the current zoning regulations. While a "data processing facility" is listed as an allowed land use within Saturn Park, that term is not defined. Additionally, since this term was added to the MPMC in 1998, it was well before the concept internet commerce emerged as the "new economy"; the term did not encompass the scope of uses contemplated by contemporary data center developers.
- D. It is plain that data centers – as they have developed in the 25 years since the Saturn Park regulations were first added to the MPMC – are energy hungry land uses that are generally aesthetically displeasing and provide few public benefits. Current data show that, overall, buildings consume 74% of all electricity in the United States.
- E. Goal 2 of the City's Environmental Justice Element provides that "Community health and the reduction of exposure to environmental pollutants is a priority and part of all planning and policy practices." Additionally, Goal 3.1 provides that the City should "[m]aximize the use of the City's existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from disadvantaged neighborhoods."
- F. These Goals and Policies reflect the City Council's overall intent to provide for a cleaner, greener, and more enjoyable community both for our current

residents and for future generations.

- G. Requiring data centers to adhere with green building principles is a form of climate action that minimizes greenhouse gas emissions, relies on energy efficiency and renewable resources, conserves water, optimizes material use, provides healthy and biodiverse environments, and bolsters an equitable society.
- H. Third party rating systems characterize the lifecycle considerations for green buildings. These programs can offer credibility, transparency, and consistency to project teams in pursuit of an elevated and well-defined performance standards for data centers.
- I. It is in the public interest to update the MPMC as to data centers while also considering additional uses for Saturn Park as contemplated by Measure JJ, SPARC, and the City Council.
- J. Without the enactment of this Ordinance, the voter's vision for revitalizing Saturn Park via Measure JJ would be thwarted: anticipated applications for land uses currently allowed by MPMC Chapter 21.14, if approved, would lock in certain types of land uses for the foreseeable future.
- K. The City Council determines that the MPMC requires updating to protect the public against health, safety, and welfare dangers that may result from allowing applicants for data centers to rely upon outdated land use regulations.
- L. The City Council finds that that this Ordinance is necessary in order to protect the City from the potential effects and impacts of outdated land uses and the accompanying impacts from traffic and commerce on City streets, impacts on parking availability in the business areas of the City, the aesthetic impacts to the City, and other similar or related effects on property values and the quality of life in the City's neighborhoods.
- M. Based on the foregoing, and, in accordance with Government Code §§ 36934 and 36937(b) and the City's police powers, the City Council finds that that this Ordinance should be adopted on an urgency basis to preserve public peace, health, safety and welfare.

SECTION 2: Pursuant to MPMC § 21.38.050, the City Council finds as follows:

- A. Land Use and Urban Design Element: This Ordinance complies with Policy 4.2 (Sustainable Practices); Policy 4.3 (Environmental Burden); Policy 4.4 (Freeway Buffer Greening); Policy 4.5 (New Development); Policy 4.6 (Active Transportation); Policy 11.1 (Privacy); Policy 12.1

(Compatibility); Policy 12.2 (Comprehensive Design); and Policies 25.1, 25.2, and 25.3 (specific as to Saturn Park).

- B. Environmental Justice Element: This Ordinance complies with Policy No. 2.1 (limiting environmental pollution); Policy 2.2 (promote enhanced health outcomes and improved quality of life); and Policy 3.2 (work with local business community to expand green space programs).
- C. These regulations will not adversely affect surrounding properties. Such regulations will operate citywide and will not affect a change in the use or the intensity of use of property in any zone.

SECTION 3: *Environmental Review.* The City Council finds and determines that this ordinance is not subject to further review under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*; “CEQA”) for the following reasons: (1) it will not result in a direct or reasonably foreseeable indirect physical change in the environment (14 Cal. Code Regs. § 15060(c)(2); (2) there is no possibility that the ordinance may have a significant effect on the environment (14 Cal. Code Regs. § 15061(b)(3); and (3) the ordinance, by itself, does not constitute a “project” as defined in the CEQA Guidelines (14 Cal. Code Regs. § 15378).

SECTION 4: *Renaming of Zone; Amendment of Zoning Map; Amendment of MPMC § 21.02.210.* All references to “O-P—OFFICE PROFESSIONAL ZONE (VOTER ENACTED)” within the MPMC are amended to read “S-P – SATURN PARK INNOVATION/TECHNOLOGY ZONE.” All references to the “O-P zone” within MPMC Chapter 21.14 are amended to read “S-P zone.” The reference to the “McCaslin Business Park (O-P Voter Enacted)” in the Zoning Map is amended to read “Saturn Park Innovation/Technology Zone.” MPMC § 21.02.210(B) is amended to add the “Saturn Park Innovation/Technology Zone” to the table of Zone Designations.

SECTION 4: MPMC Chapter 21.14 is amended to read as follows:

“Chapter 21.14

S-P – SATURN PARK INNOVATION/TECHNOLOGY ZONE

21.14.010. **Purpose.**

In order to provide for the development of innovation and technology uses that exhibit a diversity of business activity from both revenue and service quality standpoints, and which are compatible and responsive to abutting land uses, including residential developments, the following regulations apply to all properties classified in the S-P zone.

21.14.020. **Definitions.**

Unless the contrary is stated or clearly appears from the context, the following definitions govern the construction of the words and phrases used in this chapter:

“Data center” means a building, dedicated space within a building, or group of structures located on one or more acres of land used to house a large group of networked computer systems used for data storage and processing for off-site users, to be used for the remote storage, processing, or distribution of large amounts of data. Such facilities may also include air handlers, power generators, water cooling and storage facilities, utility substations, back-up batteries, fire suppression systems, enhanced security features, and other associated utility infrastructure to support operations. This definition does not apply to smaller data processing facilities that are located on less than one acre of land and where such facilities are accessory or incidental to another primary use.

“Data processing facility” means a building, dedicated space within a building, or group of buildings primarily used for the processing, storage, and management of electronic data on less than an acre of land. This type of facility typically involves activities such as data entry, storage, conversion, and analysis for onsite use.

“Director” means the City Manager or designee. Unless otherwise designated by the City Manager, the Community Development Director is the Director.

“Green Building Rating System” means an assessment tool, created and managed by LLED, a reputable organization in good standing and recognized by the building industry as meeting the standard of care, that includes the following general characteristics, at a minimum:

- A. Holistic approach to program requirements, with established and comprehensive sustainability metrics for measuring performance in a range of impact areas, such as energy; environmental justice; human and environmental health; integrative process; materials; site and surrounds; and water;
- B. Independent third-party verification;
- C. Mechanism for consistent evaluation and communication of achievement or levels of achievement;
- D. Standardized processes for project data tracking and project team support; and
- E. Commitment to continuous improvement with clearly delineated and transparent methods for program updates.

“Green Business Certification Inc.” or “GBCI” is the global certification body for the LEED green building program and other sustainability rating systems, as well as the administrator of related professional credentials. (www.gcbi.org)

“Leadership in Energy and Environmental Design” or “LEED®” is an internationally recognized and third-party verified green building rating system developed by the U.S. Green Building Council. (www.usgbc.org/leed)

21.14.030. Permitted Uses.

It is unlawful for any person to use, nor may any property owner permit the use of any lot classified in any S-P zone for any use, other than the following as set out in this chapter.

21.14.040. Prohibited Uses.

All uses not permitted in this chapter are prohibited.

21.14.050. Principal Uses.

The principal uses are permitted as follows:

Administrative and professional offices; beauty salon or barber shop; bookstore;

Cellular phone, telephone and pager store; coffee shop;

Computer store, sales and service; confectionary shop;

Data processing facility;

Delicatessen;

Employment agency;

Financial institutions' corporate offices, no retail banking;

General research facility, not involving testing, manufacturing, fabrication or processing or sale of products, nor the use of a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard;

Gift shop;

Ice cream parlor;

Import and export offices;

Investment service offices, stock brokers; Jewelry store, sales and service;

Legal offices;

Mailbox and service store;

Medical equipment and supplies, sales and service; notary public;
Photocopying and blueprinting; public utility customer service office;
Real estate offices and title companies; restaurant, tearoom and café;
Service businesses;
Stationery;
Studio, art, dance, martial arts, photography; tax consulting;
Tobacco store;
Travel agency;
Video sales and rentals.

21.14.060. **Conditional uses.**
Conditional uses are uses specifically enumerated in this chapter.

21.14.070. **Standards of Development Generally.**

All premises in the S-P zone must comply with the following standards of development as set out in this chapter and as may be adopted by city council resolution.

21.14.080. **Lots.**

- A. Lot Area. The minimum lot building on the S-P zone area of each lot is 5,000 square feet.
- B. Lot Width. The minimum width of each lot is 50 feet.
- C. Lot Depth. The minimum depth of each lot is 100 feet.

21.14.090. **Yards.**

The following minimum yards are required on all lots:

- A. Front Yard. No minimum front yard is required.
- B. Side and Rear Yards. Every lot must have and maintain minimum side and rear yards as follows:
 - 1. When the side yard is adjacent to a street, the yard must be at least 15 feet in depth.
 - 2. When adjacent to an R-zone, the yard must be not less than 50 feet, plus five feet in depth for each story above one story of building or each 10 foot increment above 15 feet in height of

building on the S-P zoned lot. Where there is an opening, including, without limitation, windows, pedestrian doors and roll-up doors, in any facing a yard adjacent to an R-zone, the yard must be not less than 100 feet from any opening to minimum width of the R zoned lot. The yard may be used for parking, excepting a minimum 15 foot wide area abutting the R zone which must be landscaped and maintained in such a condition so as not to violate this code. The required landscaping must also conform to the standards set forth in Section 21.14.150.

3. When the S-P zoned lot is separated from an R zone by an alley, a rear yard setback of 40 feet must be provided, as measured from the centerline of the alley. A minimum three-foot wide landscaped planter must be installed and maintained along the alley, excepting at any vehicular access driveway.
4. When adjacent to a non-residential zone, commercially-zoned or M zoned lot, no yard is required.

21.14.100. Building Height.

No building or structure exceeding 40 feet or three stories may be located on any lot. Buildings or structures exceeding the height limits may be permitted upon approval of a conditional use permit.

21.14.110. Floor Area Ratio (FAR).

The floor area ratio may not exceed 0.5 when the lot is less than 10,000 square feet in area. When the lot is between 10,000 and 20,000 square feet in area, the floor area ratio may not exceed 0.65. When the lot is more than 20,000 square feet in area, the floor area ratio may not exceed 0.8. The floor area ratio may be increased to a maximum of 1.0 for all lots, upon approval of a conditional use permit.

21.14.120. Off-Street Parking and Loading.

Each S-P zoned lot must have and maintain off-street parking and loading facilities as required by this title.

21.14.130. Required Walls.

Except as otherwise provided in this chapter the following standards apply:

- A. Where any part of the front yard or street side yard of an S-P zoned lot is used for parking or loading, a masonry wall compatible in color with the commercial building and/or sight- obscuring hedge a minimum of three

feet in height must be erected and maintained within a landscaped area a minimum of three feet in width adjacent to the sidewalk at the front or side yard property line as required by this title.

- B. When any S-P zoned lot has a common side or rear lot line with any R zoned property, a six-foot solid decorative masonry or concrete block wall compatible in color with the commercial building must be constructed and maintained along all such common side or rear lot lines. Where an easement exists, abutting the common property line, the decorative wall may be constructed along the boundary of the easement on the commercial lot. A minimum three-foot wide landscaped planter with automatic irrigation system must be placed adjacent to the wall, planted with trees, shrubs, ground cover and vines. Where a parking lot on the S-P zoned lot abuts a R zoned lot, the additional parking lot landscaping requirements of this chapter apply.

21.14.140. Trash Facilities.

Each S-P zoned lot must provide facilities for the storage and collection of trash as follows:

- A. Any outdoor trash facility must be enclosed by a minimum five-foot high solid masonry, brick or concrete wall except for the access way which must be enclosed with solid decorative gates of the same height.
- A. Location and size are subject to approval by the Director. When any S-P zoned lot has a common property line with a R zoned lot, no trash facility may be located within the required building setback.
- B. Open vehicular and pedestrian access to and from such trash facility must be provided. No parking spaces may block such access to the trash facility.
- C. Trash facilities must be maintained in a closed manner at all times to prohibit visibility from public rights-of-way or adjacent property.

21.14.150. Buffering and Maintenance of Landscaping and Easements.

- A. For S-P zoned lots with side or rear yards that are adjacent to an R zoned lot, the following buffering provisions must be provided and maintained:
 - 1. Landscaping, irrigation and maintenance plans are required and the plans are subject to approval of the planning agency. The plans must incorporate, without limitation, 15 gallon minimum trees at time of planting, interspersed shrubs, ground cover, raised earthen

berms and automatic sprinkler systems. The City may require the maintenance plan to include a bona fide service agreement with a City licensed landscaping service business. Maintaining an active service agreement on file with the Director is the responsibility of the owner of the subject property or authorized agent.

2. All landscaped areas and easements must be maintained in good condition, weed and disease free, and in compliance with this code.

21.14.160. Compressors, Air-Conditioning Units or Similar Mechanical Equipment.

Each S-P zoned lot which has compressors, air-conditioning units or similar mechanical equipment, located on the roof and outside of the exterior walls of any building or structure, must comply with the following:

- A. All such equipment must be installed with permanent sound proofing measures, including, without limitation, enclosures, parapet and sound attenuating walls and screens. All such equipment must comply with noise standards set forth in this code. The location, type and scope of soundproofing measures for such equipment are subject to the approval of the Director.
- B. All such equipment must be maintained in a clean and proper condition to prevent collection of litter and filth, emissions of dust or fumes, vibration or electrical disturbances.

21.14.170. Lighting.

All outdoor lighting must be located and shielded so as to prevent the direct spillage of light or glare onto adjacent lots and streets.

21.14.180. Site Development Plan Approval.

Site development plans must be approved by the Director in accordance with this code before the Building Official issues a building permit.

21.14.190. Limitations on Permitted Uses.

Every use permitted in the S-P zone must comply with the following:

- A. All uses must be conducted totally within a completely enclosed building, except for those uses which are customarily conducted in the open. Those uses conducted in the open may not be closer than 100 feet to any R zoned lot, except for parking.

- B. No outdoor storage is allowed unless the same is enclosed by a view-obscuring fence or wall, provided that no stored material is visible above the fence or wall, that the fence or wall is approved by the Director and that such storage is limited to the accessory storage of items sold or utilized in the conduct of a permitted use on the premises. Where the S-P zoned lot is adjacent to a R zoned lot, no outdoor storage is permitted within 100 feet of a R zoned lot.
- C. No loading and unloading is permitted in any required side or rear yard.
- D. Where the S-P zoned lot is adjacent to a R zoned lot, no deliveries of goods and commodities nor loading or unloading shall be conducted during the hours from 10:00 p.m. to 7:00 a.m.
- E. Overnight parking of vehicles is prohibited, except those vehicles used in conjunction with a permitted use.
- F. Driveways cannot exceed 30 feet in width or 60% of the lot frontage.
- G. No use is permitted which produces or causes or emits any dust, gas, smoke, glare, noise, fumes, odors, electromagnetic emanations or vibrations which are or may be detrimental to the health, safety, welfare and peace of the City and its residents and businesses.
- H. No use is permitted which uses or stores a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard. A business materials usage and operations form must be filed with the Public Works Director before the Building Official issues a certificate of occupancy.
- I. No person may, at any location within the S-P zone, create nor allow the creation of noise which causes the noise level to exceed the applicable noise standards set forth in this code. Where the S-P zoned lot is adjacent to an R zoned lot, the noise level at the property line of the R zoned lot may not exceed the allowable noise level for residential properties.

21.14.200. **Conditional Uses.**

Auditorium, not within 300 feet of an R zone

Buildings exceeding height limit

Business college (office or medical, dental)

Child care center, not within 300 feet of an R zone

Commercial office or service units which are shared by more than 1 independently owned business enterprise

Commercial developments of 5 or more units or with an area of more than 1 acre, and within 300 feet of a R-zone

Financial institution (retail banking)

Floor area ratio not to exceed 1.0

Government or public facility, except those owned or operated by the City of Monterey Park

Gymnasium, reducing salon and health center

Hotel

Lot size over 1 acre

Places of entertainment, except as otherwise provided in this title.

21.14.210. Data Centers – Development Agreement Required - Requirements

- A. Data centers are permitted only with a development agreement in accordance with Chapter 21.44 of this code.
- B. For new buildings, modifications to existing buildings, and/or additions to existing structures greater than 25,000 square feet in building area or located on sites greater than 30,000 square feet in land area, projects must comply with the following:
 - 1. Primary and secondary facades. Buildings must have identifiable primary and secondary facades. Public-facing facades must have dimensions, use mixed materials, and provide identification for the facility through the placement and design of entrances, lighting, canopies, artwork, signage, and other special features. Screening and enclosures must be installed to disguise outside mechanical equipment and storage. Rooftop equipment, stairwells, and features must be designed as integral to the building and enhance the form of the site. Ventilation and air-handling equipment must be screened from view with materials designed to attenuate noise.
 - 2. Pedestrian access. Sites must be designed and constructed in a pedestrian friendly manner. The design must be harmonious with the surrounding built and natural environments and identifiable with the site's location. Pedestrian walkways must be considered before designing vehicle driveways and parking areas for the safety and enjoyment of pedestrians.
 - 3. Landscape. Landscaping must be harmonious with off-site and

streetscape landscaping. Where adjacent properties contain residential or other noise-sensitive uses, a minimum 15-foot-wide landscaped buffer must be placed along the property line in addition to any required boundary masonry block wall or fence.

4. **Parking.** Minimum parking requirement for data center uses is one parking space per 250 square feet of office/meeting/technician workspace, plus one parking space per each 5,000 square feet of floor area or fraction thereof, devoted to computer equipment space.
 5. **Noise Study.** A noise study must be conducted by a third-party acoustic engineer to document baseline sound levels and include expected maximum noise output with all mechanical, electrical, and any other noise generating equipment operating simultaneously at full operational load.
- C. In addition to any other public benefits provided in a development agreement, data center projects must provide the following public benefits:
1. **Rating requirement.** Applicants must submit documentation demonstrating achievement of LEED “Gold” certification by GBCI.
 2. **Indoor water use reduction.** Applicants must submit documentation verifying that a project meets maximum prescriptive fixture flow rates in accordance with the California Plumbing Code. The project must also achieve the LEED WE Prerequisite Indoor Water Use Reduction (WEp2) and a minimum 30 percent reduction in the use of indoor potable water, as calculated to meet the LEED WE credit Indoor Water Use Reduction (WEc2).
 3. **Construction waste management.** Applicants must submit documentation verifying the diversion of a minimum 75 percent of the project’s construction and demolition waste, as calculated to meet LEED MR Prerequisite Construction and Demolition Waste Management Planning and LEED MR Credit Construction and Demolition Waste Management.
 4. **Monitoring.** Applicants must submit documentation verifying that a project will meet the criteria necessary to achieve California Building Code and Option 1 of LEED EA credit (Enhanced Commissioning), in addition to LEED EA Prerequisite (Fundamental Commissioning) and Verification.
 5. **Light pollution reduction.** Meet LEED SS Credit Light Pollution

Reduction.

6. Prohibitions. CFCs and halons are not allowed in HVAC, refrigeration and fire suppression equipment. Meet LEED EA Credit Enhanced Refrigerant Management, and additionally document that all HVAC refrigeration, and fire suppression systems do not contain CFCs or halons.
7. Electric vehicle charging. In addition to meeting the requirements of the Title 15 of this code, applicant will provide an additional 10% electric vehicle charging stations.
8. Such additional design standards that may be adopted by city council resolution.”

SECTION 5: *Electronic Signatures.* This Ordinance may be executed with electronic signatures in accordance with Government Code § 16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 6: *Construction.* This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council’s intent that the provisions of this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 7: *Severability.* If any part of this Ordinance or its Application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 8: *Recordation.* The City Clerk, or designee, is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park’s book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within 15 days after the passage and adoption of this Ordinance, and cause it to be published or posted in accordance with California law.

SECTION 9: *Effective Date.* Based on the findings in Section 1, this urgency ordinance is adopted by a four-fifths vote for the immediate preservation of the public peace, health, safety and welfare and becomes effective immediately pursuant to Government Code § 36937(b).

PASSED AND ADOPTED this ____ day of _____, 2024.

Thomas Wong, Mayor

ATTEST:

Maychelle Yee, City Clerk

APPROVED AS TO FORM:



Karl H. Berger, City Attorney

ATTACHMENT 2

Regular Ordinance No. _____ amending the
Monterey Park Municipal Code

ORDINANCE NO.

AN ORDINANCE AMENDING MONTEREY PARK MUNICIPAL CODE CHAPTER 21.14 (ZCA-24-02) TO AMEND REGULATIONS GOVERNING DATA PROCESSING FACILITIES IN ACCORDANCE WITH SECTION 3(A) OF ORDINANCE NO. 2198 (ADOPTED BY VOTERS AS MEASURE JJ ON NOVEMBER 3, 2020).

The City Council of the City of Monterey Park does ordain as follows:

SECTION 1: The City Council finds and declares that:

- A. This Ordinance is adopted pursuant to the voters' directives in Ordinance No. 2198, as adopted November 3, 2020 via Measure JJ.
- B. Based upon recommendations of the Saturn Park Advisory Review Commission ("SPARC"), the City Council will be considering expansion of uses within Saturn Park.
- C. As a preliminary matter, however, the City Council finds that there is a current interest by developers to construct "data centers" within Saturn Park. A review of the Monterey Park Municipal Code ("MPMC") confirms that the "data center" land use is not considered as part of the current zoning regulations. While a "data processing facility" is listed as an allowed land use within Saturn Park, that term is not defined. Additionally, since this term was added to the MPMC in 1998, it was well before the concept internet commerce emerged as the "new economy"; the term did not encompass the scope of uses contemplated by contemporary data center developers.
- D. It is plain that data centers – as they have developed in the 25 years since the Saturn Park regulations were first added to the MPMC – are energy hungry land uses that are generally aesthetically displeasing and provide few public benefits. Current data show that, overall, buildings consume 74% of all electricity in the United States.
- E. Goal 2 of the City's Environmental Justice Element provides that "Community health and the reduction of exposure to environmental pollutants is a priority and part of all planning and policy practices." Additionally, Goal 3.1 provides that the City should "[m]aximize the use of the City's existing open space network and recreation facilities by enhancing those facilities and providing connections, particularly from disadvantaged neighborhoods."
- F. These Goals and Policies reflect the City Council's overall intent to provide for a cleaner, greener, and more enjoyable community both for our current

residents and for future generations.

- G. Requiring data centers to adhere with green building principles is a form of climate action that minimizes greenhouse gas emissions, relies on energy efficiency and renewable resources, conserves water, optimizes material use, provides healthy and biodiverse environments, and bolsters an equitable society.
- H. Third party rating systems characterize the lifecycle considerations for green buildings. These programs can offer credibility, transparency, and consistency to project teams in pursuit of an elevated and well-defined performance standards for data centers.
- I. It is in the public interest to update the MPMC as to data centers while also considering additional uses for Saturn Park as contemplated by Measure JJ, SPARC, and the City Council.

SECTION 2: Pursuant to MPMC § 21.38.050, the City Council finds as follows:

- A. Land Use and Urban Design Element: This Ordinance complies with Policy 4.2 (Sustainable Practices); Policy 4.3 (Environmental Burden); Policy 4.4 (Freeway Buffer Greening); Policy 4.5 (New Development); Policy 4.6 (Active Transportation); Policy 11.1 (Privacy); Policy 12.1 (Compatibility); Policy 12.2 (Comprehensive Design); and Policies 25.1, 25.2, and 25.3 (specific as to Saturn Park).
- B. Environmental Justice Element: This Ordinance complies with Policy No. 2.1 (limiting environmental pollution); Policy 2.2 (promote enhanced health outcomes and improved quality of life); and Policy 3.2 (work with local business community to expand green space programs).
- C. These regulations will not adversely affect surrounding properties. Such regulations will operate citywide and will not affect a change in the use or the intensity of use of property in any zone.

SECTION 3: *Environmental Review.* The City Council finds and determines that this ordinance is not subject to further review under the California Environmental Quality Act (Public Resources Code §§ 21000, *et seq.*; “CEQA”) for the following reasons: (1) it will not result in a direct or reasonably foreseeable indirect physical change in the environment (14 Cal. Code Regs. § 15060(c)(2); (2) there is no possibility that the ordinance may have a significant effect on the environment (14 Cal. Code Regs. § 15061(b)(3); and (3) the ordinance, by itself, does not constitute a “project” as defined in the CEQA Guidelines (14 Cal. Code Regs. § 15378).

SECTION 4: *Renaming of Zone; Amendment of Zoning Map; Amendment of MPMC §*

21.02.210. All references to “O-P—OFFICE PROFESSIONAL ZONE (VOTER ENACTED)” within the MPMC are amended to read “S-P – SATURN PARK INNOVATION/TECHNOLOGY ZONE.” All references to the “O-P zone” within MPMC Chapter 21.14 are amended to read “S-P zone.” The reference to the “McCaslin Business Park (O-P Voter Enacted)” in the Zoning Map is amended to read “Saturn Park Innovation/Technology Zone.” MPMC § 21.02.210(B) is amended to add the “Saturn Park Innovation/Technology Zone” to the table of Zone Designations.

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“Data processing facility” means a building, dedicated space within a building, or group of buildings primarily used for the processing, storage, and management of electronic data on less than an acre of land. This type of facility typically involves activities such as data entry, storage, conversion, and analysis for onsite use.

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- A. Holistic approach to program requirements, with established and comprehensive sustainability metrics for measuring performance in a range of impact areas, such as energy; environmental justice; human and environmental health; integrative process; materials; site and surrounds; and water;
- B. Independent third-party verification;
- C. Mechanism for consistent evaluation and communication of achievement or levels of achievement;
- D. Standardized processes for project data tracking and project team support; and
- E. Commitment to continuous improvement with clearly delineated and transparent methods for program updates.

“Green Business Certification Inc.” or “GBCI” is the global certification body for the LEED green building program and other sustainability rating systems, as well as the administrator of related professional credentials. (www.gcbi.org)

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21.14.030. **Permitted Uses.**

It is unlawful for any person to use, nor may any property owner permit the use of any lot classified in any S-P zone for any use, other than the following as set out in this chapter.

21.14.040. **Prohibited Uses.**

All uses not permitted in this chapter are prohibited.

21.14.050. **Principal Uses.**

The principal uses are permitted as follows:

Administrative and professional offices; beauty salon or barber shop; bookstore;
Cellular phone, telephone and pager store; coffee shop;
Computer store, sales and service; confectionary shop;
Data processing facility;
Delicatessen;
Employment agency;
Financial institutions' corporate offices, no retail banking;
General research facility, not involving testing, manufacturing, fabrication or processing or sale of products, nor the use of a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard;
Gift shop;
Ice cream parlor;
Import and export offices;
Investment service offices, stock brokers; Jewelry store, sales and service;
Legal offices;
Mailbox and service store;
Medical equipment and supplies, sales and service; notary public;
Photocopying and blueprinting; public utility customer service office;
Real estate offices and title companies; restaurant, tearoom and café;
Service businesses;
Stationery;
Studio, art, dance, martial arts, photography; tax consulting;
Tobacco store;
Travel agency;
Video sales and rentals.

21.14.060. Conditional uses.

Conditional uses are uses specifically enumerated in this chapter.

21.14.070. Standards of Development Generally.

All premises in the S-P zone must comply with the following standards of development as set out in this chapter and as may be adopted by city council resolution.

21.14.080. Lots.

- A. Lot Area. The minimum lot building on the S-P zone area of each lot is 5,000 square feet.
- B. Lot Width. The minimum width of each lot is 50 feet.
- C. Lot Depth. The minimum depth of each lot is 100 feet.

21.14.090. **Yards.**

The following minimum yards are required on all lots:

- A. Front Yard. No minimum front yard is required.
- B. Side and Rear Yards. Every lot must have and maintain minimum side and rear yards as follows:
 - 1. When the side yard is adjacent to a street, the yard must be at least 15 feet in depth.
 - 2. When adjacent to an R-zone, the yard must be not less than 50 feet, plus five feet in depth for each story above one story of building or each 10 foot increment above 15 feet in height of building on the S-P zoned lot. Where there is an opening, including, without limitation, windows, pedestrian doors and roll-up doors, in any facing a yard adjacent to an R-zone, the yard must be not less than 100 feet from any opening to minimum width of the R zoned lot. The yard may be used for parking, excepting a minimum 15 foot wide area abutting the R zone which must be landscaped and maintained in such a condition so as not to violate this code. The required landscaping must also conform to the standards set forth in Section 21.14.150.
 - 3. When the S-P zoned lot is separated from an R zone by an alley, a rear yard setback of 40 feet must be provided, as measured from the centerline of the alley. A minimum three-foot wide landscaped planter must be installed and maintained along the alley, excepting at any vehicular access driveway.
 - 4. When adjacent to a non-residential zone, commercially-zoned or M zoned lot, no yard is required.

21.14.100. **Building Height.**

No building or structure exceeding 40 feet or three stories may be located on any lot.

Buildings or structures exceeding the height limits may be permitted upon approval of a conditional use permit.

21.14.110. Floor Area Ratio (FAR).

The floor area ratio may not exceed 0.5 when the lot is less than 10,000 square feet in area. When the lot is between 10,000 and 20,000 square feet in area, the floor area ratio may not exceed 0.65. When the lot is more than 20,000 square feet in area, the floor area ratio may not exceed 0.8. The floor area ratio may be increased to a maximum of 1.0 for all lots, upon approval of a conditional use permit.

21.14.120. Off-Street Parking and Loading.

Each S-P zoned lot must have and maintain off-street parking and loading facilities as required by this title.

21.14.130. Required Walls.

Except as otherwise provided in this chapter the following standards apply:

- A. Where any part of the front yard or street side yard of an S-P zoned lot is used for parking or loading, a masonry wall compatible in color with the commercial building and/or sight- obscuring hedge a minimum of three feet in height must be erected and maintained within a landscaped area a minimum of three feet in width adjacent to the sidewalk at the front or side yard property line as required by this title.
- B. When any S-P zoned lot has a common side or rear lot line with any R zoned property, a six-foot solid decorative masonry or concrete block wall compatible in color with the commercial building must be constructed and maintained along all such common side or rear lot lines. Where an easement exists, abutting the common property line, the decorative wall may be constructed along the boundary of the easement on the commercial lot. A minimum three-foot wide landscaped planter with automatic irrigation system must be placed adjacent to the wall, planted with trees, shrubs, ground cover and vines. Where a parking lot on the S-P zoned lot abuts a R zoned lot, the additional parking lot landscaping requirements of this chapter apply.

21.14.140. Trash Facilities.

Each S-P zoned lot must provide facilities for the storage and collection of trash as follows:

- A. Any outdoor trash facility must be enclosed by a minimum five-foot high

solid masonry, brick or concrete wall except for the access way which must be enclosed with solid decorative gates of the same height.

- A. Location and size are subject to approval by the Director. When any S-P zoned lot has a common property line with a R zoned lot, no trash facility may be located within the required building setback.
- B. Open vehicular and pedestrian access to and from such trash facility must be provided. No parking spaces may block such access to the trash facility.
- C. Trash facilities must be maintained in a closed manner at all times to prohibit visibility from public rights-of-way or adjacent property.

21.14.150. Buffering and Maintenance of Landscaping and Easements.

- A. For S-P zoned lots with side or rear yards that are adjacent to an R zoned lot, the following buffering provisions must be provided and maintained:
 - 1. Landscaping, irrigation and maintenance plans are required and the plans are subject to approval of the planning agency. The plans must incorporate, without limitation, 15 gallon minimum trees at time of planting, interspersed shrubs, ground cover, raised earthen berms and automatic sprinkler systems. The City may require the maintenance plan to include a bona fide service agreement with a City licensed landscaping service business. Maintaining an active service agreement on file with the Director is the responsibility of the owner of the subject property or authorized agent.
 - 2. All landscaped areas and easements must be maintained in good condition, weed and disease free, and in compliance with this code.

21.14.160. Compressors, Air-Conditioning Units or Similar Mechanical Equipment.

Each S-P zoned lot which has compressors, air-conditioning units or similar mechanical equipment, located on the roof and outside of the exterior walls of any building or structure, must comply with the following:

- A. All such equipment must be installed with permanent sound proofing measures, including, without limitation, enclosures, parapet and sound attenuating walls and screens. All such equipment must comply with noise standards set forth in this code. The location, type and scope of soundproofing measures for such equipment are subject to the approval of the Director.

- B. All such equipment must be maintained in a clean and proper condition to prevent collection of litter and filth, emissions of dust or fumes, vibration or electrical disturbances.

21.14.170. Lighting.

All outdoor lighting must be located and shielded so as to prevent the direct spillage of light or glare onto adjacent lots and streets.

21.14.180. Site Development Plan Approval.

Site development plans must be approved by the Director in accordance with this code before the Building Official issues a building permit.

21.14.190. Limitations on Permitted Uses.

Every use permitted in the S-P zone must comply with the following:

- A. All uses must be conducted totally within a completely enclosed building, except for those uses which are customarily conducted in the open. Those uses conducted in the open may not be closer than 100 feet to any R zoned lot, except for parking.
- B. No outdoor storage is allowed unless the same is enclosed by a view-obscuring fence or wall, provided that no stored material is visible above the fence or wall, that the fence or wall is approved by the Director and that such storage is limited to the accessory storage of items sold or utilized in the conduct of a permitted use on the premises. Where the S-P zoned lot is adjacent to a R zoned lot, no outdoor storage is permitted within 100 feet of a R zoned lot.
- C. No loading and unloading is permitted in any required side or rear yard.
- D. Where the S-P zoned lot is adjacent to a R zoned lot, no deliveries of goods and commodities nor loading or unloading shall be conducted during the hours from 10:00 p.m. to 7:00 a.m.
- E. Overnight parking of vehicles is prohibited, except those vehicles used in conjunction with a permitted use.
- F. Driveways cannot exceed 30 feet in width or 60% of the lot frontage.
- G. No use is permitted which produces or causes or emits any dust, gas, smoke, glare, noise, fumes, odors, electromagnetic emanations or

vibrations which are or may be detrimental to the health, safety, welfare and peace of the City and its residents and businesses.

- H. No use is permitted which uses or stores a hazardous material that has a degree of hazard rating in health, flammability or reactivity of Class 4 as ranked by U.F.C. Standard 79-3 or succeeding standard. A business materials usage and operations form must be filed with the Public Works Director before the Building Official issues a certificate of occupancy.
- I. No person may, at any location within the S-P zone, create nor allow the creation of noise which causes the noise level to exceed the applicable noise standards set forth in this code. Where the S-P zoned lot is adjacent to an R zoned lot, the noise level at the property line of the R zoned lot may not exceed the allowable noise level for residential properties.

21.14.200. Conditional Uses.

Auditorium, not within 300 feet of an R zone

Buildings exceeding height limit

Business college (office or medical, dental)

Child care center, not within 300 feet of an R zone

Commercial office or service units which are shared by more than 1 independently owned business enterprise

Commercial developments of 5 or more units or with an area of more than 1 acre, and within 300 feet of a R-zone

Financial institution (retail banking)

Floor area ratio not to exceed 1.0

Government or public facility, except those owned or operated by the City of Monterey Park

Gymnasium, reducing salon and health center

Hotel

Lot size over 1 acre

Places of entertainment, except as otherwise provided in this title.

21.14.210. Data Centers – Development Agreement Required - Requirements

- A. Data centers are permitted only with a development agreement in accordance with Chapter 21.44 of this code.

- B. For new buildings, modifications to existing buildings, and/or additions to existing structures greater than 25,000 square feet in building area or located on sites greater than 30,000 square feet in land area, projects must comply with the following:
1. Primary and secondary facades. Buildings must have identifiable primary and secondary facades. Public-facing facades must have dimensions, use mixed materials, and provide identification for the facility through the placement and design of entrances, lighting, canopies, artwork, signage, and other special features. Screening and enclosures must be installed to disguise outside mechanical equipment and storage. Rooftop equipment, stairwells, and features must be designed as integral to the building and enhance the form of the site. Ventilation and air-handling equipment must be screened from view with materials designed to attenuate noise.
 2. Pedestrian access. Sites must be designed and constructed in a pedestrian friendly manner. The design must be harmonious with the surrounding built and natural environments and identifiable with the site's location. Pedestrian walkways must be considered before designing vehicle driveways and parking areas for the safety and enjoyment of pedestrians.
 3. Landscape. Landscaping must be harmonious with off-site and streetscape landscaping. Where adjacent properties contain residential or other noise-sensitive uses, a minimum 15-foot-wide landscaped buffer must be placed along the property line in addition to any required boundary masonry block wall or fence.
 4. Parking. Minimum parking requirement for data center uses is one parking space per 250 square feet of office/meeting/technician workspace, plus one parking space per each 5,000 square feet of floor area or fraction thereof, devoted to computer equipment space.
 5. Noise Study. A noise study must be conducted by a third-party acoustic engineer to document baseline sound levels and include expected maximum noise output with all mechanical, electrical, and any other noise generating equipment operating simultaneously at full operational load.
- C. In addition to any other public benefits provided in a development agreement, data center projects must provide the following public benefits:
1. Rating requirement. Applicants must submit documentation

demonstrating achievement of LEED “Gold” certification by GBCI.

2. Indoor water use reduction. Applicants must submit documentation verifying that a project meets maximum prescriptive fixture flow rates in accordance with the California Plumbing Code. The project must also achieve the LEED WE Prerequisite Indoor Water Use Reduction (WEp2) and a minimum 30 percent reduction in the use of indoor potable water, as calculated to meet the LEED WE credit Indoor Water Use Reduction (WEc2).
3. Construction waste management. Applicants must submit documentation verifying the diversion of a minimum 75 percent of the project’s construction and demolition waste, as calculated to meet LEED MR Prerequisite Construction and Demolition Waste Management Planning and LEED MR Credit Construction and Demolition Waste Management.
4. Monitoring. Applicants must submit documentation verifying that a project will meet the criteria necessary to achieve California Building Code and Option 1 of LEED EA credit (Enhanced Commissioning), in addition to LEED EA Prerequisite (Fundamental Commissioning) and Verification.
5. Light pollution reduction. Meet LEED SS Credit Light Pollution Reduction.
6. Prohibitions. CFCs and halons are not allowed in HVAC, refrigeration and fire suppression equipment. Meet LEED EA Credit Enhanced Refrigerant Management, and additionally document that all HVAC refrigeration, and fire suppression systems do not contain CFCs or halons.
7. Electric vehicle charging. In addition to meeting the requirements of the Title 15 of this code, applicant will provide an additional 10% electric vehicle charging stations.
8. Such additional design standards that may be adopted by city council resolution.”

SECTION 5: *Electronic Signatures.* This Ordinance may be executed with electronic signatures in accordance with Government Code § 16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 6: *Construction.* This Ordinance must be broadly construed to achieve the purposes stated in this Ordinance. It is the City Council’s intent that the provisions of

this Ordinance be interpreted or implemented by the City and others in a manner that facilitates the purposes set forth in this Ordinance.

SECTION 7: *Severability.* If any part of this Ordinance or its Application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Ordinance are severable.

SECTION 8: *Recordation.* The City Clerk, or designee, is directed to certify the passage and adoption of this Ordinance; cause it to be entered into the City of Monterey Park's book of original ordinances; make a note of the passage and adoption in the records of this meeting; and, within 15 days after the passage and adoption of this Ordinance, and cause it to be published or posted in accordance with California law.

SECTION 9: *Effective Date.* This Ordinance will become effective 30 days after second reading and adoption.

PASSED AND ADOPTED this ____ day of _____, 2024.

Thomas Wong, Mayor

ATTEST:

Maychelle Yee, City Clerk

APPROVED AS TO FORM:



Karl H. Berger, City Attorney

ATTACHMENT 3

Resolution No. _____ adopting design standards
that apply to data center developments

RESOLUTION NO. _____

A RESOLUTION ADOPTING DEVELOPMENT STANDARDS FOR DATA CENTERS IN ACCORDANCE WITH MONTEREY PARK MUNICIPAL CODE CHAPTER 21.14.

THE CITY COUNCIL RESOLVES AS FOLLOWS:

SECTION 1: Authorizations. This Resolution may be referred to as the “Data Center Development Standards.” It is adopted in accordance with Monterey Park Municipal Code (“MPMC”) § 21.14.210(C)(8). The City Manager is authorized to promulgate administrative policies and procedures (“AP&P”) to implement this Resolution.

SECTION 2: Standard Development Standards. The standards set forth in attached Exhibit “A,” and incorporated by reference, constitute the Data Center Development Standards that represent public benefits required of any person executing a development agreement with the City.

SECTION 3: Contracting Authority. The City Manager is authorized to solicit bids, award contracts, and execute on-call contracts to ensure uniform application of the Data Center Development Standards.

SECTION 4: If any part of this Resolution or its application is deemed invalid by a court of competent jurisdiction, the City Council intends that such invalidity will not affect the effectiveness of the remaining provisions or applications and, to this end, the provisions of this Resolution are severable.

SECTION 5: Electronic Signatures. This Resolution may be executed with electronic signatures in accordance with Government Code §16.5. Such electronic signatures will be treated in all respects as having the same effect as an original signature.

SECTION 6: The Mayor, or presiding officer, is hereby authorized to affix his signature to this Resolution signifying its adoption by the City Council of the City of Monterey Park, and the City Clerk, or her duly appointed deputy, is directed to attest thereto.

SECTION 7: This Resolution will become effective immediately upon adoption.

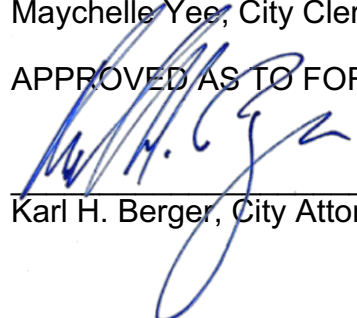
PASSED, APPROVED, AND ADOPTED BY THE CITY COUNCIL OF THE CITY OF MONTEREY PARK ON THIS __ DAY OF NOVEMBER 2024.

Thomas Wong, Mayor

Attest:

Maychelle Yee, City Clerk

APPROVED AS TO FORM:



Karl H. Berger, City Attorney

RESOLUTION NO. ____

EXHIBIT A

Design Guidelines
(Data Centers)

Data Centers must comply with the following to the Director's satisfaction:

1. Building Orientation: Prioritize public-facing elevations, screen less appealing elements, maximize daylighting.
2. Access: Provide pedestrian and bicycle access along primary frontages, limit vehicle access width to 20 feet.
3. Parking and Loading: Locate to the rear, separate from pedestrian/bicycle access.
4. Landscaping: Use native plants, create transitions between private/public spaces, buffer sensitive areas.
5. Lighting: Highlight features, prevent light spillage, use downward-directed lights with shields.
6. Security: Incorporate crime prevention and natural disaster protection measures.
7. Screening: Use architecturally compatible screening for mechanical/utility equipment.
8. Amenities: Include elements like outdoor seating, water features, vertical gardens, or artwork.
9. Signage: Keep unobtrusive but functional
10. Hierarchy: Identify primary, secondary, and ancillary structures.
11. Architecture: Balance proportions, avoid monolithic scale, promote human-scale elements.
12. Facades: Compose identifiable segments, design corner lots with two public-facing facades.
13. Roofs: Use identifiable, proportionate roof forms.
14. Materials: Incorporate at least 2-3 materials, select colors for depth and dimension.

15. Context: Ensure compatibility with surrounding neighborhood in scale and design.

16. Walls/Fences: Use compatible materials, break up long expanses, avoid chain link or barbed wire.

Sample Data Center Designs:

The following photographs provide examples of designs which integrate the intent of these Design Guidelines. These are merely sample designs and are not intended to be used as prototypes.









ATTACHMENT 4

Data Center Research

ATTACHMENT 4.a
County of Fairfax, Virginia – *Data Centers*
Report and Recommendations, dated
January 9, 2024



County of Fairfax, Virginia

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

January 9, 2024

DATA CENTERS Report and Recommendations

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INTRODUCTION

On May 9, 2023, the Board of Supervisors (Board) approved a Board Matter that recognized data centers as an evolving industry that merits further research and analysis.¹ The Board Matter directed staff to provide a report with research, findings, and recommendations on topics including environmental issues and mitigation; locational guidelines for siting facilities; how data centers should be permitted; and where any new guidelines should be located, including the Comprehensive Plan and the Zoning Ordinance.

Research has included a review of written materials, site visits, and meetings with stakeholders and the community. In addition, staff engaged Clarion Associates for background research; Clarion's report is provided as Attachment 3. Engagement with key stakeholders was critical for staff to understand the data center industry in Northern Virginia and to collect feedback from the

¹ Board's Board Matter: "Guidelines for Data Centers" <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/documents/pdf/5-9-2023-board-matter.pdf>



variety of interests. In addition to hosting a general community input session, over 20 meetings were held with various stakeholders, including representatives of the following:

- Dominion Energy
- Fairfax Water
- Virginia Department of Environmental Quality
- Fairfax County Environmental Quality Advisory Committee (EQAC)
- Fairfax County Tree Commission
- Nature Forward
- Sierra Club
- Faith Alliance for Climate Solutions
- Various data center consultants
- Noise consultant
- Amazon
- CoreSite
- Stack Infrastructure
- Data Center Coalition
- Fairfax County's Land Use Attorneys Work Group
- Northern Virginia Building Industry Association (NVBIA)
- Northern Virginia Commercial Real Estate Development Association (NAIOP)

A project webpage and email address for public comment were created. Presentations were also provided to the Board's Land Use Policy Committee on October 17, 2023, and the Planning Commission's Land Use Process Review Committee on October 26, 2023.²

This report is intended, in part, to address questions and feedback that have been shared by the community and industry. It is based on the work of an interagency staff team consisting of staff from the Planning, Zoning Administration, and Zoning Evaluation Divisions within the Department of Planning and Development, the Office of Environmental and Energy Coordination, the Northern Virginia Soil and Water Conservation District, the Operations and Building Divisions in Land Development Services, and the Stormwater Management and Wastewater Management Divisions in the Department of Public Works and Environmental Services.

RESEARCH TOPICS

Information is presented below according to seven topic areas: land use and site design; energy demand; water demand; water quality; air quality; noise; and building design. Each topic area includes a summary of current regulations and guidelines followed by a discussion of research and recommendations. These sections are followed by a summary of recommendations for the Board's consideration.

A data center is a facility that houses computer servers and their network connections. This report focuses on data centers as a principal land use, not those cases where an accessory server

² Project webpage with information about the community input session, and Board and Planning Commission committee meetings: <https://www.fairfaxcounty.gov/planning-development/data-centers>

room is located within another business facility or office. Data centers can be developed as stand-alone buildings or as part of a complex that may include other uses. The growth of digital data has expanded exponentially in recent years, resulting in a rapid increase in data center facilities that is anticipated to continue. This growth is needed to support the increased online population as well as business applications in all sectors, including finance, entertainment, healthcare, and education. Major factors contributing to data center growth in Northern Virginia include the long history of a robust fiber optic network in the area and reliable electric power.

Some of the benefits that data centers bring are job creation with good wages, few impacts to transportation systems or schools, and positive tax revenues. Individual businesses can benefit from the scale of cloud computing services where they share in the use of data center resources. Data centers are designed with optimal cooling and other systems to support computer servers and for 99.999% reliability. Data centers can provide better computer processing, storage, data security, and energy efficiency than if each individual business were to manage its own servers. However, data centers are industrial uses that may affect surrounding uses (through noise and visual impacts), or affect energy demand and associated greenhouse gas emissions, air quality, and water supplies.

1. Land Use and Site Design

Current Regulations and Guidelines

The Zoning Ordinance³ currently⁴ allows data centers in the zoning districts shown in Table 1 below.⁵ These districts are currently located across the County, with industrial districts primarily in the western portion of the County along Route 50 and Route 28, in the Herndon and Reston areas along the Dulles Toll Road, in the Merrifield/Mosaic areas between I-66 and Route 50, near the intersection of I-495 and I-395, and along I-95 in the southern portion of the County. Zoning districts can be viewed by using the Zoning District Analyzer or JADE.⁶ Additionally, the locations of existing, approved, and proposed data centers with surrounding zoning districts are identified in Attachment 1. As shown on these maps, existing data centers are located in the I-3, I-4, I-5, and PTC Districts, and pending data center applications are in the I-5 and PDC Districts.⁷

³ Zoning Ordinance: <https://online.encodeplus.com/regs/fairfaxcounty-va/index.aspx>

⁴ Before the new Zoning Ordinance (re-adoption effective May 10, 2023), starting in 2000, data centers were considered by interpretation to be telecommunication facilities which were allowed by right in all C and I districts, in all P districts when shown on an approved development plan, and with SE approval in all R districts. Par. 5 of Sect. 9-101 and Sect. 9-102.

⁵ Abbreviations used in the table: SF – square feet; GFA – gross floor area; FAR – floor area ratio.

⁶ Zoning District Analyzer:

<https://fairfaxcountygis.maps.arcgis.com/apps/webappviewer/index.html?id=e64b68aa834d46b0ad0e6cd4d831f843>
or JADE:

<https://www.fairfaxcounty.gov/GeoApps/Jade/Index.html?configBase=https://www.fairfaxcounty.gov/GeoApps/Geocortex/Essentials/REST/sites/Jade/viewers/Jade/virtualdirectory/Resources/Config/Default>

⁷ Pending (in-progress) data centers include those with site plan and building permit approval for at least one building.

Zoning District	By Right	Special Exception (SE)
C-3 (Office) C-4 (High Intensity Office)	Up to 40,000 SF of GFA; 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; 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) ⁸	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

Setbacks vary according to the zoning district. In the I-4, I-5, and I-6 Districts, the front setback must equal the building height (but be at least 40 feet) and there are no minimum side and rear setbacks. In addition to building setbacks, the Zoning Ordinance requires transitional screening and barriers on the lot of a more intense use when it is located next to a less intense use, as prescribed in Table 5108.2.⁹ Transitional screening yards are required to be 25, 35, or 50 feet wide and planted with trees and shrubs in accordance with Zoning Ordinance standards. Currently, a data center is required to provide a 35-foot transitional screening yard when located next to single-family detached or attached dwellings, or a 25-foot transitional screening yard when located next to certain other uses, such as multifamily dwellings, religious assemblies, and child care centers. Under the proposed Zoning Ordinance amendment for Landscaping and Screening, the transitional screening requirements would be the same for most industrial uses, including data centers, and would require 50 feet of screening (the maximum) next to all residential uses and 25 feet next to most public, institutional, and community uses and commercial uses.¹⁰

⁸ FAR is also subject to the provisions of the Route 28 Highway Transportation Improvement District, and the Dulles Phase I and Phase II Transportation Improvement Districts.

⁹ Transitional screening and barriers: <https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx#secid-3017>

¹⁰ Webpage for the proposed Landscaping and Screening Zoning Ordinance amendment: <https://www.fairfaxcounty.gov/planning-development/zoning-ordinance/landscaping-screening>

Appendix 12 of the Land Use Element of the Comprehensive Plan's Policy Plan includes guidelines for certain uses, including data centers, that propose higher intensities than what is shown on the Comprehensive Land Use Plan Map.¹¹ The guidance in this Appendix applies during the review of a rezoning or SE and provides an option for higher-intensity development in designated industrial areas, while ensuring proposals are compatible with surrounding uses and can be supported by existing infrastructure. The criteria used to review such proposals are organized into five topic areas: transportation, mitigation of noise and other impacts, building design, lot size and parcel consolidation, and site design. The use of this option for additional intensity is not meant to supersede any site-specific Plan guidance for intensity and applies only to areas with a baseline Plan recommendation for industrial use.

Research and Recommendations

As outlined above, data centers are currently allowed by right in certain zoning districts. However, as further discussed under the topic areas below, data centers have the potential for impacts to surrounding uses, environmental resources, and infrastructure, and the SE process may provide for a more site- and application-specific review of impacts and mitigations. As indicated in subsection 4102.1.F(1) of the Zoning Ordinance, the SE process is appropriate for certain uses which by their nature or design can have an undue impact upon or be incompatible with other uses of land. Requiring SE approval for data centers in the C-3, C-4, and I-2 through I-6 Districts would allow the Board to consider land use impacts and mitigations through a public process. In the Planned Districts—where the use is allowed if represented on the approved development plan—the current standards could remain because the current process provides for an in-depth, site-specific review. However, the Board could consider clarifying the requirement for a data center to be specifically shown on the development plan, including its location, size, height, and setbacks.

While data centers could continue to be allowed by right with additional standards or conditions, some of the recommendations included in this report—such as reviewing building design and noise studies and encouraging increased open space, tree planting, and stormwater treatment—may be more appropriately and effectively implemented through an SE review in accordance with SE standards in the Zoning Ordinance and guidelines in the Comprehensive Plan. Applications for rezoning are reviewed for conformance with the applicable guidelines in the Comprehensive Plan, and SEs must be found to be in harmony with the Plan. The SE review process also allows for consideration of flexibility through Board modification of standards where appropriate.

A new appendix to the Land Use Element of the Policy Plan could be created with updated performance criteria that would apply in the review of all data centers undergoing a rezoning or SE review, not just those seeking additional intensity. As shown on the maps in

¹¹ Land Use Appendix 12: <https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/policy/landuse.pdf#page=39>

Attachment 1, some industrial districts are close to residential districts. Revised guidelines in a new Policy Plan appendix and SE standards in the Zoning Ordinance could bolster existing guidelines and regulations. These could address land use compatibility with existing and planned uses for the property and surrounding properties, including the size of the proposed data center, and the distance of the proposed building and generators from surrounding development. Setbacks and buffering can serve to minimize visual, noise and other impacts; therefore, guidelines could encourage enhanced buffering for data centers near residential development, other noise-sensitive uses, and environmentally sensitive areas.

As industrial uses, data centers are currently allowed in industrial zoning districts, and Appendix 12 of the Policy Plan provides guidelines for additional intensity in areas that are planned for industrial use; however, additional investigation may be warranted for consideration of data centers in areas that are planned in the Comprehensive Plan for future residential or mixed use. Although this report is focused on the potential impacts of larger data centers, smaller data centers with upgraded equipment and design features may be appropriate in areas not planned for industrial use if they meet certain performance criteria.

Additionally, as discussed below, due to the energy demands of data centers, they are typically located near a substation that is connected to major transmission lines. To reduce the need for new transmission lines and substations, a new Plan appendix could include consideration of the distance from and availability of a substation and transmission lines to serve a proposed data center.

2. Energy Demand

Current Regulations and Guidelines

The Zoning Ordinance does not include regulations for energy use and efficiency. As noted above, data centers are typically located close to an electrical substation, which is considered a light utility facility under the Zoning Ordinance and is allowed by right in the I-3 through I-6 Districts; with SE approval in all other conventional zoning districts; and in planned districts if shown on the development plan or with SE approval. When a substation is located in a residential area, the Zoning Ordinance requires a finding that there is no alternative site in a commercial or industrial district. Substations are also subject to the 2232 review process for public facilities.¹² Data centers also need to be located close to electrical transmission lines which, if over 138kv and approved by the Virginia State Corporation Commission (SCC), are not subject to the Zoning Ordinance.¹³

¹² The public facility 2232 process is summarized at: <https://www.fairfaxcounty.gov/planning-development/public-facilities-review/process>

¹³ If the voltage exceeds 138kv, SCC approval satisfies the requirements of local zoning and Virginia Code Sect. 15.2-2232 for the transmission line. Virginia Code Sect. 56-46.1(F). The locality retains jurisdiction to enforce local zoning over “associated facilities.” For any transmission line of 138kv and associated facilities, a public utility must either obtain a certificate of public necessity from the SCC or obtain approval under 15.2-2232 and the local zoning ordinance where the transmission line will be located. Virginia Code Sect. 56-265.2(A)(2).

Starting on January 18, 2024, the newly approved 2021 Virginia Energy Conservation Code (VECC)¹⁴ will require data centers to comply with “ASHRAE 90.4 - Energy Standard for Data Centers,” which will include several changes to the design and construction of these facilities. Prior to the 2021 VECC, there were no specific enforceable requirements for energy conservation related to data centers. With the adoption of the 2021 VECC, a new data center will be treated like any other commercial building for the purpose of energy conservation. ASHRAE 90.4 is a performance-based standard and will encourage a more efficient design, presumably leading to less energy usage.

The Environment Element of the Comprehensive Plan encourages the design and construction of new buildings and associated landscapes to use energy and water resources efficiently and to minimize short- and long-term negative impacts on the environment and building occupants. The Comprehensive Plan also recommends that development within designated Industrial Areas incorporate green building practices sufficient to attain certification through LEED-NC, -CS or equivalent. Additional recommendations exist within the Comprehensive Plan guidance for certain Suburban Centers, Transit Station Areas (TSAs), and other development centers. The Environment Element does not contain existing guidance for the evaluation or consideration of energy demand.

Research and Recommendations

Data center operations rely on large amounts of electricity from the electrical grid. Although there is not a consistent correlation between square footage and energy demand (expressed in megawatts, MW), a data center of about 400,000 square feet would likely have a capacity of 48 to 60 MW. Also, with the advent of more powerful computer chips, future data centers may need even more energy. For comparison, the energy demand for 250 homes is approximately 1 MW, the Fairfax County Government Center uses about 2 MW, a typical hospital uses 3 to 4 MW, and the Noman Cole wastewater treatment facility uses 5 to 6 MW. As discussed below, the large energy demand of data centers poses several concerns: a) the availability and reliability of energy for existing and planned development; b) the potential need for clearing and construction of new major transmission lines and substations and related costs relayed to rate-payers; c) potential water quality and air quality impacts of large numbers of diesel backup generators (see Water Quality and Air Quality sections below); and d) increases in greenhouse gas (GHG) emissions.

Availability and reliability: Most of Fairfax is served by Dominion Energy, and a portion of the western part of the County is served by the Northern Virginia Electric Cooperative (NOVEC). Both Dominion and NOVEC purchase power from the Pennsylvania-New Jersey-Maryland Interconnection (PJM), the regional transmission organization. Concerns have

¹⁴ Land Development Services Technical Bulletin, No: 23-07:

https://www.fairfaxcounty.gov/landdevelopment/sites/landdevelopment/files/assets/documents/23-07-adoption-2021-virginia-uniform-statewide-building-code-usbc.pdf?utm_medium=email&utm_source=govdelivery

been raised by the public that the uniquely large energy demands of data centers could present a challenge in planning for reliable power to all customers. However, in meetings with staff, Dominion has indicated that data center growth does not pose a risk in terms of reliability to residential and other customers. Dominion has also stated that PJM has sufficient power available, and the risks of inadequate transmission capacity would be borne by the data center customer. While the planning for power infrastructure falls to PJM and the utility companies, with regulation by the SCC, land use approvals for data centers are the purview of the County. Therefore, staff recommends that the County pursue discussions with Dominion and NOVEC on enhancing coordination on data center applications through the review of energy capacity analyses. Communication about proposed data centers could facilitate planning for utility service and inform County land use decisions. Energy capacity analyses would allow an assessment of regional power supplies into the future and a common understanding of the power demands of data centers. The growth in data centers and their associated electricity load could be compared against the ability of the existing infrastructure to satisfy those forecast load demands to identify needed transmission infrastructure upgrades, and potential reliability issues, including the timeframe and duration of any electricity delivery shortages. The analyses could also state whether electricity constraints may impact other electricity customers.

Transmission lines and substations: Because of their energy demands, data centers need to be located near a substation that is near a major transmission line. If sufficient substation and transmission line infrastructure does not exist, the utility company will have to plan for and construct the necessary infrastructure to serve its customers. Construction of substations and transmission lines usually involves land clearing. Once constructed, the utilities can have visual and noise impacts and, depending on their location, impacts on natural resources and environmentally sensitive areas. Although utility infrastructure is usually separate from a data center project, and the infrastructure is part of the larger grid that supports other customers, the need for certain infrastructure can be directly attributed to data center development. Therefore, when a proposed data center is proposed, related needs for utility infrastructure and its impacts should be evaluated as part of the new coordination process suggested above. Dominion has indicated that the costs of infrastructure projects are absorbed across the system's customers, with some of the costs covered by PJM as well. Because of the need for proximity, some data center developers seek land near existing transmission lines or include enough land area to support a substation. A substation typically has a 300 MW capacity, so a data center campus may need to provide a new substation. Data center developers may coordinate with the utility company in various ways to facilitate the development of a new substation, if needed, including selling or donating land. As noted above, a new Plan appendix could include consideration of the distance from and availability of a substation and transmission lines to serve a proposed data center.

Greenhouse gas emissions: Increased electricity demand also increases GHG emissions, which may make it harder to meet the state and County GHG emission reduction goals:

- The [Virginia Clean Economy Act](#) (VCEA) establishes mandatory renewable portfolio standards for Dominion Energy to deliver electricity from 100% renewable sources by 2045 and Appalachian Power by 2050.
- Fairfax County's [Community-wide Energy and Climate Action Plan](#) (CECAP) sets a goal for the entire community to be carbon neutral by 2050. Based on the 2020 GHG inventory, 48% of emissions come from the use of energy in buildings (25% commercial plus 23% residential).

Approximately 25% of GHG emissions in Fairfax County comes from commercial buildings. Fairfax County community-wide GHG emissions have decreased by 30% between 2005 and 2020, despite a 12% growth in population.¹⁵ This decline in GHG emissions reflects a strong and consistent effort across multiple sectors, especially increased energy efficiency and conservation in residential and commercial buildings, cleaner vehicles travelling fewer miles, and a greener electric grid. Strategies to reduce energy use and related GHG emissions include improving energy efficiency and transitioning to clean, renewable energy.

Energy Efficiency: A review of best practices indicates that data centers can improve energy efficiency with current technology. Data centers typically measure their power utilization efficiency (PUE), which is the total facility power including cooling systems divided by IT equipment power. The PUE is a performance metric, with a PUE of 1.1 to 1.3 or less representing an efficient facility. To promote energy efficiency, a PUE standard or another performance metric could be included in the new appendix in the Policy Plan for data centers undergoing rezoning or SE review. The ability for staff to review this standard would need to be considered. Additionally, given the substantial energy demands of data centers, proposed data centers could be encouraged to achieve LEED-Data Center Silver certification or greater. Under Section C405.12 of the 2021 Virginia Energy Conservation Code, data centers will be required to monitor their energy consumption. The County could pursue partnerships with data center operators for the voluntary sharing of that information with the County, which could assist in measuring the achievement of CECAP goals.

Renewables: Regarding the use of clean, renewable energy sources, data centers rely on the power grid and are not able, at this time, to generate sufficient power onsite through solar or other renewable sources. As previously noted, a data center of about 400,000 square feet would likely have a capacity of 48 to 60 MW. With current solar panel technology, approximately 5 acres of solar panels would be needed to produce 1 MW of power. Therefore, a 48 MW data center would need at least 260 acres of solar panels to be self-sufficient. Nevertheless, data centers should be encouraged to install onsite solar and invest in offsite renewable energy. Some data center operators have sustainability goals. For example, Meta states that they have maintained net zero GHG in global operations since

¹⁵ [Community-Wide Greenhouse Gas Emissions Inventory Summaries](https://www.mwcog.org/documents/2022/12/27/community-wide-greenhouse-gas-emissions-inventory-summaries-featured-publications-greenhouse-gas/), MWCOC:
<https://www.mwcog.org/documents/2022/12/27/community-wide-greenhouse-gas-emissions-inventory-summaries-featured-publications-greenhouse-gas/>

2020, primarily by purchasing 100% renewable energy. Meta has an additional goal to reach net zero emissions across its value chain by 2030.¹⁶ Amazon states that it is the world's largest corporate purchaser of renewable energy and is on target to power its operations with 100% renewable energy by 2025 and to reach net-zero carbon emissions by 2040.¹⁷

3. Water Demand

Current Regulations and Guidelines

The Zoning Ordinance does not regulate water demand. The Environment Element of the Comprehensive Plan Policy Plan provides limited recommendations on water demand topics through the discussion of water conservation for buildings sufficient to attain certification through LEED-NC, -CS, or equivalent. A majority of water-related recommendations in the Comprehensive Plan Policy Plan are related to exterior stormwater management mitigation and best practices.

Research and Recommendations

The amount of water used by a data center depends on the type of cooling system used. There are reports of data centers in other jurisdictions that use large amounts of water. However, since water demand is highly variable according to the technology used onsite and the climate of the area, the analysis in this report relies primarily on water use data and recommendations provided by Fairfax Water, which are included in Attachment 2.

Fairfax Water reviewed water use by data centers located on Sunrise Valley Drive and found that they use an average of approximately 38,000 gallons per day (gpd) which equals about 90 to 100 gallons/1,000 square feet. This is higher than the planning values Fairfax Water uses for office uses (60 gallons/1,000 square feet), but lower than retail (140 gallons/1,000 square feet) or hotel (180 gallons/1,000 square feet). Fairfax Water also compared water usage information from the Prince William County Service Authority and Loudoun Water and found comparable average water usage by data centers. Fairfax Water has concluded that with its periodic planning process, it is well prepared to address overall water supply needs.

Typically, it has been reported that air cooling systems use more energy but less water, while evaporative cooling systems use more water and less energy. However, not all data centers with evaporative cooling systems use large amounts of water. Techniques that data centers may use to reduce water consumption include, but are not limited to, rainwater harvesting and closed-loop cooling systems. The direct evaporative cooling systems being employed by newer data centers do not require chillers or cooling towers and the water usage is reported as approximately ten percent of older evaporative cooling systems. For example, Amazon has indicated that its typical data centers (250,000 square feet) use an average of approximately three million gallons of water per year, which equals only 8,220 gpd. [While recent articles

¹⁶ Meta sustainability: <https://sustainability.fb.com/2023-sustainability-report/>

¹⁷ Amazon: <https://sustainability.aboutamazon.com/products-services/the-cloud?energyType=true>

regarding a proposed Amazon data center campus in central Virginia reported a projected use of approximately 21 million gallons per building per year based on 640,000 gpd, Amazon has indicated this report is a miscalculation because the 640,000 gpd is the peak day demand, with an estimated average number of ten peak days per year.] According to industry sources, a data center with direct evaporative cooling systems in Virginia only needs to use water during the hot summer months.

Some data center companies have goals to reduce their water demand. For example, both Meta and Amazon have a water positive goal to return more water to communities than they use in data center operations by 2030.¹⁸ One approach to reducing water usage is to use recycled or reclaimed water systems for non-potable water uses, such as industrial cooling. Loudoun Water operates such a system serving over 50 data centers. Fairfax has a reclaimed water system available in the Lorton area, but to date, no data centers are using that system.¹⁹

Based on this information, staff has not identified any potential Comprehensive Plan or Zoning Ordinance amendments related to water demand at this time. As Fairfax Water noted, it is possible that the declining per capita and per employee water use trends could change; therefore, staff recommends that monitoring of data centers and coordination with Fairfax Water continue, and the issue of water demand be revisited on a regular basis.

4. Water Quality

Current Regulations and Guidelines

Stormwater runoff: The County's Stormwater Management Ordinance ([Chapter 124 of the County Code](#)²⁰) is designed to mitigate stormwater runoff impacts from all impervious cover regardless of land use type. Runoff from a data center building is no different than runoff from any other building. Additionally, development that requires a site plan and occurs within the [Water Supply Protection Overlay District](#)²¹ must provide water quality control measures designed to reduce the projected phosphorus runoff pollution by one-half for the proposed use. Stormwater impacts can also be mitigated by other measures, such as preservation of open space, floodplain protection, and landscaping and screening as required

¹⁸ Meta: <https://datacenters.atmeta.com/wp-content/uploads/2023/10/Water-Stewardship.pdf>; Amazon: <https://www.aboutamazon.com/news/aws/aws-water-positive-by-2030>

¹⁹ Fairfax reclaimed water system: <https://www.fairfaxcounty.gov/publicworks/wastewater/water-reuse>

²⁰ Chapter 124:

https://library.municode.com/va/fairfax_county/codes/code_of_ordinances?nodeId=THCOCOFAVI1976_CH124STMAOR

²¹ WSPOD: <https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx?tocid=001.004.004.005#secid-2542>

under the Zoning Ordinance, as well as tree preservation as required under the Tree Conservation Ordinance ([Chapter 122 of the County Code](#)²²).

Additionally, to ensure that stormwater is appropriately managed (water quality and water quantity), the Comprehensive Plan promotes site design and low-impact development (LID) techniques that reduce stormwater runoff volumes and peak flows; increase groundwater recharge; and increase the preservation of undisturbed areas. Developments are expected to optimize stormwater management and water quality controls through the use of innovative infiltration techniques, nonstructural BMPs and bioengineering practices, and infiltration landscaping. The Environment Element of the Comprehensive Plan Policy Plan also identifies Environmental Quality Corridors (EQCs) as an integrated network of ecologically valuable land and surface waters that should be protected and enhanced for the present and future residents of Fairfax County. The policy categorizes characteristics of EQCs including habitat quality, connectivity, pollution reduction capabilities, hydrology, stream buffering, and stream protection; the policy recognizes that EQCs are delineated through the entitlement process based on policy criteria. The Plan also recommends protecting and restoring the ecological integrity of streams and protecting the Chesapeake Bay from the avoidable impacts of land use activities.²³

Diesel tanks for backup generators (spills): Federal, state, and County regulations address the fuel storage tanks for backup generators:

- Virginia Department of Environmental Quality (DEQ) requirements – [Aboveground Storage Tanks | Virginia DEQ](#)²⁴
- Fairfax County Fuel Storage Tank requirements – [Fuel Storage Tanks | Planning, Permitting and Construction \(fairfaxcounty.gov\)](#)²⁵

Research and Recommendations

Water quality impacts can include: a) cooling system discharges to the wastewater system; b) spills or leaks from diesel tanks; and/or c) stormwater runoff.

Cooling systems: According to data center industry sources, most newer interior cooling systems utilized by data centers, even those that use water, do not have cooling towers that discharge to wastewater or stormwater systems. However, for those that do have cooling

²² Chapter 122:

https://library.municode.com/va/fairfax_county/codes/code_of_ordinances?nodeId=THCOCOFAVI1976_CH122TRCOOR

²³ [Objective 2, 3 and 9: Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment:](#)

<https://www.fairfaxcounty.gov/planning-development/sites/planning-development/files/assets/compplan/policy/environment.pdf>

²⁴ VDEQ storage tank requirements: <https://www.deq.virginia.gov/our-programs/land-waste/petroleum-tanks/aboveground-storage-tanks>

²⁵ County storage tank requirements: [https://www.fairfaxcounty.gov/plan2build/fuel-storage-tanks#:~:text=Tank\(s\)%20capacity%20of%20500,and%20plan%20reviews%20may%20apply](https://www.fairfaxcounty.gov/plan2build/fuel-storage-tanks#:~:text=Tank(s)%20capacity%20of%20500,and%20plan%20reviews%20may%20apply)

towers, evaporative cooling concentrates salts in the water that must be periodically discharged to the wastewater system. Even if no other chemicals are added to the system, the discharge has concentrated sodium, a constituent of concern in drinking water. If the facility is in the sewer collection area of the Upper Occoquan Service Authority (UOSA), the treated wastewater discharges to the Bull Run River upstream of the Occoquan Reservoir, which is a potable water source. Although this is true of any commercial or industrial use that employs a cooling tower, the extensive cooling systems needed by data centers heighten the potential concern. Currently, the County prohibits the use of bromide as a treatment additive in cooling water systems that discharge to UOSA based on direction from UOSA.

As noted in the attached comments from Fairfax Water, their facility for treatment of raw water from the Occoquan Reservoir is not designed to remove salts or other emerging contaminants of concern. Although the federal Environmental Protection Agency (EPA) set a health advisory of 20 mg/L for sodium levels in potable water,²⁶ an advisory is not an enforceable federal standard and the UOSA pre-treatment requirements do not include a standard for sodium. Consideration could be given to establishing Comprehensive Plan guidance to encourage data centers to monitor their discharges and, if needed, provide for pre-treatment. Additionally, to reduce the potential for impacts to potable water, within the UOSA service area, the Plan could encourage the use of non-chemical/non-water-based cooling systems or systems that do not discharge to the wastewater or stormwater systems.

Diesel tanks for backup generators (spills): Typically, depending on the size of the generator, about 5,000 to 15,000 gallons of diesel fuel are stored in individual, above-ground, double-walled tanks below each generator to provide sufficient fuel for 24 to 72 hours. Existing state regulations include procedures to prevent pollution of state waters, lands, and storm drain systems from the discharge of fuel from aboveground storage tanks that are 25,000 gallons or more. Further analysis could be done to determine whether these existing regulations could be enhanced. Consideration could also be given to including SE standards in the Zoning Ordinance (or amending another chapter of the County Code) for tanks smaller than 25,000 gallons for proper surface grading, berms, or other additional containment practices to protect surface water and ground water by ensuring that if the tank were to fail or if a spill were to occur during filling, the fuel does not enter the stormwater system or open space areas.

Stormwater runoff: Regarding stormwater runoff, data centers are similar to other nonresidential uses with expansive impervious surfaces. With the provisions in place to address stormwater runoff as described above, in staff's opinion no additional recommendations are necessary for data centers. However, in general, water quality on industrial sites would benefit from site designs that include green roofs, increased open space and native tree and plant vegetation. Projects subject to rezoning or SE review should be

²⁶ EPA advisory on sodium: https://www.epa.gov/sites/default/files/2014-09/documents/support_cc1_sodium_dwreport.pdf

encouraged to exceed minimum requirements for open space, tree preservation and planting, and stormwater treatment.

5. Air Quality

Current Regulations and Guidelines

The Zoning Ordinance does not directly regulate air quality. Through the Comprehensive Plan, the County seeks to preserve and improve air quality and expects that state-of-the-art technologies will be applied to minimize emissions from stationary sources of air pollution.²⁷

For data centers, backup generators are the source of air pollutants that are a concern, and these emissions are regulated by DEQ. DEQ monitors criteria air pollutants across the state, in accordance with the Clean Air Act, a federal law that provides for the protection of human health and the environment. Data center projects require Minor New Source Review (NSR) permits from DEQ for their backup generators, which are powered by diesel fuel. Minor NSR permits in Northern Virginia receive stricter scrutiny due to non-attainment of air quality standards in the Washington, DC region. Over the past decades, the EPA has developed a tiered regulatory system that applies to backup generators (non-road diesel engines):²⁸

- Tier I – phased in from 1994 to 1997
- Tier II – phased in from 2000 to 2005
- Tier III – phased in from 2006 to 2008 for smaller engines with 50 to 750 hp
- Tier IV – phased in from 2008 to 2015 and requires a 90% reduction of certain emissions with reductions made possible through newer control technologies.

Research and Recommendations

Potential pollutants released into the air from generator use include nitrogen oxides (NO_x), particulate matter (PM₁₀ and PM_{2.5}), carbon monoxide (CO), volatile organic compounds (VOC), and sulfur dioxide (SO₂), all of which are regulated by DEQ. DEQ maintains 36 monitoring sites across the Commonwealth to measure air pollutants. One air quality monitoring station is located in Loudoun County and two are located in Fairfax County:

- Broad Run High School: Ashburn, Loudoun County, Virginia - Pollutants measured: O₃, NO₂, and PM_{2.5}
- Franconia District Park: Franconia, Fairfax County, Virginia - Pollutants measured: SO₂, O₃, PM_{2.5}, and PM₁₀
- 6831 Backlick Road: Springfield, Fairfax County, Virginia - Pollutants measured: CO, NO₂, and PM_{2.5}

²⁷ [Objective 1](#): Fairfax County Comprehensive Plan, 2017 Edition, Policy Plan, Environment, Amended through 6-28-2022, Pages 2-5

²⁸ EPA: <https://www.epa.gov/regulations-emissions-vehicles-and-engines/regulations-emissions-heavy-equipment-compression>

Due to the current and expected growth of the data center industry in Northern Virginia, additional monitoring may be beneficial in tracking air quality near large numbers of data centers.

Along with lower emissions, Tier IV generators provide increased fuel efficiencies, incorporate modern pollution-control technologies, require less maintenance, and reduce operating costs. These emission reductions are typically achieved by using advanced exhaust gas after-treatment technologies, with most Tier IV engine families using urea-selective catalyst reduction filters (SCR) for emissions control. The use of diesel generators for backup is the current industry standard. Until cleaner alternatives become more available, staff recommends that the Comprehensive Plan encourage the use of Tier IV generators and state-of-the-art technology to reduce GHG emissions.

Renewables: As energy providers are able to produce more power from renewable sources, air pollutants and GHG emissions from non-renewable sources will decrease over time. Dominion does not allow commercial consumers to choose the generating source for the power they consume, since all types of energy sources are placed into the entire grid; however, as noted above under Energy Demand, data center operators should be encouraged to invest in renewable energies to offset their carbon footprint. Through the Virginia Clean Economy Act, Dominion Energy Virginia and Appalachian Power are required to retire electric generating units located in the Commonwealth that emit carbon as a by-product of combusting fuel to generate electricity; the utilities are also required to construct, acquire, or enter into agreements to purchase generating capacity located in the Commonwealth using energy derived from sunlight or onshore wind.²⁹

6. Noise

Current Regulations and Guidelines

The Fairfax County Noise Ordinance (Chapter 108.1 of the County Code) regulates sound generation for all uses, including data centers. Among other standards, the Noise Ordinance limits the maximum sound levels that can be generated when the sound is measured at the property boundary or at any point within another property affected by the sound. The standards in the table below apply according to the use and zoning district of the property impacted by the noise (not the property generating the noise).³⁰

²⁹ [Virginia House of Delegates Bill 1526](#), adopted as the Virginia Clean Economy Act

³⁰ [Section 108.1-4-2](#) of the Noise Ordinance:

https://library.municode.com/va/fairfax_county/codes/code_of_ordinances?nodeId=THCOCOFAVI1976_CH108.1_NOOR

Maximum Sound Levels			
Use and Zoning District Classification	Time of Day	Continuous Sound (dBA)	Impulse Sound (dB)
Residential areas in residential districts	7 a.m. to 10 p.m.	60	100
Residential areas in residential districts	10 p.m. to 7 a.m.	55	80
Nonresidential areas in residential districts	All	60	100
Mixed use area	7 a.m. to 10 p.m.	65	100
Mixed use area	10 p.m. to 7 a.m.	60	80
Commercial districts	All	65	100
Industrial districts	7 a.m. to 10 p.m.	72	120
Industrial districts	10 p.m. to 7 a.m.	65	100

Table 2: Noise Ordinance Standards

Section 108.1-5-1(g) of the Noise Ordinance exempts the operation of backup generators during power outages from storms or other emergencies as well as the testing and maintenance of generators between 7 a.m. and 9 p.m. for up to two hours per day. Separately, DEQ does not allow for generator testing between 7 a.m. and 5 p.m. from May 1 to September 30 to minimize impacts on air quality from ozone. Therefore, during those months, generator testing would be limited to the evening hours from 5 p.m. to 9 p.m.

To reduce noise impacts, a use standard for data centers in the Zoning Ordinance requires all equipment for cooling and backup generators to be contained within an enclosed building, except in the I-4, I-5, and I-6 Districts.³¹

The Environment Element of the Comprehensive Plan Policy Plan currently provides guidance and recommendations only for transportation-related noise, such as motor vehicle and airport-related noise. There are no other policies for non-transportation-related noise uses.

Research and Recommendations

Noise from data centers, which can be significant if not mitigated, is primarily generated by two sources: the cooling systems and the backup generators. The potential impacts vary considerably according to the type of equipment, location (proximity to residential or other noise-sensitive uses), site design, and the mitigation measures employed. Related infrastructure such as electric substations may also generate noise.

³¹ [Subsection 4102.6.A\(1\)](https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx#secid-2854) of the Zoning Ordinance: <https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx#secid-2854>

Data centers require substantially more cooling as compared to other uses due to the heat produced from densely packed servers. To provide context, a data center server room might require 100 tons of cooling (per 10,000 square feet, using a median total heat number) as compared to a shopping mall which would require 40 tons, or an office which would need 29 tons. Cooling systems generate a continuous noise, and concerns have also been noted in articles about the low frequency of the noise generated by certain cooling equipment. Generally, the sound from lower frequencies propagates farther than that from higher frequencies and may be felt, even if it is not audible. As noted above, the use of diesel generators for backup is the current industry standard. To provide for backup in the case of power interruption, data centers have large numbers of generators as compared to other uses. For example, a hospital would typically have three to five backup generators, while a data center typically has over 20 generators.³² Although the generators are only for emergencies, each one needs to be tested and maintained, requiring a runtime of about five to 15 minutes per generator each month. It appears that in the past, the emergency use of backup generators in Fairfax and surrounding areas has been infrequent. One data center representative indicated that backup generators are typically used for emergency purposes a few hours each year while another stated that the generators are typically used for about 53 total hours per facility per year. Consideration could be given to amending the Noise Ordinance for uses such as data centers with large numbers of backup generators to remove the exemptions for testing and maintenance of generators, as well as the full emergency use of backup generators.

A review of noise studies submitted as part of rezoning or SE applications for data center projects in Fairfax County indicated that measures were consistently needed to reduce the potential noise to comply with the Noise Ordinance. A variety of measures were proposed in those cases, including upgraded equipment, sound-attenuating enclosures for generators, acoustical barriers and louvers, silencers on air handling equipment, attenuators on both the intake and exhaust for generators, and the location of the mechanical yard. Given the need for noise mitigation and the variety of options that may be tailored for each site and facility, consideration could be given to providing guidelines in the Comprehensive Plan for the review of noise studies for projects undergoing rezoning or SE review and for amending the Zoning Ordinance to include noise study submission requirements for zoning applications. Noise studies could be submitted as part of a rezoning or SE application and updated pre-construction (prior to building permit approval) and post-construction (prior to issuance of a Nonresidential Use Permit) to demonstrate compliance with the Noise Ordinance. The noise modeling could address the worst-case scenario, including all cooling equipment at full operational load, as well as the maximum number of generators that may be tested at one time. In addition, the noise modeling could address the emergency use of backup generators

³² The number of generators varies according to the energy demand of the data center. For example, one data center in Fairfax with approximately 400,000 square feet of gross floor area has 20 generators with a total capacity of about 45 MW. Another campus project with over 2 million square feet is planned to have over 100 generators with a total capacity of about 259 MW.

and include the frequency octave band limits. Comprehensive Plan guidance could be considered for noise studies to include particular attention to impacts on residential uses and sensitive habitats. Noise mitigation equipment could be considered to avoid noise impacts to both the human environment and the habitats of local fauna.

As previously noted, the Zoning Ordinance requires all equipment for cooling and backup generators for data centers to be contained within an enclosed building, except in the I-4, I-5, and I-6 Districts.³³ The exemption of these industrial districts recognized other industrial uses allowed in those districts. However, given the potential noise impacts from data centers because of their unique cooling requirements and use of generators, consideration could be given to requiring equipment enclosures for all data centers and other similar industrial uses.

As noted above, the maximum sound levels apply to all uses, whether that be the cooling system for an office building, the trucking associated with a freight distribution facility, or a contractor's storage yard. It has been suggested that lower sound levels should apply to data centers; however, staff does not have information that the dBA for a data center should be regulated differently from that for other uses. On the other hand, further research and consideration could be given to establishing standards for lower frequencies, perhaps measured as dBC.³⁴

7. Building Design

Current Regulations and Guidelines

The Zoning Ordinance does not currently have any regulations regarding the architectural design of data centers. Architectural design standards are included in the Ordinance for large retail sales establishments and goods distribution hubs when approved by SE, to minimize the impacts of building bulk through variations in roof lines and setbacks, landscaping, and enhanced architectural treatments such as windows. Standards are also included for self-storage facilities in certain zoning districts to require that storage bay doors or lighted hallways not be visible from the outside, and the building must be multistory and office-like in appearance. The I-4, I-5, and I-6 Districts limit the maximum building height to 75 feet and the FAR to 0.5, without SE approval. For projects undergoing rezoning or SE review, Appendix 12 of the Policy Plan specifies criteria for building design, including the need for high-quality design and materials that complement the architecture of surrounding uses. Loading areas should be screened, and visual impacts should be minimized by avoiding undifferentiated facades and providing variation in height, fenestration, materials, patterns, textures, colors, and accent materials.

³³ [Subsection 4102.6.A\(1\)](https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx#secid-2854) of the Zoning Ordinance: <https://online.encodeplus.com/regs/fairfaxcounty-va/doc-viewer.aspx#secid-2854>

³⁴ Generally, dBA is intended to match typical human hearing; dBC does not have the weighting applied for dBA and may be more appropriate for consideration of low frequencies.

Research and Recommendations

The development of large data centers raises concerns regarding building design and aesthetics because of their bulk and height. They are typically constructed of concrete with minimal fenestration. Larger data centers are often 75 feet in height or more. Also, data centers have related equipment, which, in addition to backup generators, may include water towers and electrical substations.

As identified in the attached report from Clarion Associates, certain other jurisdictions have or are in the process of adopting zoning standards for building design, including Prince William and Loudoun Counties, and Atlanta, Georgia. Similar to the Comprehensive Plan guidance, the standards are intended to provide for variation and interest in design, such as requiring façade changes for height, recesses, fenestration, building and accent materials, and a defined main entrance, as well as mechanical screening.

Given the potential impacts of the bulk of larger data centers, the current guidelines for building design in Appendix 12 of the Policy Plan could be reviewed and considered for all data centers undergoing rezoning or SE review to improve the view of the data center and related equipment from public roads and nearby residential uses. Additionally, submission requirements for rezoning or SE applications could be added to the Zoning Ordinance for architectural elevations (for consideration of the large massing and scale impacts), proposed materials and color palette, and provision of sight line studies with renderings or perspectives from surrounding roads and residential areas.

SUMMARY OF RECOMMENDATIONS FOR GUIDELINES AND STANDARDS

Below is a summary of the recommendations included in the text of this report. These recommendations are presented for Comprehensive Plan guidelines and Zoning Ordinance standards that could be established for data centers to be approved by SE in conventional zoning districts and rezoning/development plan approval in planned districts, where permitted. As previously noted, data centers could continue to be allowed by right; however, some of the recommendations, such as a review of noise studies and building design and encouraging increased open space, tree planting, and stormwater treatment, may be more effectively implemented through an SE review. The SE review process would ensure a robust County review with careful consideration of potential impacts and allow for public hearings to solicit community feedback.

1. Land Use and Site Design

Zoning Ordinance:

- Consider revising permissions to require SE approval for data centers, regardless of size, in the C-3, C-4, and I-2 through I-6 Districts. In addition to recommendations included below under other topic areas, standards for special exception review should include the

consideration of the size of a proposed data center and its distance (buildings and generators) from surrounding existing and planned residential development.

- Where data centers are allowed in the Planned Districts, add a standard to clarify that the use must be specifically identified on the approved development plan, including the location, size, height, and setbacks.

Comprehensive Plan:

- Create a new appendix to the Land Use Element of the Policy Plan for data centers with updated performance criteria. The new appendix should include guidelines that would be utilized in the review of all data centers through the rezoning or special exception process, not just those seeking additional intensity in industrial areas. The guidelines could include consideration of compatibility with future planned uses for the property and surrounding properties.
- Consider recommendations for enhanced buffering for data centers located near residential, noise sensitive uses, and environmentally sensitive areas.
- Consider guidelines for distances from existing or planned substations or transmission lines that can service the data center.

2. Energy Demand

Zoning Ordinance:

- Add zoning application submission requirements for rezoning and SE applications for assessments of future energy needs that will be used in staff's review in accordance with Comprehensive Plan guidelines.

Comprehensive Plan:

- Consider adding an energy performance standard like PUE to promote energy efficiency data centers undergoing rezoning or SE review.
- Encourage LEED-Data Center Silver certification or greater for data centers undergoing rezoning or SE review.
- Encourage data centers to install onsite solar and invest in offsite renewable energy to offset their energy demand and carbon footprint for data centers undergoing rezoning or SE review.

Other Recommendations:

- Establish a new process for coordination with Dominion and NOVEC about proposed data centers during the review of zoning applications, which may include assessments of future energy needs as it relates to existing and planned power infrastructure.
- Pursue partnerships with data center operators for the voluntary sharing of facility energy consumption to assist the County in measuring the achievement of CECAP goals.

3. Water Quality

Zoning Ordinance:

- Consider adding SE standards in the Zoning Ordinance (or amending another chapter of the County Code) for fuel tanks smaller than 25,000 gallons for proper surface grading, berms, or other additional containment practices to protect surface water and ground water by ensuring that if the tank were to fail or if a spill were to occur during filling, the fuel does not enter the stormwater system or open space areas.

Comprehensive Plan:

- Encourage data centers to address potential water quality concerns through the monitoring of cooling system discharge into the wastewater system and, if needed, providing pre-treatment.
- To avoid potential impacts on potable water, within the UOSA service area, encourage the use of cooling systems that do not discharge to the wastewater or stormwater systems, or non-chemical and non-water-based cooling systems.
- Encourage projects subject to rezoning or SE review to exceed minimum requirements for open space and tree preservation and planting.

4. Air Quality

Comprehensive Plan:

- Encourage data centers undergoing rezoning or SE review to minimize air quality impacts through a variety of approaches:
 - Apply state of the art technology to minimize air pollution from backup generators.
 - Encourage the use of Tier IV backup generators, and replacement of existing Tier II generators with Tier IV generators.

Other Recommendations:

- Request DEQ to install additional air quality monitoring stations in Fairfax County.

5. Noise

Zoning Ordinance:

- Consider adding zoning application submission requirements for data centers undergoing rezoning or SE review to quantify the increase in noise on adjacent uses, support review in accordance with Comprehensive Plan guidelines, and demonstrate compliance with the Noise Ordinance.
- Consider expanding the current Zoning Ordinance equipment enclosure requirement to apply in all zoning districts where data centers and other similar industrial uses are allowed.

Noise Ordinance:

- Consider amending the Noise Ordinance to remove exemptions for uses with large numbers of backup generators and require the testing and maintenance as well as the full emergency use of backup generators to comply with the Noise Ordinance standards.

Comprehensive Plan:

- Noise studies for projects undergoing rezoning or SE review could include an evaluation of impacts on residential uses and sensitive habitats. Noise mitigation equipment should be considered to avoid noise impacts to both the human environment and the habitats of local fauna.
- Consider amending the Plan to recommend that data center proposals evaluate and mitigate potential noise impacts:
 - Noise studies could be submitted as part of a rezoning or SE application, for pre-construction (prior to building permit approval) and post-construction (prior to issuance of a Nonresidential Use Permit) to quantify the increase in noise on adjacent uses and demonstrate compliance with the Noise Ordinance.
 - Noise modeling could address the worst-case scenario, including all cooling equipment at full operational load, as well as the maximum number of generators that may be tested at one time.
 - Noise modeling could also address the backup use of backup generators.
 - Noise modeling could include the frequency octave band limits.

Other Recommendations:

- Conduct additional research on establishing standards for lower frequencies in the Noise Ordinance.

6. Building Design

Zoning Ordinance:

- Consider adding submission requirements for rezoning and SE applications to include:
 - Architectural elevations (to address the large massing and scale of data centers)
 - Materials and color palette
 - Sight line studies, including renderings or perspectives from the right-of-way and nearby residential uses.

Comprehensive Plan:

- Review the current guidelines for Building Design in Appendix 12 and consider applying them to projects undergoing rezoning or SE review, including consideration of façade variation, a defined entrance feature, screening of equipment, and other techniques to improve the view of the building from public roads and nearby residential uses.

NEXT STEPS

Data centers are important facilities to support the modern, digital world – particularly in the Northern Virginia region where data center infrastructure is significant. Given their unique characteristics, careful consideration of their location, design, and impacts (including potential mitigation measures) is needed to ensure that data centers are compatible with the surrounding community. This report presents research and related recommendations for possible amendments to the Comprehensive Plan, Zoning Ordinance, Noise Ordinance, and potentially other chapters of the County Code. While staff will use these considerations in the review of any data center entitlement applications in the context of our current guidelines and regulations, staff recommends that the Board direct staff to begin work on amendments to the Comprehensive Plan, Zoning Ordinance, and other chapters of the County Code to facilitate implementation of the recommendations as outlined above and any others the Board might recommend.

Additionally, staff would support future direction from the Board on a closer evaluation of legislative authority for related topics in which the County currently lacks sufficient regulatory authority. Examples of this could include addressing energy efficiency (e.g., PUE), salinity in water discharges, and air quality.

The County's One Fairfax policy would provide the framework to consider equity in the development of any future amendments to the Comprehensive Plan, the Zoning Ordinance, or other chapters of the County Code. This could include enhanced outreach to ensure diverse perspectives are heard and respected. An equity impact analysis could include consideration of the location of vulnerable areas within the County and their relationship to potential data center locations.

If requested, staff is available to present these recommendations at an upcoming Land Use Policy Committee meeting. Questions and comments can be directed to Carmen Bishop at 703-324-1314, and Katie Hermann at 703-324-1280, or by email to ffx-data-centers@PublicInput.com.

ATTACHMENTS

1. Data Center Maps
2. Fairfax Water Comments
3. [Clarion Report](#)

Attachment 1: Data Center Maps

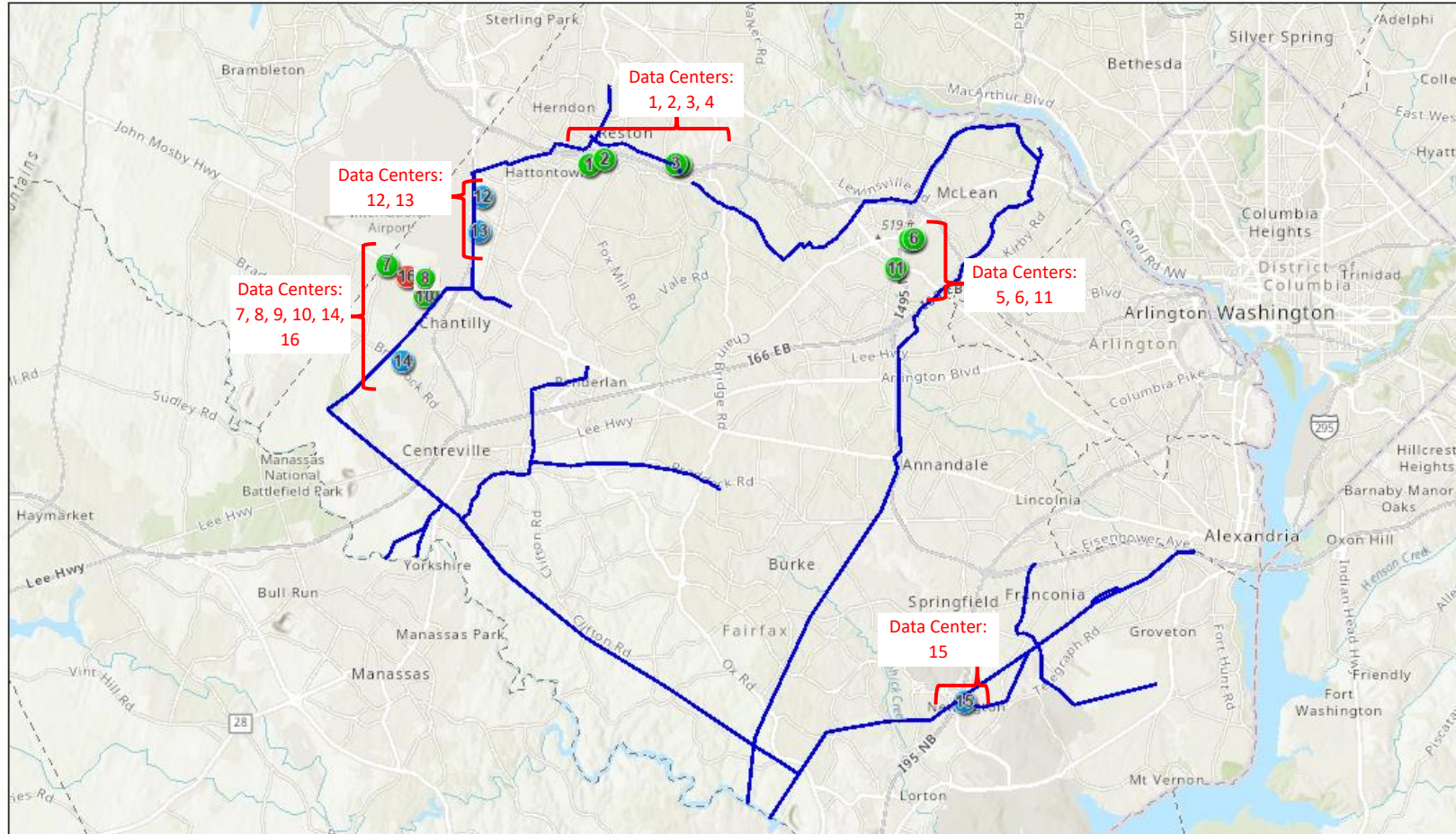
Fairfax Data Centers

	Name	Address	Tax Map	Zoning District	Square Feet of Gross Floor Area	Zoning Case or By Right
Existing						
1 ¹	Coresite VA3	12379A Sunrise Valley	17-3 ((1)) 32A	I-5	332,957 (existing) 943,600 (total approved by SE)	RZ 2017-HM-032 & SE 2017-HM-030; Rezoning & increase in FAR
2	Coresite 12100 SV & 12098 SV	12098 Sunrise Valley	17-3 ((8))(3A) 1A	I-4	423,341 (existing)	SE 2011-HM-019 for increase in FAR
3	Faraday Building	1807 Michael Faraday	18-3 ((5)) 10	I-5	30,609 (existing)	By right
4	Digital Realty/Lemur Properties	1780 Business Center	18-3 ((8)) 9A	I-3/I-4	264,888 (existing)	By right
5	Elias DC Assets	1764A Old Meadow	29-4 ((6)) 97F	PTC	69,089 (existing)	Pre-existing use before rezoning to PTC under RZ -2014-PR-021
6	Roosevelt Building	1755 Old Meadow	29-4 ((6)) 105	PTC	72,546 (existing)	Pre-existing use before rezoning to PTC under RZ -2014-PR-021
7	Lafayette Business Data Center	4030 Lafayette Center	33-2 ((1)) 10D	I-4	145,409 (existing)	By right
8	AWS Virginia Mallory	3980 Virginia Mallory / 14501 Avion	34-1 ((3)) 13	I-5	542,942 (existing) 768,392 (approved by site plan)	By right
9	AWS Westfax B	4100 Westfax	34-3 ((9)) 3A	I-5	95,000 (existing)	By right
10	AWS Westfax A	4101 Westfax	34-3 ((9)) 4	I-5	95,000 (existing)	By right
11	Equinix	7990 Quantum	39-2 ((1)) 13D	I-3	202,500 (existing)	By right
In Progress²						
12	Renaissance Technology Park	13860 Redskin	24-2 ((14)) 1 - 6	I-5	2,136,040 (approved by SE) 2,130,000 (approved by site plan)	SE-2021-SU-00017 for increase in height
13	Perspecta Datacenter Campus/AWS	13600 EDS	24-4 ((1)) 6B7, 6B8	I-5	1,046,632 (approved by site plan)	By right

¹ Numbers correspond to maps

² In progress includes projects where any necessary zoning entitlement has been approved, or for by right projects, a site plan has been approved, but a certificate of occupancy has not been issued.

	Name	Address	Tax Map	Zoning District	Square Feet of Gross Floor Area	Zoning Case or By Right
14	Parkstone Tech Park	5140 Parkstone	43-4 ((6)) 37B	PDC	500,000 (approved by RZ) 419,410 (approved by site plan)	RZ-2021-SU-003
15	AWS Loisdale Station	7951 and 7961 Loisdale	99-2 ((1)) 8A	I-5	240,000 (approved by RZ/SE) 235,422 (approved by site plan)	RZ-2021-LE-015 & SE-2021-LE-010; Rezone & increase in height
	Proposed					
16	Chantilly Premier	None	33-2 ((1)) 6 pt	I-5 (proposed)	402,000 (proposed)	RZ-2022-SU-00019 & SE-2022-SU-00038; Rezone & increase in height



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Data Centers



Existing (11)

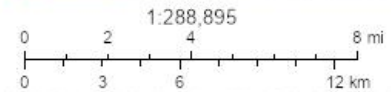


In Progress (4)



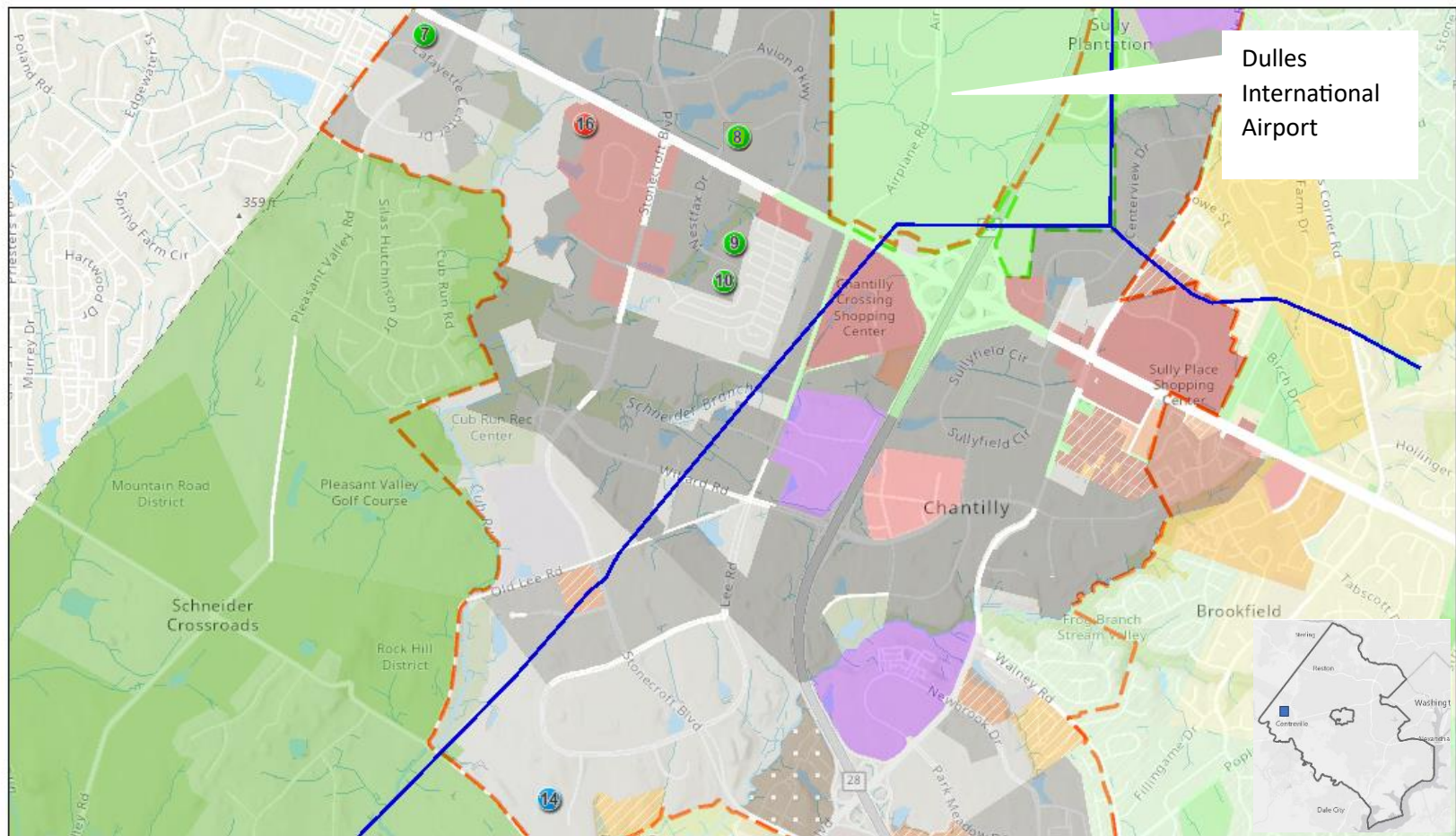
Proposed (1)

Electric Lines

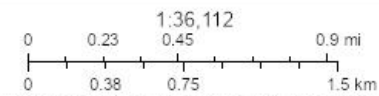
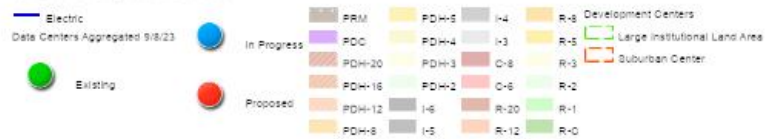


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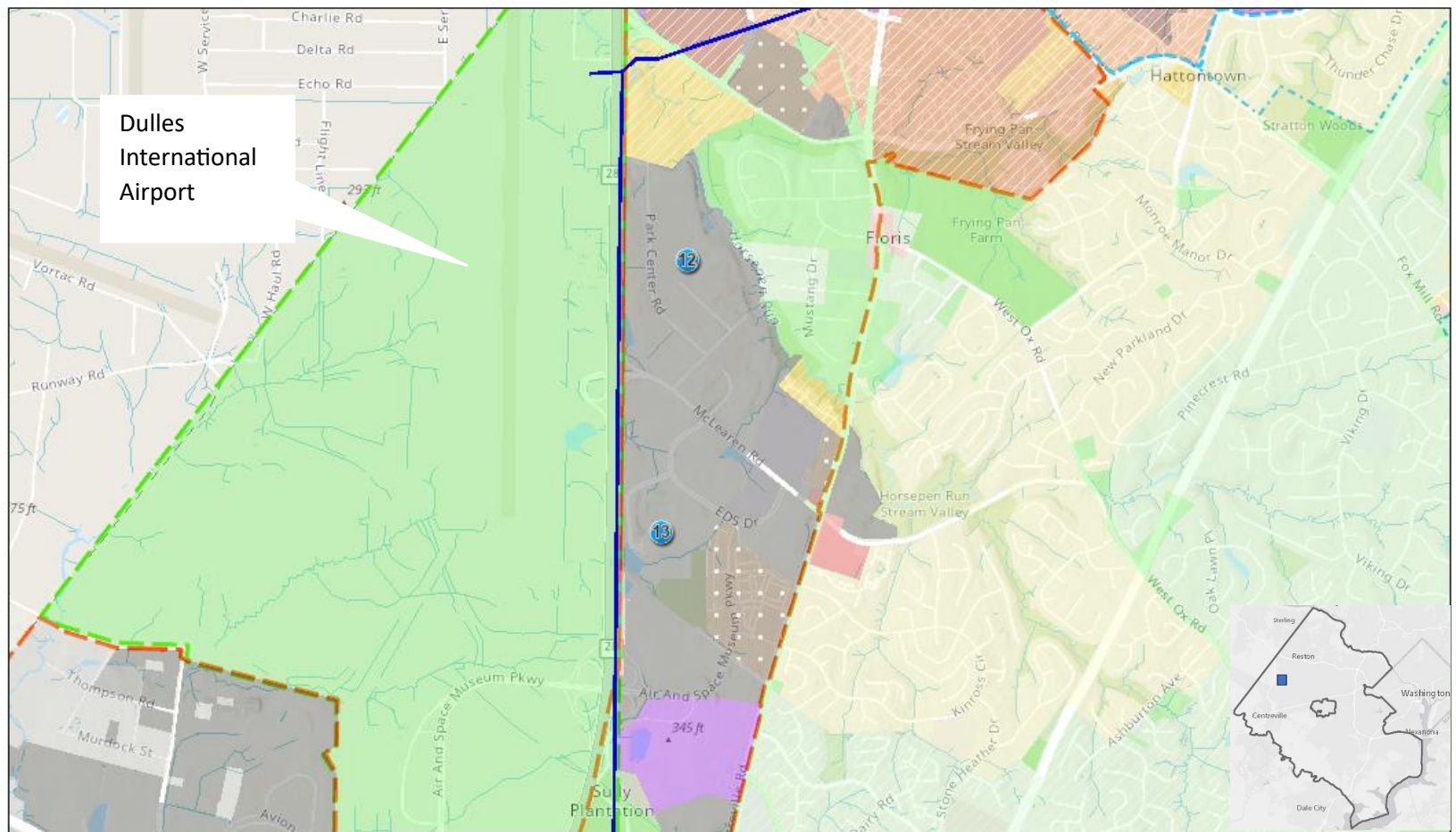


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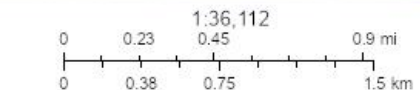
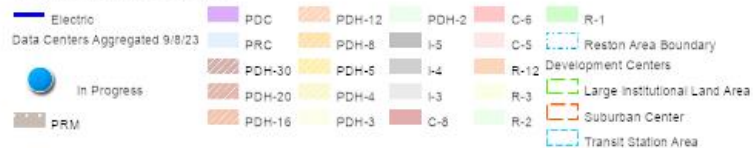


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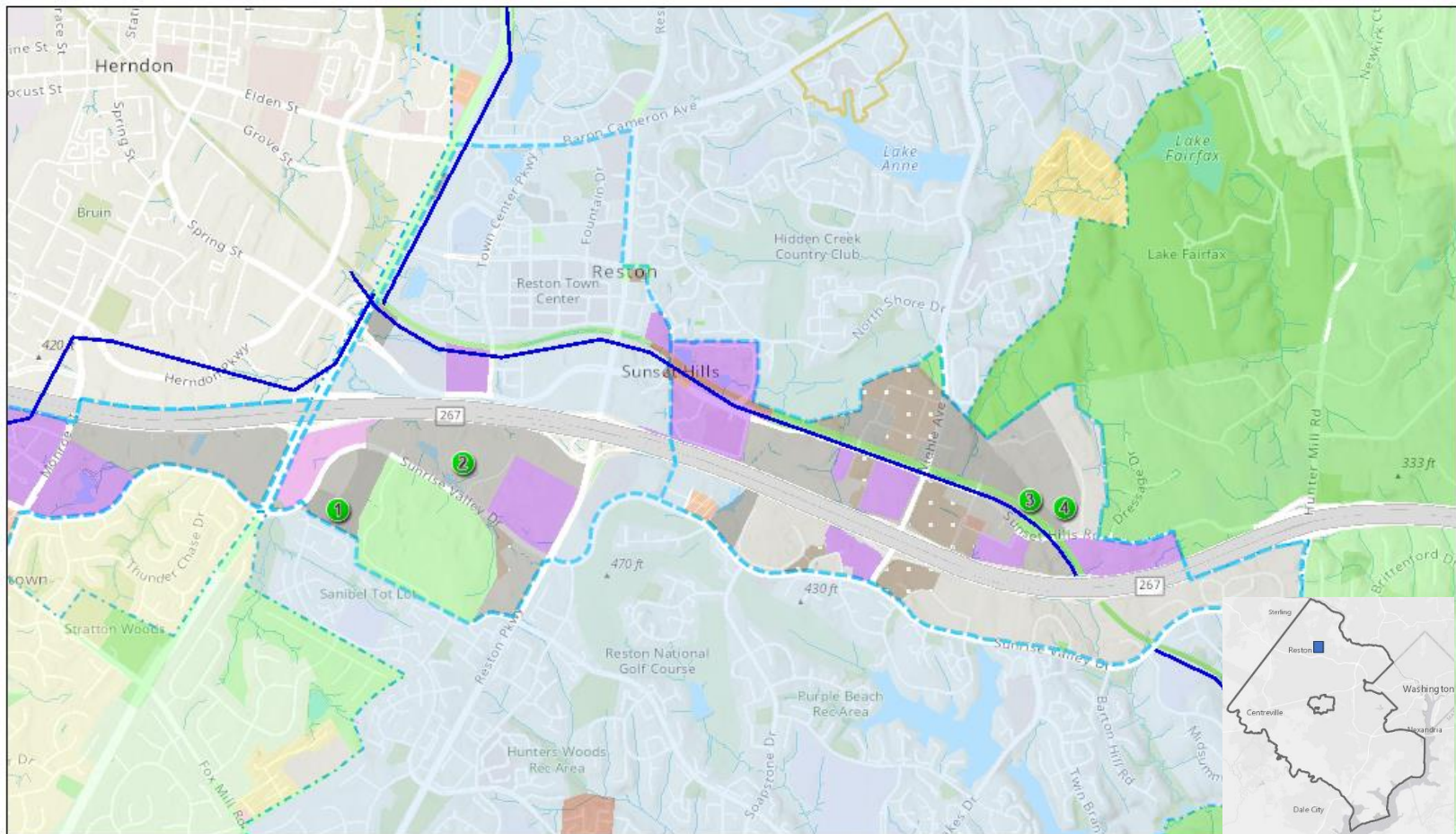


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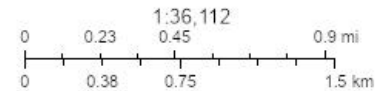
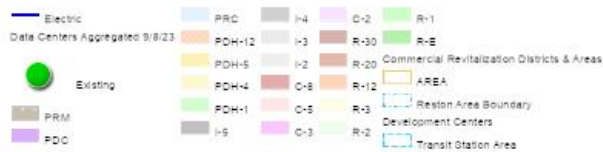


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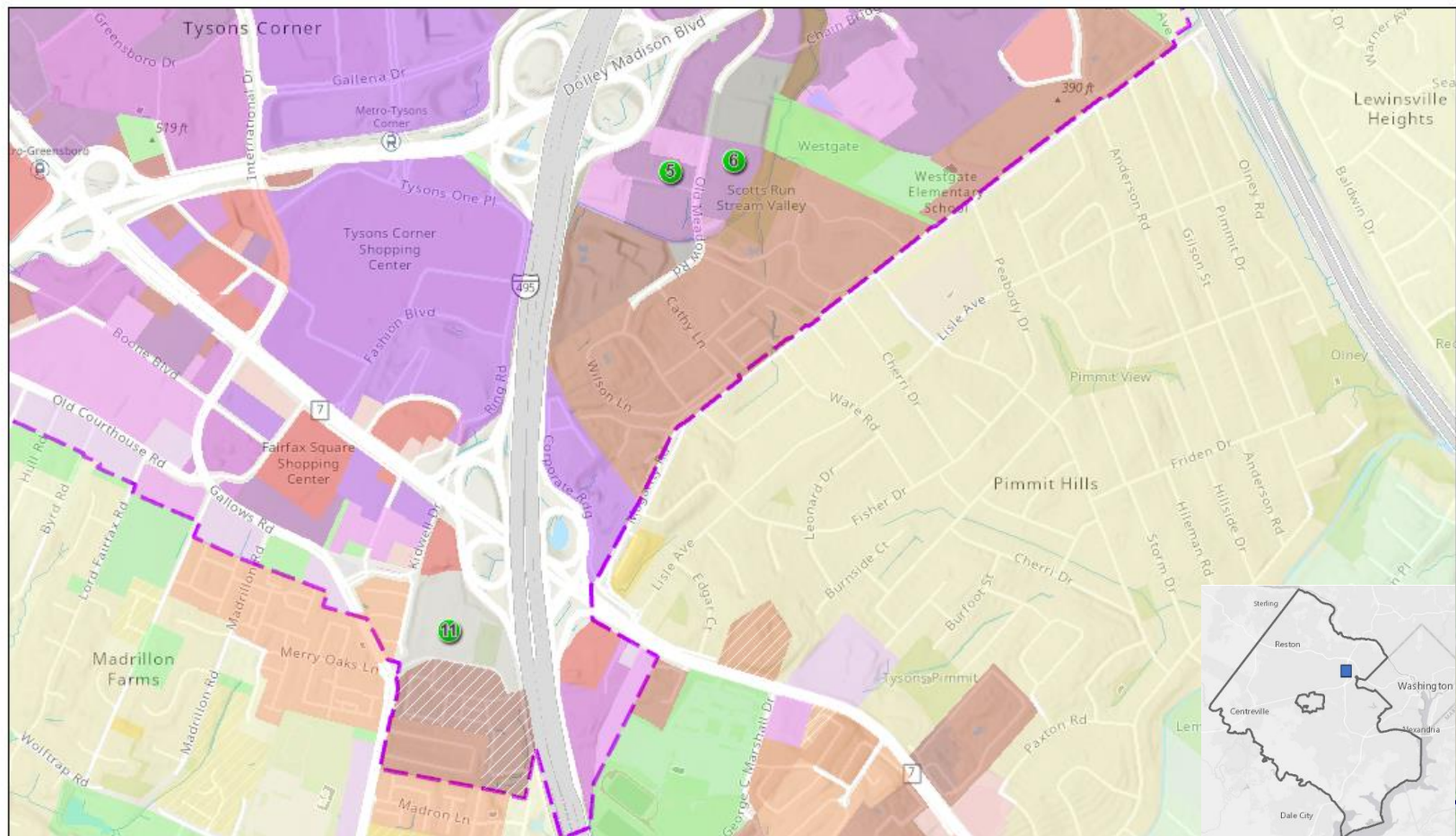


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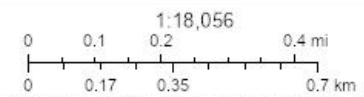
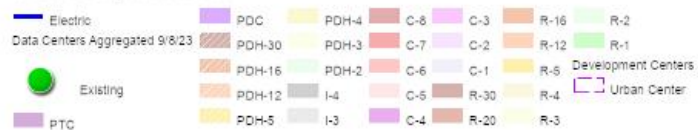


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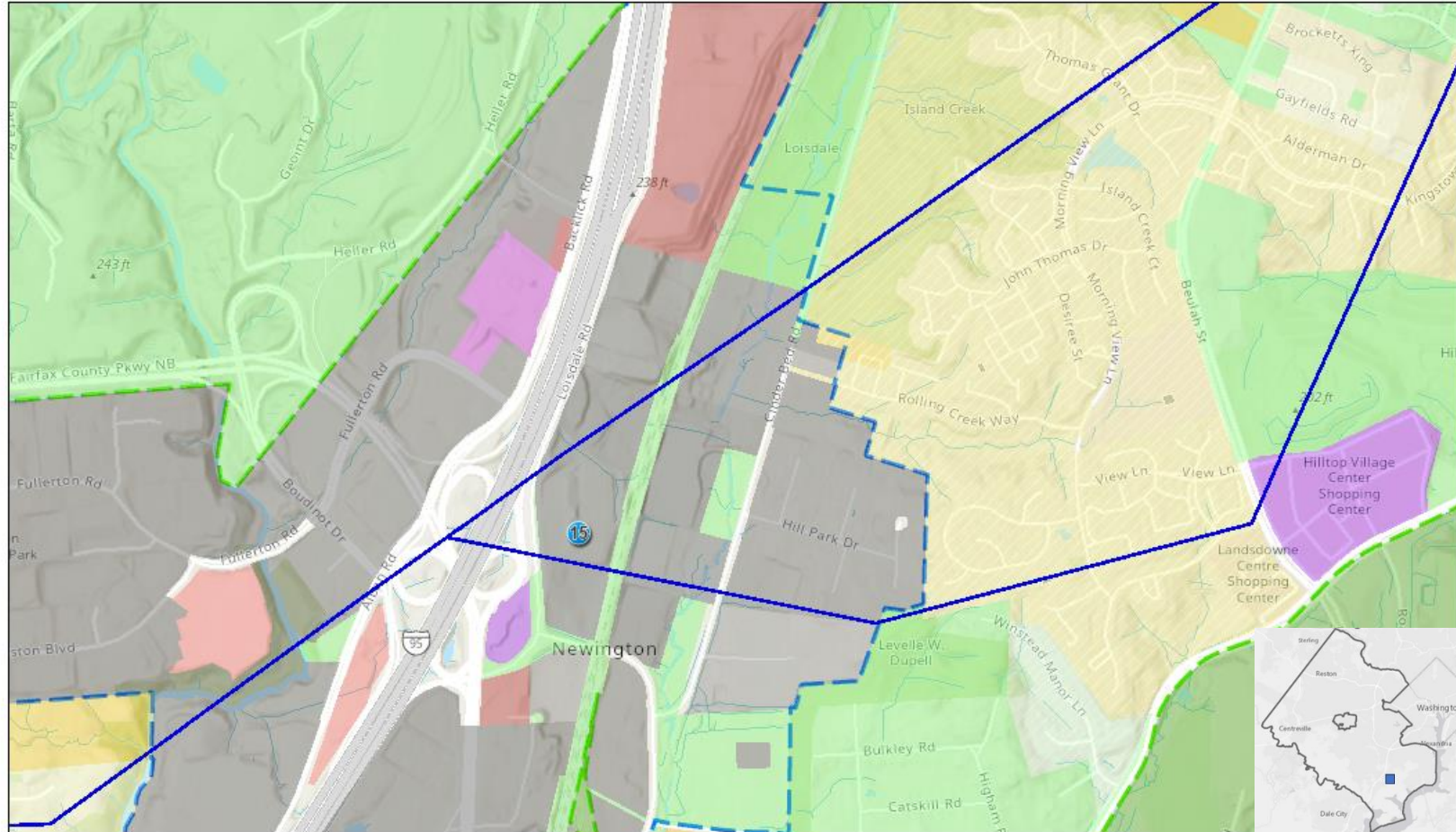


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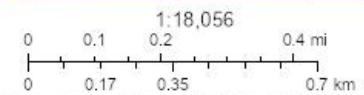
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- Electric
- Data Centers Aggregated 9/8/23
- In Progress
- PDC
- PDH-5
- PDH-4
- PDH-3
- PDH-2
- I-5
- I-4
- C-8
- C-6
- C-4
- R-8
- R-5
- R-4
- R-3
- R-2
- R-1
- R-C
- Development Centers
- Industrial Area
- Large Institutional Land Area

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8560 Arlington Boulevard, Fairfax, Virginia 22031

PLANNING & ENGINEERING DIVISION
Nat Atapoor, P.E., CCM
Director
(703) 289-6325

November 6, 2023

Ms. Carmen Bishop
Deputy Zoning Administrator
Ordinance Administration Section
Zoning Administration Division
12055 Government Center Parkway, Suite 807
Fairfax, VA 22035

Re: Fairfax Water Responses to Fairfax
County Staff Questions Regarding
Data Centers

Dear Ms. Bishop:

Please find the following summarizing water system impacts to assist in your response to the Board of Supervisors directive to evaluate guidelines for new data centers.

Question 1: *Do we have sufficient water and infrastructure to accommodate data centers and other projected growth?*

Response: Fairfax Water uses land use and demographic information furnished by local governments to evaluate projected water demands on the water system and plan sufficient water infrastructure system to meet the community's need. Future demands are calculated based on projected regional population and employment growth projections provided by the Metropolitan Washington Council of Governments. Projections are developed and used to evaluate the water system to meet demands, currently assessed through the year 2045. As a result of this periodic planning process, Fairfax Water remains well-prepared to address any water infrastructure needs that may be needed.

Employee water unit use in Fairfax Water's retail service area continues to decline, a long-term trend that has occurred over the past few decades and continues today. This trend is consistent with national water use trends that have documented declining per capita and per employee water use. Please note that data center water use depends on many site-specific factors, including but not limited to the type of cooling used (air/water) and facility specifics (size, equipment, cooling technology, and other factors). Given the uncertainty in site-specific factors, it's possible that a large increase in the number of data centers could, over the long term, change or reverse Fairfax Water's employee unit water use trend.

A more in-depth evaluation of this would require an assessment of data center re-development potential, data center development market viability, and land-use entitlement potential for land units under consideration for data centers. Given a comprehensive inventory of land units that could be converted to data centers in Fairfax County, a comparison of water use with Fairfax Water's projected population and employment forecasts could be estimated. Such an analysis could be useful to assess the maximum potential water demand that may be required to serve new data centers in Fairfax Water's retail service area.

Question 2: *How does the water consumption from data centers compare to other nonresidential users?*

Response: It can be difficult to directly compare data center water use with other non-residential uses. As mentioned, water consumption of data centers depends on many site-specific factors, including but not limited to the type of cooling used (air/water) and facility specifics (size, equipment, cooling technology, etc.). At the request of Fairfax County DPD staff, Fairfax Water recently reviewed data center water use for a few large data center facilities (both in the 12000 block of Sunrise Valley Drive) located in our retail service area with sufficient operating history to assess their water use. Our review determined that during calendar year 2022, data center water use for each facility was approximately 38,000 gallons per day. Based on the gross floor area of these facilities, water use averaged between 90 and 100 gallons per 1,000 square feet of area. By comparison, planning values used by Fairfax Water for other types of commercial use include:

- Retail: 140 gallons per 1,000 sq ft
- Office: 60 gallons per 1,000 sq ft
- Hotel: 180 gallons per 1,000 sq ft

Therefore, based on square footage basis, water use of data centers appears to be more than office use but less than retail and hotel use.

Question 3: *Using known water usage rates by existing and proposed data centers in the County and in other nearby jurisdictions, could Fairfax Water provide a value for typical water usage, perhaps correlated to the gross floor area of these existing data centers?*

Response: Recognizing that water consumption of data centers depends on many site-specific factors, data center water use in our region for existing operational data centers can serve as a reference point.

Consider the following:

- The Prince William County Service Authority provided information to the Prince William County Planning Department summarizing water use for 25 operating data centers in Prince William County (as of late 2021). This records review found the

average daily water consumption of a single data center building was about 18,000 gallons per day, while the maximum day consumption of a single data center building is about 88,000 gallons per day. Reference: <https://www.pwcva.gov/assets/2021-10/DCOZOD%20%20Economic%20Development%20memo.pdf>

- Loudoun Water operates a reclaimed water system serving over 50 data centers in Loudoun County. The water use of the reclaimed water system by these data center customers averaged 1.9 MGD in 2022, or about 37,000 gallons per day per data center. Reference: <https://www.loudounwater.org/commercial-customers/reclaimed-water-program>

Recognizing that many site-specific factors need to be considered, the water use review conducted by Fairfax Water (mentioned in the response to Question #2) confirmed the general water use ranges for data centers in Northern Virginia identified by our neighboring systems. Average water use on a unit basis is estimated in the response to question #3.

Question 4: *Do you anticipate any changes to water demand forecasts based on a potential increase in data centers in Fairfax?*

Response: Consistent with our long-range planning process, Fairfax Water's water demand forecasts will be adjusted over time to reflect changes in population and employee unit water use. Site-specific factors including the equipment specifics, type of cooling and other site-specific factors that impact water use vary among different facilities. Fairfax Water's long-term decline in per employee water use has continued despite dozens of existing data centers in Fairfax Water's retail service area. Currently, there is no evidence that our water demand forecast requires a change to our traditional forecasting methodology.

Question 5: *How do data centers impact the water quality of the Occoquan?*

Response: Fairfax Water is concerned with chemical use in the Occoquan watershed, particularly from commercial and industrial sources. These chemicals are discharged into the sanitary sewer system and readily pass through the municipal wastewater and water treatment process. Chemical use associated with data centers can include sodium and bromide-based chemicals (salts) designed to provide and protect water quality in the recirculating cooling water systems. A portion of the water used in these systems needs to be "blowdown" or discharged into the sanitary sewer system. Since the municipal wastewater treatment process at the Upper Occoquan Service Authority (UOSA) is not designed to remove these chemicals, they can pass through without substantial reduction and increase pollutant load into the Occoquan Reservoir, one of the two water supply sources of drinking water for Fairfax Water. Fairfax Water's water treatment plant is not designed to remove salts (and other emerging compounds such as per-and polyfluoroalkyl substances or PFAS) through the water treatment process.

Ms. Carmen Bishop
November 6, 2023
Questions Regarding Data Centers

Question 6: *Overall, what concerns do data centers raise for Fairfax Water and does Fairfax Water have suggested approaches to addressing those concerns?*

Response: Fairfax Water suggests that data centers within the Occoquan watershed (such as Fairfax County's sewershed treated at the UOSA plant) use non-chemical/non-water based cooling or have industrial pre-treatment permit requirements to eliminate chemical discharge to the sanitary sewer system upstream of the Occoquan Reservoir. As noted above, Fairfax Water has concerns with certain chemical uses associated with data centers that can be transmitted to the UOSA sanitary sewershed and pass through the wastewater treatment process without reduction or removal. To address potential non-point source pollutant impacts on the Occoquan Reservoir, Fairfax Water suggests: the use of stormwater management practices consistent with County and Water Supply Overlay District (WSPOD) requirements that go above and beyond Virginia Stormwater Management requirements, and the use of environmental, stream resource and tree protection management practices to reduce the impacts of runoff on the Occoquan Reservoir.

Should you have any further questions or require additional information, please do not hesitate to contact me at (703) 289-6318.

Sincerely,

A handwritten signature in blue ink, appearing to read 'Gregory J. Prelewicz', with a long horizontal flourish extending to the right.

Gregory J. Prelewicz, P.E.
Manager, Planning

ATTACHMENT 4.b

Article – *As Data Centers Zap Power, Some
Pols Ponder The Unthinkable: Pulling The
Plug*, dated October 9, 2024

As Data Centers Zap Power, Some Pols Ponder The Unthinkable: Pulling The Plug

October 9, 2024 | By Dan Rabb and Maddy McCarty

It isn't every day that Texas legislators liken an industry to pigs at the trough or accuse it of "crashing our grid and turning the lights off."

But it is happening in the famously business-friendly Lone Star State as lawmakers turn increasingly hostile toward a real estate asset class playing an outsized role in nearly doubling (<https://apnews.com/us-news/texas-state-government-texas-general-news-d8f648128b1661doc86865eab788b4e5>) statewide demand on its mostly self-contained power grid (<https://www.bisnow.com/tags/power-grid>) over the next six years.



Data centers (<https://www.bisnow.com/tags/data-centers>), which house thousands of servers providing the computing power for major corporations, are a booming industry in Texas. Much of the growth is fueled by demand from the world's largest tech companies — Amazon (<https://www.bisnow.com/tags/amazon>), Microsoft (<https://www.bisnow.com/tags/microsoft>), Google (<https://www.bisnow.com/tags/google>) and Meta (<https://www.bisnow.com/tags/meta>) — which need facilities to support their massive cloud (<https://www.bisnow.com/tags/cloud>) businesses and, increasingly, artificial intelligence (<https://www.bisnow.com/tags/artificial-intelligence>).

Texas has also emerged as the undisputed U.S. capital for bitcoin (<https://www.bisnow.com/tags/bitcoin>) mines, specialty data centers devoted to processing cryptocurrency (<https://www.bisnow.com/tags/cryptocurrency>) transactions.

All that growth is expected to account for more than half of a projected power demand spike that hit legislators like a ton of bricks this summer when the Electricity Reliability Council of Texas presented new and startlingly higher numbers.

And it came as the state was making progress toward shoring up its grid after a catastrophic 2021 winter storm shut it down, killing hundreds and wreaking billions (<https://www.bisnow.com/houston/news/infrastructure/project-eyes-a-link-of-ercot-grid-with-other-southeastern-states-122278>) in property damage.

Texas isn't alone in worrying about energy stability. National projections show usage from data centers will double by the end of the decade and rise even further in industry hot spots like Dallas-Fort Worth. Some jurisdictions have imposed limits (<https://www.bisnow.com/national/news/data-center/loudoun-countys-new-data-center-rules-leaving-some-developers-in-limbo-115766>), and the Biden administration made developing new solutions to the industry's increasingly acute energy crisis (<https://www.bisnow.com/national/news/data-center/were-not-even-close-data-center-power-crunch-gets-worse-with-no-end-in-sight-122415>) a national priority.

Yet the unexpected surge has Texas lawmakers reeling, asking questions about the worth of huge power consumers to the economy and calling for ways to put the brakes on an industry speeding ahead faster than anywhere else in the U.S. outside of Northern Virginia.

"I'm more interested in building the grid to service customers in their homes, apartments, and normal businesses and keeping costs as low as possible for them instead of for very niche industries that have massive power demands and produce few jobs," Texas Lt. Gov. Dan Patrick (<https://www.bisnow.com/tags/lt.-gov.-dan-patrick>) said on social media platform X (<https://x.com/LtGovTX/status/1800968003636408657?lang=en>) after ERCOT (<https://www.bisnow.com/tags/ercot>) presented the new projections.

"We want data centers, but it can't be the Wild Wild West of data centers and crypto miners crashing our grid and turning the lights off."

The debate has refocused attention on the state's fragile grid and limited energy infrastructure. And the avalanche of new demand is spiking fears of massive bills ahead for residents and businesses.

“It has huge policy implications,” Texas Sen. Nathan Johnson, a Democrat from Dallas, said at a June hearing. “And every assumption that we’ve made over the past four years is now called into question.”

From Dozens Of Megawatts To Hundreds

Dallas is the country's second-largest data center market and one of the industry's traditional hubs. More data center firms are headquartered in Dallas than any other city.

At the end of the second quarter, there were 966 megawatts of total inventory, with 339 MW under construction and 3,091 MW planned in DFW, according to JLL (<https://www.us.jll.com/en/trends-and-insights/research/na-data-center-report>). The total number of megawatts in use by data centers in the Dallas market is up 77% since 2020, according to CBRE (<https://www.cbre.com/insights/reports/north-america-data-center-trends-h1-2024>).



Meanwhile, the Austin-San Antonio region is considered the largest of the nation's “secondary” data center markets. It was the fastest-growing data center market through the first half of this year, the CBRE report says, and its combined under-construction activity more than quadrupled from a year earlier.

Data centers are attracted to sites with low power costs, targeted tax incentives and robust optical fiber network infrastructure nearby. Many parts of Texas hit all these marks.

But the new wave of data center demand caught ERCOT and utilities across the nation (<https://www.bisnow.com/national/news/data-center/more-skin-in-the-game-power-utilities-say-data-centers-must-foot-the-bill-for-billions-in-grid-upgrades-124385>) by surprise.

Data centers will represent 6.6% of electricity (<https://www.bisnow.com/tags/electricity>) consumption in the U.S. by 2028, up from just 1.5% in 2018, according to TD Cowen (<https://www.bisnow.com/national/news/data-center/td-cowen-data-centers-share-of-us-energy-use-to-quadruple-124474>). Other studies (<https://carboncredits.com/us-data-centers-power-requirement-will-double-by-2030/>) predict the industry's share of power use will be as high as 9.1%.

In Texas, 60% of the 40 GW of new load expected in the months ahead consists of new data centers and bitcoin mining (<https://www.bisnow.com/tags/bitcoin-mining>), according to Texas Public Utility Commissioner Lori Cobos. But what is catching providers most off guard is that each new facility is using far more power than ever before.

The size of data center campuses, measured in the amount of energy they consume, has shot up over the past four years from dozens of megawatts to hundreds, with major tech companies now looking to deploy more than a gigawatt of capacity at a time.

The reason is AI (<https://www.bisnow.com/tags/ai>). High-performance computing equipment, such as the graphics processing units made by companies like Nvidia (<https://www.bisnow.com/tags/nvidia>), use far more power than traditional data center servers. A Google search using AI computing consumes around 10 times more energy (<https://www.goldmansachs.com/insights/articles/AI-poised-to-drive-160-increase-in-power-demand>) than a traditional search.

"We're not talking about 50-MW data centers anymore," said Enchanted Rock Chief Commercial Officer Allan Schurr, whose firm partners with large energy users to locate on-site power generation. "We're talking about 500-MW or gigawatt-scale data centers."

'Too Many Pigs At The Table'

"Five years ago, we didn't see AI-type data centers coming on the grid. No one was talking about that," ERCOT Chief Operating Officer Woody Rickerson told lawmakers at a June Senate Business and Commerce Committee hearing when lawmakers first learned expectations about future power demand had been upended.

"Those are extremely large. Just for comparison's sake, the city of Lubbock is about 700 MW, and some of these AI data centers are over 2,000 MW, so we're talking about putting three Lubbocks in 24 months at a site."

When Texas demand hit a new high of 85 gigawatts in 2023, the hottest year recorded in the state, ERCOT expected demand to rise to 110 GW by 2030. After changing its projection methodology (<https://www.kvue.com/article/news/local/texas/ercot-long-term-planning-process/269-adf87150-d459-42cb-b826-029b506bcb20>) in April, it raised that number to 150 GW.

The new projection brought worries about the health of the Texas grid to a head, seemingly sending some lawmakers into panic mode. Some wondered aloud whether the state could stop data centers and bitcoin mines from coming at all.

“AI’s just come on the scene, but who knows what’s next, even after that, that will consume even more?” said Sen. Donna Campbell, a Republican whose district includes parts of Austin and San Antonio. “Can we just say, ‘No, you can’t come’? Can we just say no? Too many pigs at the table just run out of food if they don’t come with their own trough full of food.”

Much of the concern stems from 2021’s Winter Storm Uri (<https://www.bisnow.com/tags/winter-storm-uri>), which laid bare the Texas grid’s vulnerability. More than 4 million homes and businesses were left without power amid freezing temperatures.



Power demand before Uri-related blackouts began was 69 gigawatt-hours (<https://experience.arcgis.com/experience/cc48fcfebfcae414b99b3d18f86c72c27/page/Power-Demand-During-Uri/>), a new winter high. The Texas grid can typically handle 70 GWh, but 14 GW of natural gas and coal-fired power plants were offline for maintenance (<https://experience.arcgis.com/experience/cc48fcfebfcae414b99b3d18f86c72c27/page/Power-Supply-During-Uri/>), a common practice during winter months.

But this time, disaster ensued. In addition to loss of life, by March 2022 (<https://www.tdi.texas.gov/reports/documents/feb2021-tx-winter-weather-summary-mar2022.pdf>), the Texas Department of Insurance had tallied 510,772 freeze-related insurance claims, with an expected payout total of \$11.2B. The average incurred loss for commercial property was about \$149K.

ERCOT, the Public Utilities Commission and lawmakers responded by going all out to ensure adequate generation resources would become available when the system is under stress. But with the gears of that fraught process in motion, the unexpected wave of electrical demand from data centers and bitcoin mines tossed a new wrench in the works.

There is a chance the state is “building a system that won’t fit,” said state Sen. Robert Nichols, a Republican from Jacksonville.

“This is so far different from anything we’ve ever seen.”

Fear And Black Swans

But is the influx of data centers actually increasing the risk of catastrophic blackouts across Texas? The answer is complicated.

On one hand, experts refute the notion that a data center with the power consumption of a small city could suddenly switch on and take grid operators by surprise, plunging large swaths of Texas into darkness. Connecting a data center to the ERCOT grid isn't a free-for-all — it requires an extensive approval process, and permission is only granted once sufficient infrastructure is in place.

Still, energy experts like Enchanted Rock’s Schurr acknowledge that the ERCOT grid becomes more vulnerable as the addition of data centers and other large industrial power loads keeps demand on the grid in the upper range of its capacity. Grid operators must make sure there is always enough capacity operating or ready to operate for anticipated power demand, with extra in reserve in case of plant failures or other unforeseen events.

The problems come when an event like Uri reduces grid capacity, but data centers are already encroaching on the reserve margins of extra power, Shurr said.

“We have to plan for the extreme events, the black swans,” he said. “If data centers are the cause of squeezing that reserve margin, then the reliability during those extreme events can be at risk.”

Many in the industry are quick to point out that data centers have their own backup electricity sources on-site, typically in the form of diesel or natural gas generators, allowing facilities to remain fully operational off grid. Nearly every data center in Texas remained online (<https://www.bisnow.com/dallas-ft-worth/news/data-center/despite-arctic-inspired-panic-texas-data-centers-are-doing-alright-107802>) during Winter Storm Uri, and their on-site power meant they didn’t contribute stress on the already overmatched ERCOT system.

But much of the concern around data centers’ impact on the Texas power grid has focused on one contentious corner of the broader data center ecosystem: bitcoin mines.

Unlike traditional data centers, bitcoin mining facilities don’t use the same amount of power all the time. As long as a miner’s power costs are less than the price of bitcoin, a facility will run at full tilt. But during times of energy scarcity, when the price of power goes up, bitcoin miners typically shut down entirely, pulling potentially hundreds of megawatts off the grid.

This pattern of electricity usage aligns with what ERCOT's operators want. Yet it can also raise the risk of catastrophic grid failures. ERCOT and utilities have little transparency into bitcoin miners' operations, making real-time predictions about energy demand challenging.



And if grid operators don't correctly anticipate when bitcoin miners will shut down during periods of high demand, disaster can follow.

"It's a little bit of a hold-your-breath moment when we go into scarcity, not knowing for sure what that demand response is going to look like from one day to the next," ERCOT's Rickerson told lawmakers in June.

However, the characterization of bitcoin mining as an inherently destabilizing force on the state's energy infrastructure has also received pushback from miners and ERCOT leadership, who say bitcoin miners can be part of the solution.

ERCOT has implemented demand response programs, in which major power consumers agree to effectively give their allotted power back to the grid by dramatically reducing electricity consumption during times of peak demand — for a price. Bitcoin mines are a natural fit for demand response.

But only about a third of Texas bitcoin mining operations are in such a program, according to Texas Blockchain Council President Lee Bratcher.

ERCOT leadership and mining groups like Bratcher's are aligned in wanting to see all miners become so-called controllable load resources, giving ERCOT transparency into their operations and a say in when they disconnect during periods of high demand. These facilities could become an important stability resource, effectively adding gigawatts of emergency capacity to the grid.

Who's Stuck With The Bill?

Texas lawmakers aren't just worried about data centers and crypto mines making the state's electricity less reliable. They're also worried about them making it more expensive.

The flood of massive data centers and bitcoin mining developments seeking connections to the ERCOT grid far exceeds the capacity of Texas' existing power infrastructure, particularly the transmission lines and substations needed to deliver power to these projects. ERCOT and its associated utilities, like all U.S. power providers, are legally obligated to fulfill these requests.

That means spending billions to expand grid capacity.

ERCOT already has \$14B worth of transmission projects in some stage of preconstruction or development, and a significant increase in spending is needed to meet the wave of demand projected to be just around the corner, ERCOT's leadership told lawmakers. In theory, the cost of these capital projects will be covered by data centers paying for the power they use.

But if billions of dollars are spent building transmission lines for a data center campus that never ends up being built or uses just a fraction of the electricity its developers asked for, the huge cost of these projects would be borne by all Texans in their power bills.

State lawmakers were quick to raise concerns about the potential for higher power rates, which they said would have the greatest impact on the state's most vulnerable households.

"I want to make sure that we don't increase the cost of everybody who can least afford it for a specialized project that's for industries that are very profitable," Sen. Jose Menendez, a San Antonio Democrat, told ERCOT leadership at the hearing.

Clouding the issue, ERCOT has little insight into how much of its record interconnection queue will materialize. In the data center industry and among utilities, there is broad consensus that much of the projected increase will never come to fruition — as much as 80% of ERCOT's projection, Bratcher said.

A data center developer might apply for interconnections for 100 MW in five potential locations but only plan on building at one of them. That looks like 500 MW to ERCOT, but in reality it would only be 100 MW, Bratcher said.

Adding to this "phantom load," landowners or developers with no relevant experience have made large connection requests for properties to boost land values and potentially flip the parcels to data center firms.

"In every single market, we've seen a flood of private equity guys and landowners who go to the utility and get a power study for 500 MW for a farm just so that land's worth six times as much," JLL U.S. Data Center Managing Director Andy Cvengros (<https://www.bisnow.com/tags/andy-cvengros>) said. "Utilities are looking at us to help them understand who's real and who's not."



Some steps are already being taken to help ERCOT make more accurate demand projections and separate the wheat from the chaff, hoping to lower the risk Texans will be stuck with the bill for billions in unneeded transmission infrastructure.

Oncor (<https://www.bisnow.com/dallas-ft-worth/news/data-center/data-center-demand-continues-to-boom-in-dfw-even-as-other-assets-falter-119757>), which transmits and delivers electricity to much of the Dallas-Fort Worth region and parts of the Permian Basin (<https://www.bisnow.com/tags/permian-basin>), started taking advantage of a law passed last year allowing transmission providers to give input on which loads they felt were likely to connect, Oncor Vice President Ellen Buck said during the Senate hearing.

Oncor determined that only 25 GW of the 47 GW seeking connections were likely to move forward after examining whether the requesting entity was legitimate, like a major tech firm or known developer, and whether they had started making financial commitments toward their projects, such as securing property or ordering equipment.

“What we're looking at is, what's the customer's evidence of skin in the game?” Buck told the committee.

There is also support for charging potential connectors (<https://www.bisnow.com/national/news/data-center/the-machete-approach-a-fight-between-data-centers-and-an-ohio-utility-may-preview-more-turmoil-ahead-125992>) large fees, securing another form of collateral or requiring expensive studies as part of the application to request a connection. Those measures, widely used in other markets, could make speculative requests less likely.

“As a data center industry, as a bitcoin mining industry, we are all supportive of ERCOT charging fees for loads to be in the interconnection queue because we understand how important it is for them to have an accurate picture of what load is coming,” Bratcher said. “If that hurts our bottom line, then so be it.”

Reaching A ‘Tipping Point’

The increasingly hostile rhetoric from Texas lawmakers may signal a changing political landscape for the data center and bitcoin mining industries, which until recently were welcomed with open arms.

The severest suggestions floated by elected officials, banning bitcoin mining or new grid connections for data centers, have yet to manifest as concrete legislative proposals. But more limited bills were introduced, including a measure to limit bitcoin miners’ participation in demand response programs (<https://www.coindesk.com/policy/2023/05/30/texas-bill-that-would-limit-miners-participation-in-cost-saving-grid-programs-stopped-in-house-committee/>).

Meanwhile, there is a sense that the tone of the conversation around data centers and crypto mining in Austin is taking a rapid turn toward the negative.

“Suddenly they flipped on crypto a few months ago,” said University of Houston (<https://www.bisnow.com/tags/university-of-houston>) energy fellow Ed Hirs, who predicted in 2013 (<https://www.chron.com/opinion/outlook/article/texas-suffers-from-soviet-style-electricity-4301693.php>) that ERCOT’s deregulated grid would result in power generation and distribution shortfalls. “I guess they read the pieces I’ve been putting out.”

Texas would hardly be the first place where data centers have worn out their welcome. That pattern has played out (<https://www.bisnow.com/national/news/data-center/an-expensive-lesson-facing-growing-local-hostility-data-center-developers-are-finally-trying-to-win-hearts-and-minds-122476>) in a growing number of development hotbeds, where a data center building boom has sparked political efforts (<https://www.bisnow.com/national/news/data-center/virginia-lawmakers-look-to-eliminate-data-centers-as-by-right-use-125001>) to control or limit the industry’s growth.

While specific grievances driving opposition vary by market, concerns over the impact of skyrocketing electricity demand have led government officials and utilities in places like Columbus, Ohio (<https://www.bisnow.com/national/news/data-center/the-machete-approach-a-fight-between-data-centers-and-an-ohio-utility-may-preview-more-turmoil-ahead-125992>), and Dublin (<https://www.irishtimes.com/business/2023/11/27/data-centre-moratorium-could-strangle-digital-growth-and-impact-carbon-targets/>) to pursue what are effectively moratoriums on new data center development (<https://www.bisnow.com/tags/data-center-development>).

The risks data centers pose to the reliability and price of electricity in Texas may be solvable through policy and regulatory changes. But industry players like Bill Thomas, chief energy officer at data center campus developer CleanArc (<https://www.bisnow.com/tags/cleanarc-data-centers>), caution that lawmakers and ERCOT could follow other jurisdictions’ lead and decide that data centers just aren’t worth the trouble.

“I don't know what that tipping point is,” Thomas said. “Everything's bigger in Texas, but I think they've probably reached it.”

Check out Bisnow early next week when Data Centers Reporter Dan Rabb takes a closer look at crypto mining. The industry has been maligned by some politicians, but industry leaders say they can be part of the state's energy solution.

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See Also: Europe's Largest Property Lender To Pull Back From New Office Loans ([/london/news/capital-markets/europes-largest-property-lender-to-pull-back-from-new-office-loans-126242](https://london/news/capital-markets/europes-largest-property-lender-to-pull-back-from-new-office-loans-126242))

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ATTACHMENT 4.c

Article – Recommendations for Proposed Zoning Ordinance Amendment for Data Center Impacts in Fairfax County, dated May 20, 2024



(<https://www.facebook.com/GreatFallsSierraClubChapter/>)



Club-
GFG-
Meetup/)

Recommendations for Proposed Zoning Ordinance Amendment for Data Center Impacts in Fairfax County

Recommendations for Proposed Zoning Ordinance Amendment for Data Center Impacts in Fairfax County

May 20, 2024

Dear Members of the Board of Supervisors and Planning Commissioners,

We are writing to share our recommendations to address the impacts of accelerated growth of the data center industry in Fairfax County. We appreciate that the county has studied and issued “Data Centers – Report and Recommendations.” At the same time, the public deserves stronger protections than those that have been proposed in the Staff Summary dated April 23, 2024 with draft Zoning Ordinance Amendment (ZOA) language and the May 17, 2024 Staff Report in order to ensure that county policies adequately mitigate the myriad of negative environmental and public health impacts of this use.

Our concerns about the magnitude of future data center development focus particularly on the massive energy demand, water consumption and resulting increases in carbon emissions. In addition to the few standards offered in this draft ZOA in order to obviate the significant environmental impacts, it is essential that the county require:

comprehensive building energy efficiency; procurement of new renewable energy by companies; the use of sustainable building materials, avoiding highly toxic diesel generator pollution and other natural resources protections.

In order to try to meet the unique set of impacts associated with data centers, we recommend that:

1. The county take a comprehensive regulation approach to the data center “use” and also expand “use-specific standards” as part of this effort.
2. Data centers be regulated so that environmental and health mitigations are proportional to harmful impacts.
3. All data center proposed developments be subject to a Special Exception (SE).

Impacts of Virginia’s Data Centers

With the acceleration of computing and cooling demands from artificial intelligence and other rapidly- changing technologies, data centers now require far more energy and water to run. Today, the industry seeks data centers that are larger and often taller to pack in more servers to run more energy and water intensive applications. Yesterday’s data centers use far fewer resources compared to those planned to host artificial intelligence and other new applications, which could require at least 10 times the power to run.

Fairfax County has recently begun to approve larger facilities in tandem with market demand and their impacts won’t be fully understood until they come online. Those facilities (such as Chantilly Premier and Renaissance) are not in operation but appear to be more in line with data centers built in neighboring jurisdictions, giving us a reasonable basis for predicting impact.

We are deeply concerned about the projected total demand of energy to service data centers. With revised forecasts from PJM, the region’s grid provider, the data center industry in Virginia is now expected

to need over 25,000 MW (25 GW) just to service Virginia's data centers by 2039¹. This would be the equivalent of 28 coal plants (the size of Clover Power Plant in Halifax County, still in operation at 877 MW.) Newly approved transmission lines are expected to bring coal to Virginia already delaying coal plant closures.² Dominion has also revived pre-pandemic plans to build a natural gas peaker plant in Chesterfield County to meet growing grid demand in the coming years, due to data center growth. Data center developers, rather than the ratepayer or taxpayer, should bear the expense of infrastructure needed to operate their facilities so that Fairfax County residents do not shoulder the burden.

Because the data center growth is driving Dominion's reliance on fossil-fueled generation,³ Dominion has projected to double greenhouse gas emissions to 36,000,000 metric tons by 2048.⁴ That Loudoun County's GHG emissions have increased by over 50% due to data centers⁵ is a serious concern for the region and the state and foreshadows what will happen in other jurisdictions if mitigating protective measures aren't enacted. The energy trajectory created with this unprecedented industrial build out could reverse the ongoing work to deliver a cleaner grid, which will also undermine the county's ability to meet its Community-wide Energy and Climate Action Plan (CECAP) goals. All of this is to say that the increases in carbon we are seeing makes clear that effective local policies to mitigate these impacts are imperative.

Recommendations for Data Center Use Standards

Screening/Enclosures:

We support requiring equipment enclosures. Does this include enclosing diesel generators? Is that considered "mechanically feasible" or would we expect a waiver on those? We recommend that generators and HVAC equipment be located away from (not adjacent to) residential, public and commercial uses, in order to reduce pollution, noise and aesthetic impacts to adjacent properties.

Maximum Size:

Data Centers are rapidly growing in size and server capacity. For instance, newly built or proposed data centers in Loudoun County are generally over 200,000 square feet and increasingly as much as 1,000,000 square feet. Demand for hyperscale size buildings reflect market conditions post 2023, thereby precluding the need for by right

standards under 80,000 square feet. (The currently under review by right Plaza 500 Bren Mar proposal is for 461,244 sf and Chantilly Premier was approved at 402,000 sf and other recent projects are over 1 million sf)

Likewise, we believe that the demand for and speculation around data center development does not warrant a credit for repurposing under a by right standard. Repurposing of underperforming commercial properties for data centers is already underway at an accelerated pace in other jurisdictions, so the incentivizing redevelopment for data centers is unnecessary. Further, a possible 200,000 square foot addition is a substantial 2.5 times the square footage that is proposed as a by right maximum. Either way, our strong recommendation is to require the data center use to be subject to a Special Exception across the board so that proffers can be offered to mitigate impacts.

While there are some similarities in transportation, freight, warehouse and distribution-related industrial facilities, the data center use differs significantly from other industrial uses in the sheer magnitude of its impact on land, energy and water resources. The possibility that under certain conditions it could

1 <https://www.pjm.com/-/media/planning/res-adeq/load-forecast/load-forecast-supplement.ashx>

2 <https://www.washingtonpost.com/business/interactive/2024/data-centers-internet-power-source-coal/>

3 (<https://www.sierraclub.org/press-releases/2023/05/dominion-announces-future-energy-production-customers-and-its-bleak>)

4 Dominion Energy's 2023 IRP, page 7, preferred plans B and C summary. <https://www.dominionenergy.com/-/media/pdfs/global/company/desc-2023-integrated-resource-plan.pdf>

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function as a power plant must also be taken into consideration. This concept, to provide an air quality variance for diesel generators in Fairfax, Loudoun and Prince William Counties, was floated last year by the Department of Environmental

Quality.⁶ And while it was later withdrawn, it could be revived due to energy and transmission constraints. One must consider that Fairfax County is highly populated and quickly urbanizing, and with the majority of I-5 districts residing directly adjacent to residential areas, the health hazards to adding thousands of diesel generators near population centers could be harmful to far larger numbers of residents based on proximity.

Further, since the county's Policy Plan does not currently have adequate standards for data centers, a Special Exception gives the board flexibility to address issues such as green building and renewable energy, stormwater, water use that also cannot adequately be regulated under by right conditions.

Noise Impacts:

We support pre and post construction studies with adequate standards to protect adjacent properties 24/7. Further, we believe data center noise should not be audible over the property line and the ZOA and/or county Noise Ordinance should provide for this. This measure would protect neighbors from the continuous low humming noises as well as noise from generators. Generators should not run from 8 pm to 8 am. This is a health issue, as well as a comfort issue for residents.

Setbacks:

Setbacks should not only be from residential areas, they also should be from schools, hospitals, parks and other public amenities. We generally suggest a buffer of 500 feet. In terms of noise and disturbance, the usefulness of a protective buffer adjacent neighbors and uses is also predicated on the efficacy of the noise ordinance and/or noise mitigations required by the county and provided by the developer for the combined impacts of the building, cooling systems and generators. In order to achieve the property line measurement under "noise impacts," buffers may have to be expanded and natural barriers, such as mature trees planted.

It was shocking to learn that a new substation for the Plaza 500 by right data centers, currently under review by the county, is proposed a very short distance of 80 feet from residential townhomes. While the state plays a large role in approving substations, localities must have protections in place so that major energy infrastructure is far from homes, schools, hospitals and other public spaces. There is no way such placement could "minimize adverse visual impacts" as well. On the other side of this proposed development, transmission lines are planned to be constructed in the Resource

Protection Area of Turkeycock Run. In this current situation, a small buffer of 200 feet would be wholly inadequate to protect adjacent properties. We suggest that additional protective language be included in this ZOA to avoid these situations.

Distance from Metro:

Data Centers should be sited at least 1 mile from TSAs and major transit hubs such as Metro stations. Siting Data centers within walking distance of 15-20 minutes of transit undermines the County's smart growth goals to populate residential, employment centers and mixed-use residential near transit. Data Centers employ few people and if near transit, take up valuable space, reducing the utility of critical county transit infrastructure. Current data centers near the Reston Town Center and Loudoun Station Metros are examples of this. For the same reason, even under an SE, at least a 1-mile standard should be in force. Further, the SE process would allow the county to ensure that data centers are not sited in industrial zones a mile or more from major transit near incompatible development. For instance, the Mosaic District is a mile or more from the Dunn Loring Metro and there are similar areas near the Springfield Metro where existing industrial areas or commercial areas that would qualify for larger data center development by repositioning under this proposed ZOA would be incompatible with other uses

6 <https://www.deq.virginia.gov/Home/Components/Calendar/Event/971/17>

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and/or would reduce the potential to build for transit use. So, instead of a (5) "lesser" distance, a holistic look at a transit area might call for a greater distance.

Zoning Districts:

We support the option to remove permission for data centers in the PRC District. This use seems incompatible with the PRC focus on green open space.

Use-Specific Standards addressed in the Study, but not in the draft ZOA

Several significant issues were addressed in the January 9, 2024 Data Center Study that are excluded from the draft ZOA language. Deferring the implementation of use-specific standards contributes risk to the power grid, increases in carbon emissions,

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depletion of local water resources and public health. The county should be prepared now to address the emerging and more intense resource demands and environmental impacts of any proposed development. There should be a pause in approvals of the data center use until the following critical issues are adequately addressed.

Diesel Generator Impacts:

We ask that you avoid the use of unhealthy diesel fuel or natural gas for back-up generators. Alternatively, we ask that you require on-site microgrids for back up for each building with solar and battery storage. We recommend that if diesel is allowed, a requirement be established for Tier IV generators or the best available/highest standard technology that is the least polluting. These generators should be treated as having the potential to be used as power plants (see above), so their cumulative effects to public health should be well understood.

One Fairfax/Equity Protections

We urge the county to protect vulnerable populations under One Fairfax from health and pollution harms. Has DPD or other agencies conducted a formal analysis of the potential impact on neighborhoods likely to see data center development? Low-income areas which already suffer or may suffer from neighborhood conditions that challenge public health should be protected from the polluting effects of data centers and not located near them. Such protections should be integrated into this ZOA.

Energy Impacts:

We must require state-of-the-art building and cooling efficiency to address the massive energy demand associated with this use. Given the extent of potential use for the purpose, Fairfax County data centers should be at least in the top 10% nationwide for efficiency and water use. As mentioned in the Study, a Power Utilization Standard (PUE) performance metric should be required to promote energy efficiency. We suggest a PUE of 1.12 or less with a method of third-party certification be required under a Special Exception.

It is our understanding that LEED-silver does not ensure that the building will deliver the needed level of energy efficiency. LEED-DC Gold or stronger certification with ASHRAE 90.4 is needed. All buildings must be constructed and operated using best practices or better in the industry with respect to building construction, noise attenuation, and cooling technologies. We suggest that third party certification be

required of the building's design and construction according to the standards which are utilized. We ask that you benchmark renewable and total energy use for data center reporting requirements and make the information public. We recommend the following best practices language for energy efficiency in any data center application:

Best Practices for Energy Efficiency: *All buildings on the Property must be constructed and operated using best practices or better in the industry with respect to building construction, noise attenuation, and cooling technologies. All data center buildings must be constructed to LEED (Leadership in Energy and Environmental Design) "Gold" standards for Building Design and*

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Construction, achieving at least 16 of the 18 points available in the Optimize Energy Performance section of the Energy and Atmosphere category or a recognized industry equivalent such as EnergyStar certification, with a certification score of at least 90 points. Prior to the issuance of the permanent certificate of occupancy for such building, a licensed engineer or architect must provide the Planning Department with certification that such building was constructed according to the standards specified under LEED Gold or EnergyStar certification at the 90-point scoring level. Any other recognized building industry equivalent that may be used for the building design and construction must produce equal or better energy efficiency performance than the two standards mentioned above. The operation and maintenance of all data center buildings must be consistent with generally recognized industry energy efficiency standards and guidelines for data centers (i.e. ASHRAE Standard 90.4), to the maximum extent possible.

Carbon Costs:

Data Centers are a climate issue. Strong proffers could also reduce future climate mitigation costs resulting from emissions associated with data centers. Projects of this magnitude should require thorough impact analyses of its impact on the county's carbon footprint. Since we know that emissions increases are associated with the data center use, and it will increasingly depend on going "back to coal" to meet energy demand, what will the county do to ensure that its carbon emissions do not increase if new and data centers come online?

Water Impacts:

It is imperative to have a solid understanding of the water quantity needed for operation of the centers, as well as water quality issues presented. When data centers are serviced by public water sources, the public should have an understanding of water demand and quality impact.

Jurisdictions servicing data centers with AI applications have seen huge increases in water consumption. This is an emerging area of concern and discussion by the industry and in many local communities. Based on limitations of air cooling for AI applications and what might have been an industry standard in the past, the use of liquid cooling is increasing by necessity.⁷ The experience of Des Moines, Iowa gives us a peek into water usage⁸ and the additional strain that can be placed on the region's drinking water supply.

Therefore, water impact studies should be performed before any approvals and the data should be made publicly available sufficiently in advance to allow for public consideration and comment; water pollution prevention measures should protect soils and capture chemical residue; outflows should protect from residue such as bromine and salt; a significant percentage of water should be recycled or reclaimed and should neither deplete nor imperil surface or groundwater sources needed for drinking water; and drinking water for residents should be designated as a priority use during drought conditions.

Transportation Impacts:

The traffic analysis and plan should take into consideration the impact on transportation and imperative of safe delivery of diesel fuel and that the time of delivery should not impact nearby neighborhoods.

⁷ <https://www.datacenterknowledge.com/industry-perspectives/data-center-liquid-cooling-moving-niche-mainstream#close-modal>

⁸ <https://apnews.com/article/chatgpt-gpt4-iowa-ai-water-consumption-microsoft-f551fde98083d17a7e8d904f8be822c4>

Last year (2023) was the hottest year in 170 years of record keeping, even *exceeding scientists' predictions*. The fact that climate change is an existential threat to all of us requiring swift action of every level of government has been repeated so often that scientists sound like a broken record. And yet, this is an existential issue and so their warnings must be heeded.

The land use regulatory power at the local level is foundational to ensuring data center developers are held accountable for short and long-term impacts and therefore are protecting ratepayers and Fairfax County residents from the long-term costs for carbon mitigation, and the impacts on air quality, and energy and water bills.

As always, we are happy to discuss these recommendations at any time.

Thanks,

Ann Bennett

Land Use Chair, Sierra Club Great Falls Group Virginia Chapter Data Center Issues Chair

Susan Bonney

Chair, Sierra Club Great Falls Group

CC: John Morrill OEEC, Rachel Flynn, DCE

Carmen Bishop, DZA Katherine Hermann, DPD

9 <https://www.nytimes.com/interactive/2024/04/20/upshot/carbon-dioxide-growth.html>

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ATTACHMENT 5

Notice of Determination

Notice of Exemption

From: City of Monterey Park Planning
320 W. Newmark Avenue
Monterey Park, CA 91754

To:

- ☒ Office of Planning and Research
1400 Tenth Street, Room 121
Sacramento, CA 95814
- ☐ Los Angeles, County Clerk
Environmental Filings
12400 Imperial Highway #1201
Norwalk, CA 90650
Attn: Business Filings and Registration

Project Title: Data Center Regulations
Project Location - Specific: Citywide
Project Location - City: Monterey Park
Project Location - County: Los Angeles

Description of Project:

Adopt regulations governing data centers within Saturn Park in accordance with Section 3(A) of Ordinance No. 2198 (adopted by voters as Measure JJ on November 3, 2020).

Name of Public Agency Approving Project: City of Monterey Park
Name of Person or Agency Carrying Out Project: City of Monterey Park

Exempt Status: (check one)

- ☐ Ministerial (Sec. 21080(b)(1); 15268);
- ☐ Declared Emergency (Sec. 21080(b)(3); 15269(a));
- ☐ Emergency Project (Sec. 21080(b)(4); 15269(b)(c));
- ☒ Categorical Exemption. State type and section number: § 15060(c)(2), § 15378(b)(5) § 15301 § 15303 and § 15061(b)(3)
- ☐ Statutory Exemptions. State code number: _____

Reasons why project is exempt:

Pursuant to the California Environmental Quality Act (Public Resources Code §§ 21000, et seq.; "CEQA") and the regulations promulgated thereunder (14 Cal. Code of Regs. §§ 15000, et seq.; the "CEQA Guidelines"), the City reviewed the environmental impacts of the proposed regulations. No additional environmental review is required for these regulations pursuant to CEQA Guidelines § 15060(c)(2), § 15378(b)(5) § 15301 § 15303 and § 15061(b)(3). These regulations are exempt from additional CEQA review because the regulations would amend existing zoning to govern data centers within Saturn Park in accordance with the voter enacted Land Use Element. This will not have a direct or reasonably foreseeable indirect physical change in the environment and does not qualify as a "project" under CEQA because it will not make physical changes to the environment. Additionally, the regulations are exempt from additional CEQA review under the commonsense exemption that it will not affect the environment. Any future data center project applications will require separate environmental review as required by applicable law.

Lead Agency Contact Person: Jessica Serrano Telephone (626) 307-1463

If filed by applicant:

1. Attach certified document of exemption finding.
2. Has a notice of exemption been filed by the public agency approving the project? ☐ Yes ☐ No

Signature:  Date: 11/6/24 Title: Director of Community Development

- ☐ Signed by Lead Agency Date received for filing at OPR:
- ☐ Signed by Applicant



City Council Staff Report

Date: January 21, 2026
Agenda Item Number: 5.B.

To: The Honorable Mayor and City Council
From: Karl Berger , City Attorney
Subject: Receive and File Regarding Council Member Thomas Wong's Participation on the Saturn Park Advisory Review Committee (SPARC)

(This item will be rolled over to the Jan. 21, 2026 Regular Meeting as Consent Calendar Item No. 10.E.)

Recommendation:

It is recommended that the City Council consider:

1. Receiving and filing the attached staff report regarding Council Member Thomas Wong's participation on the Saturn Park Advisory Review Committee (SPARC); and
2. Taking such additional, related action that may be desirable.

Executive Summary:

Recent social media posts allege that Council Member Thomas Wong may not participate in crafting land use regulations governing Saturn Park because of a perceived conflict of interest. The narrative is that Mr. Wong's participation in the Saturn Park Advisory Committee (SPARC) and subsequent vote implementing new zoning regulations for Saturn Park constituted a legal conflict of interest under applicable law (the Political Reform Act and rules promulgated by the Fair Political Practices Commission).

A review of the record, however, shows there is ample evidence demonstrating that Council Member Wong's service on the SPARC and his subsequent decision-making regarding zoning for Saturn Park are legally permissible. Those same rules apply to Item No. 5A on the Special Meeting Agenda for January 21st.

Background:

Council Member Wong previously served on the SPARC in 2024. In October 2024, the SPARC presented recommended changes to zoning for Saturn Park (see, www.montereypark.ca.gov/1636/Saturn-Park-Advisory-Review-Committee-SP). Subsequently, Council Member Wong voted to adopt ordinances amending the zoning regulations for Saturn Park. Those changes included various amendments to the MPMC to

implement the voters' intent in adopting Measure JJ (the City's Land Use Element) as to Saturn Park – they were not specific to data centers.

Separately, on January 11, 2024, the City received an application for a “data processing facility” to be located at 1977 Saturn and, at the time SPARC was formed, was processing that application. That land use, however, did not (and still does not) have a vested right to develop (see, City Attorney Letter dated November 5, 2024, attached). Amendments to the MPMC in 2024 reclassified the proposed use at 1977 Saturn from “data processing facility” to “data center” as defined by MPMC § 21.14.210. While that reclassification subjected the application to City Council review rather than being processed administratively or by the Planning Commission, that did not predict whether the project would (or will) be approved. It must be considered on its own merits.

Government Code § 87100 establishes a general disqualification rule: a public official may not participate in any governmental decision in which the official has a disqualifying financial interest. FPPC Regulation § 18706 (promulgated by the FPPC in 1984) recognizes that some complex matters involve multiple distinct decisions that can be separated to allow participation by an otherwise conflicted public official in portions of the matter where that public official does not have a conflict. Such decisions may not be “inextricably interrelated.”

This standard means that the result of one decision cannot effectively determine, affirm, nullify, or alter the result of another decision. It is a fact intensive determination and is outcome-focused, not process-focused: If one decision is a necessary condition precedent or condition subsequent to another – or is otherwise so closely tied to it that deciding one will effectively determine the other – then the decisions cannot be segmented. Put differently, the legal test focuses on independence and outcome neutrality: can each decision stand alone? Will deciding one predictably determine the other?

Applying this standard to the SPARC, the 2024 decisions, and the proposal in Item No. 5A make it apparent that Council Member Wong could previously participate in decision-making and may do so tonight. Nothing proposed by the SPARC to the City Council determined the outcome of a pending or future land use decision; none of the 2024 City Council decision regarding data centers in Saturn Park could determine a decision of the City Council on an individual application; and the moratorium proposed by Council Member Ngo would likewise not determine an outcome as to any pending or future application.

While only the FPPC may determine whether a public official has a conflict of interest – and it does not opine regarding past actions – it seems likely that Council Member Wong *may* have a conflict as to the pending 1977 Saturn data center application. Which is exactly why the City Attorney's office requested that the FPPC provide advice regarding the matter in October 2025 (see attached). Upon advice from the City Attorney's office, Council Member Wong has recused himself from influencing any decision as to 1977 Saturn pending the FPPC's advice on the matter.

Strategic Plan Goal:

N/A

Fiscal Impact:

N/A

Attachments:

None