PLANNING COMMISSION MEMORANDUM

Date:	September 10, 2025 for September 17, 2025 scheduled meeting	Page: 1 of 9
To:	Planning Commission	
From:	Koren Manning, Interim Director of Planning and Development Services, and Executive Secretary	
Subject:	C8-25-04 Large-Scale Data Center Regulations Unified Development Code Amendment (Citywide)	

Issue – This is a study session to present considerations for a code amendment to the Unified Development Code (UDC) to establish regulations and standards for large-scale data centers. This amendment was initiated by Mayor and Council during their August 6, 2025 Study Session (see Attachment A for the Legal Action Report from that meeting). At that time, Mayor and Council directed City staff to develop regulations for this use. This request was part of the motion Mayor and Council adopted to not consider the proposed Project Blue data center annexation and Development Agreement.

PDSD staff are holding this Planning Commission Study Session to brief the Commission and gather feedback before developing the draft ordinance. In the coming months, a broader community engagement process will take place to gather input that will inform the proposed code amendment. After that, a second Planning Commission Study Session will be held, giving the Commission the opportunity to review the draft ordinance, ask questions, and provide additional feedback prior to a Planning Commission Public Hearing.

Staff Recommendation – Staff recommends the Planning Commission provide feedback that may be used for a Unified Development Code (UDC) amendment related to large-scale data centers.

Background – The need for data centers is increasing due to the volume of data generated by artificial intelligence (AI), cloud computing, and an increase in the number of connected devices used in everyday life.

Earlier this year, the proposed Project Blue data center development was brought to Mayor and Council for consideration of an annexation and Development Agreement. Several public meetings were held regarding the Project Blue data center proposal. Additional information on the Project Blue proposal can be found on the City's website at *Project Blue – Facts and Information*.

Mayor and Council considered the proposed Project Blue annexation and Development Agreement at their August 6, 2025 Study Session. At this meeting Mayor and Council voted unanimously to not proceed with consideration of Project Blue, and requested that staff draft a *Unified Development Code* amendment for the location of data centers within the City. This motion also included a request that Tucson Water draft an ordinance to establish a "Large Quantity Water User" program. Mayor and Council adopted this ordinance at their August 19, 2025 meeting, with a request that Tucson Water

undertake a community engagement process, and return with any proposed amendments within the next six months.

Mayor and Council initiated the UDC amendment to address large-scale data centers through the motion below:

> *Initiate the public process required for the consideration and approval of amendments to the City's Unified Development Code for the purpose of updating zoning requirements that apply to large-scale data centers in order to safeguard public health and safety. This amendment will include a clear definition of data center, and the design and development regulations and standards that apply to them and will be informed by examples of similar requirements adopted or under consideration elsewhere in Arizona, including but not limited to Phoenix, Chandler, Mesa, and Tempe. The amendments will also require that applications are reviewed under Zoning Examiner Legislative Procedure which requires approval by Mayor and Council after recommendation by the Zoning Examiner.*

The UDC does not currently define or address large-scale data centers. Therefore, the code amendment will need to include a definition for large-scale data centers, the identification of zoning districts where they may be permitted, use-specific standards, and the review and approval process.

The City of Tucson Zoning Administrator has determined that large-scale data centers are most directly correlated to a Generating System land use (see Attachment B), and will be classified as such until a code amendment is adopted further defining and regulating their use. These are facilities which generate energy, typically including electrical generating plants. A Generating System land use:

- Although a Generating System would typically only include a TEP power plant, large-scale data centers are similarly generating massive amounts of a product to be distributed throughout an interconnected system;
- Large-scale data centers are similar to a utility user, where they provide a service necessary to daily life;
- Large-scale data centers are uniquely integrated into multiple utility systems, including water, electricity, and internet providers;
- The intensity of a large-scale data center is similar to a large generating facility in size, scale, and scope and may require mitigation for impacts to adjacent properties or nearby properties.

Generating Systems are not permitted in any zones and have no use-specific standards. They are only allowed through the establishment of a Planned Area Development (PAD), which is generally a 6–12-month process.

Recently, numerous large-scale data centers have been built in the Phoenix region, prompting code amendments in Phoenix, Chandler, Mesa, and Marana. These amendments have broadly defined data centers as:

> *A facility, or a portion of a facility, whose principal use is to store and manage computer systems, servers, networking equipment, and components related to digital data operations. These operations include the storage, processing, and distribution of digital information and may encompass activities related to artificial intelligence, blockchain technology, cryptocurrency mining, computational modeling, weather modeling, and genome sequencing, among other computationally intensive applications.*
>
> *The facility typically houses networked computer systems and telecommunications equipment used for remote*

storage, processing, and distribution of data. It also includes related infrastructure, office space, and staff areas necessary to support digital data operations. This associated infrastructure can include air handlers, power generators, water cooling and storage facilities, and utility substations to support sustained operations.

A facility is generally not considered a data center if it does not exceed 10% of the gross floor area of all on-site buildings, is used to serve the enterprise functions of the on-site property owner, and is not used to lease data services to third parties.

Present Consideration(s) – Data center location factors often include affordable power, high-speed network connectivity, proximity to end users, stable climate, access to water for cooling, low risk of natural disasters, skilled labor for operations and construction, favorable land costs, local incentives, and suitable zoning and permitting processes. These factors have contributed to the recent proliferation of data centers in Arizona.

PDSD staff has reviewed how other jurisdictions are regulating data centers, focusing on regulations for Chandler, Marana, Phoenix, and Mesa. The results of this review are shown on the comparison table on the next page, followed by more in-depth overviews of the data center regulations for each jurisdiction.

Data Center Regulation Comparison Table

Regulatory Area	Chandler	Marana	Phoenix	Mesa
Definition	Broad definition; networked systems, telecom, data storage/processing	Broad; servers, utilities, digital data management	Includes only primary-use facilities; small owner-only uses excluded	Very broad; includes advanced operations (AI, blockchain, crypto, modeling)
Where Allowed	Principal use only in PAD; accessory with limits	As permitted by a specific plan, by plan amendment, or as accessory use in industrial zones	Only select zones with Special Permit	Principal via PAD Overlay; accessory allowed under conditions
Community Input	Neighborhood notice + meetings required	Neighborhood notice required	No formal meetings required	PAD review includes input; not explicitly required
Noise Requirements	Baseline + post-construction + annual monitoring; mitigation; liaison	Baseline + post-construction + annual monitoring; max levels by use	Noise study within 300 ft of residential; mitigation required; max 5% increase	General operational compliance; enforcement tied to occupancy
Site & Building Design	Setbacks, screened equipment, landscaping, architectural treatments	Setbacks, screening, underground utilities, landscape buffers, building mass/height limits	Setbacks (150 ft mechanical), landscape buffers, façade treatments, streetscape, shaded paths	Setbacks, PAD standards, landscape buffers, massing/façade treatments; flexible via PAD
Backup Power / Generators	Restricted hours, notice, sound mitigation	Diesel Tier IV, emergency use, limited hours	Screened/setback; must meet noise limits	Covered under operational/PAD review
Utilities / Water	Considered during PAD review	Must demonstrate adequate electricity/water; potable water prohibited for cooling	"Will-serve" letter; water source documentation	Reviewed during PAD/special approval
Parking &	Not specified in code	Not specified in code	Minimum distance from	Minimum parking ratios

Regulatory Area	Chandler	Marana	Phoenix	Mesa
Transportation	amendment	amendment	transit; streetscape/shaded paths	defined
Enforcement	Conditional on PAD + ongoing noise monitoring	Compliance tied to Specific Plan; annual monitoring	Certificate of occupancy conditional on noise compliance	Civil penalties; escalating fines for repeat violations; habitual offenders may face criminal charges

City of Chandler, AZ

The City of Chandler adopted zoning changes related to data centers on December 23, 2022. Key changes included the addition of a formal definition for "Data Center," described as a facility or portion of a facility housing networked computer systems and telecommunications equipment used for remote storage, processing, and distribution of data.

The new rules established that Data Centers are not permitted to operate in Chandler unless explicitly approved as part of a Planned Area Development (PAD) zoning district. Ancillary Data Centers are allowed if they meet specific conditions: they must occupy no more than 10 percent of the building footprint, serve only the on-site property owner's enterprise functions (not third-party leasing), and may not exist as separate stand-alone structures.

For Data Centers proposed within a PAD, several pre-construction requirements must be met. Property owners are required to notify residents and homeowners' associations within a half-mile radius of the parcel via mail and hold two neighborhood meetings to present project details and sound-mitigation measures. In addition, a third-party acoustic engineer must conduct a baseline sound study to document existing noise levels, particularly at the property line of the nearest residential or noise-sensitive use. Based on this study, the Data Center must be designed and built with sound mitigation features that prevent operational noise from exceeding ambient levels.

After construction, operators are required to conduct a third-party noise study at the time of occupancy to document peak operating noise levels. Annual noise studies must also be conducted for five years following the initial post-construction study, with results submitted to the City within 30 days of each anniversary. Operators may also be required, upon City request, to provide an on-site neighborhood liaison between 8:00 a.m. and 10:00 p.m. daily to respond to noise complaints. If backup power generators are used, operators must maintain a public website announcing their operation times (including testing), provide at least 24 hours advance notice, and restrict routine operation to weekdays between 9:00 a.m. and 5:00 p.m., excluding holidays, except in the event of a power outage.

Town of Marana, AZ

The Town of Marana adopted new regulations for data centers in December 2024. These changes include the addition of a definition for "Data Center," now described as a facility used primarily for the storage, management, processing, and transmission of digital data. This definition includes computer and network equipment, servers, and associated utility infrastructure such as air handlers, power generators, and water cooling systems.

Within the updated use matrix, data centers are prohibited as a principal use in all standard Town zones. They may, however, be permitted as a principal use if authorized in a Specific Plan or Specific Plan

Amendment adopted through the normal rezoning process, which can designate geographic areas for data center development. As accessory use, data centers are permitted in the Light Industrial (LI), Heavy Industrial (HI), and legacy zoning districts, provided they meet specific requirements. These include occupying no more than 15 percent of the site, serving only the on-site property owner's enterprise functions (not third-party leasing), and complying with development standards for accessory use data centers.

Applications for a Specific Plan or amendment that proposes a data center must include several items. These requirements include a baseline noise study with a noise contour exhibit, documentation from the utility provider confirming sufficient electric power, an assessment of future energy needs, and an estimate of annual water consumption. Applicants must also provide documentation from the water provider confirming adequate resources, and either demonstrate compliance or request a waiver with justification.

The Town also established development regulations for principal use data centers, unless waived by council, and for certain accessory uses. Noise attenuation standards require a baseline noise study by a third-party acoustic engineer with a contour exhibit. Maximum permissible sound levels at property lines are established by adjacent zoning: 55 dBA daytime and nighttime for residential or mixed-use areas, and 72 dBA daytime and 65 dBA nighttime for industrial areas. Data centers must be designed with mitigation measures to ensure these limits are not exceeded. Post-construction noise studies are required before a certificate of occupancy is issued, followed by annual studies for five years and additional studies upon request. Failure to comply may prevent issuance of a permanent certificate of occupancy.

Water requirements prohibit the Marana Water Department from supplying potable water for cooling systems or humidity control. Developers must demonstrate access to an alternative water source. Site design standards also apply to principal and some accessory uses. These include orienting principal facades to primary roads and screening loading docks from public view, with no maximum lot coverage. Setbacks must be at least 400 feet from residential or noise-sensitive properties and at least 100 feet from other non-industrial properties. Backup diesel generators must be Tier IV or newer and used only for emergencies, with testing limited to weekdays between 8:00 a.m. and 5:00 p.m. (excluding emergencies). Mechanical equipment and substations must be screened using vegetation, landscaping, or solid walls at least 10 feet high, with chain-link fencing prohibited. Ground-mounted equipment is not allowed in front yards, and mechanical equipment near residential areas must be screened on all sides by an acoustic barrier. Electric power lines, except transmission lines of 48kV or more, must be placed underground. Landscape buffers are required, with a minimum of 50 feet for agricultural or commercial properties and 100 feet for residential or mixed-use properties. Fencing is allowed, but chain-link and barbed wire are prohibited along public or private street frontages.

The standards also establish detailed building design requirements. Buildings must incorporate variation in massing and scale, such as footprint shifts or changes at the ground plane, to reduce visual bulk. Maximum height is set at 55 feet, with an additional 10 feet allowed for screened rooftop mechanical equipment, though exceptions apply to utility substations. Principal facades facing public roads or non-industrial properties must include design elements such as differentiated surfaces, fenestration, varied materials or colors, and step-backs or recesses of at least two feet. Each principal facade must include at least 20 percent fenestration, while main entryways must be distinguished by materials, patterns, textures, or accent features that project or recess from the building plane. Exterior colors must be neutral and low contrast, with accent colors limited to complementary tones. No more than three primary

materials may be used, and at least five architectural features such as overhangs, canopies, or tower elements must be incorporated into the design.

City of Phoenix, AZ

On July 2, 2025, the City of Phoenix adopted new regulations for data centers. The ordinance introduced a definition for "Data Center" as a facility primarily for data services, including storage, processing, management, and transmission of digital data. A facility is not considered a data center if it occupies less than 10 percent of the gross floor area of all on-site buildings, is used exclusively for the property owner's enterprise functions, and does not lease services to third parties.

Data centers are permitted in the C-2 (Intermediate Commercial), C-3 (General Commercial), CP/GCP (Commerce Park/General Commerce Park), A-1 (Light Industrial), and A-2 (Industrial) zoning districts, but only with approval of a Special Permit. To support these changes, Phoenix adopted new Data Center-specific design guidelines which establish standards for setbacks, landscaping, architecture, and streetscapes. All mechanical equipment, such as transformers and generators, must be set back at least 150 feet from abutting rights-of-way or residentially zoned property and screened either by a building integrated into the design or a decorative wall with varied colors, materials, patterns, textures, or art. A minimum 30-foot-wide landscape setback must surround the perimeter, planted with two staggered rows of large canopy shade trees, shrubs, and groundcovers to achieve at least 75 percent live coverage.

Architectural standards require that facades exceeding 100 feet include embellishments such as recesses, pilasters, or window fenestration. All sides of the building must incorporate variation in materials, colors, patterns, textures, height, or art, with main entrances clearly differentiated by accent features and recessed or projected design. Streetscapes must provide a minimum 6-foot-wide detached sidewalk separated from the curb by an 8-foot-wide landscaped strip planted with large canopy shade trees, shrubs, and ground covers for 75 percent live coverage. All existing overhead utilities within abutting rights-of-way must be relocated underground unless exempted through a technical appeal. Additionally, on-site pedestrian pathways must be 75 percent shaded, while adjacent multi-use trails must be 50 percent shaded at tree maturity.

The new Special Permit requirements also establish performance standards. Data centers must be located at least 2,640 feet (half a mile) from an approved high-capacity transit station. Preliminary site plan approval requires a written "will-serve" letter from a local utility provider confirming sufficient energy capacity within two years. For any site located within 300 feet of residential zoning, noise standards apply. Developers must demonstrate that projected noise levels, including mechanical equipment, will not exceed existing ambient noise levels by more than five percent. A third-party acoustic engineer must conduct a baseline noise study prior to or concurrent with the preliminary site plan, and noise mitigation measures must be incorporated as conditions of final approval. Certificates of occupancy will not be issued if operational noise exceeds the allowable threshold. All data centers must comply with the general design guidelines as well as the new data center-specific standards.

City of Mesa, AZ

On July 8, 2025, the City of Mesa adopted new regulations establishing "Data Center" as a distinct land use. A Data Center is defined as a facility, or portion of a facility, whose principal use is to store and manage computer systems, servers, networking equipment, and components related to digital data operations. This definition also includes related infrastructure, office space, and staff areas. Digital data operations encompass a range of activities, including artificial intelligence, blockchain technology, cryptocurrency mining, computational modeling, weather modeling, and genome sequencing.

To implement the new land use, Mesa amended its zoning ordinance and land use tables. Data Centers are generally prohibited as a principal use by right but may be permitted through a special review process in Employment Districts. Additionally, Data Centers as a principal use are only allowed if specifically authorized by the City Council through approval of a Planned Area Development (PAD) Overlay District, used in combination with General Industrial or Heavy Industrial zoning. They may also qualify as an accessory use in Commercial and Employment Districts under specific conditions.

Mesa also amended the PAD Overlay District regulations by repealing and adopting new sections that revise its purpose, land use regulations, and development standards. The amendments enhance flexibility by explicitly allowing the City Council to modify land use regulations through a PAD to authorize uses not previously contemplated in the Zoning Ordinance.

Alongside these zoning changes, the City adopted new development and operational standards for data centers. A new minimum parking requirement was added: one space per 5,000 square feet for the first 200,000 square feet of development, and one space per 10,000 square feet thereafter. The ordinance also revised the definition of "Indoor Warehousing and Storage" to explicitly exclude Data Centers, nullifying a prior zoning interpretation that had classified them as such except for parcels where a waiver applies.

A waiver of the enforcement process was introduced for property owners whose property value or use rights were reduced by the new law. Eligible properties zoned for employment or industrial uses or located in specific land use groupings may request a binding waiver to develop a data center without PAD approval, as though the Data Center law had not been adopted. This waiver does not exempt properties from compliance with other development standards. Projects with prior approvals or complete applications submitted before the ordinance's effective date may proceed under the previous Zoning Ordinance, while new projects must comply with the updated provisions. Data centers within a specific planned community are exempt from the new requirements.

Code Amendment related to Large-Scale Data Center Regulations – This is the first of two anticipated Planning Commission Study Sessions to review Mayor and Council's request for data center regulations. At the first Study Session staff seeks to highlight approaches used by other jurisdictions, outline the community engagement process, and gather feedback from the Commission. PDSD staff will present a draft code amendment for the Planning Commission to review at a future Study Session, following the Technical Advisory Committee (TAC) meetings and a community engagement process. The TAC will make recommendations on technical aspects of the proposed code amendment, which will then be considered through the community outreach process.

Items that are being considered for inclusion in the proposed amendment include the following:

- Data center definition, including a size threshold for large-scale data centers;
- Establishing zoning districts where large-scale data centers are permitted;
- Establishing use specific standards for large-scale data centers;
- Mayor and Council Special Exception process for large-scale data centers.

Community Outreach

A significant amount of outreach has taken place for the Project Blue proposal, as described above. Building on the engagement that has already occurred, PDSD will engage stakeholders and the broader community around citywide standards for large-scale data centers. The outreach process will be

designed to involve both technical experts and community members. Key components will include the formation of a Technical Advisory Committee (TAC) as well as broader community engagement. The TAC will bring together subject matter experts from multiple disciplines related to data centers to inform the development of the proposed regulations.

This process is intended to include background information on the types of items zoning can and cannot regulate. This effort will also include an explanation of what regulations have been established for data centers, as well as clarifying which entities will oversee these regulations and how they will be implemented. In addition, the effort will focus on collecting input on community concerns and priorities related to data centers and documenting the feedback received to date.

The graphic below shows the approximate code update timeline:

Plan Tucson Consideration(s) – *Plan Tucson* does not specifically address the location of large-scale data centers, as this land use did not exist when the Plan was adopted in 2013. However, the Plan does address impacts to the Economic Environment, the Natural Environment, and the Built Environment, which are applicable to the location of large-scale data centers and any sustainability features.

- **Water Resources** Policy WR3 – Expand effective water efficiency and conservation programs for City operations and for the residential, commercial, and industrial sectors.
- **Water Resources** Policy WR4 – Ensure an adequate amount of water to meet the needs of riparian ecosystems.
- **Water Resources** Policy WR6 – Integrate land use and water resources planning.
- **Water Resources** Policy WR10 – Continue to manage the City's Water Service Area, considering service area expansion only when it furthers the long-term social, economic, and environmental interests of City residents.
- **Green Infrastructure** GI1 – Encourage green infrastructure and low-impact development techniques for stormwater management in public and private new development and redevelopment, and in roadway projects.
- **Environmental Quality** Goal EQ1 – Strive for a "zero waste" model for solid and hazardous waste through integrated waste management and waste reduction.
- **Environmental Quality** Goal EQ4 – Reduce and mitigate noise in neighborhoods, along roadways, and near industrial and airport zones through enforcement of existing codes, use of noise reducing and mitigating materials and designs, and deliberative decisions regarding

compatible land uses and related zoning.

- **Environmental Quality** Goal EQ6 – Promote recycling as well as the responsible disposal of electronics and hazardous waste and reduce other environmentally-damaging forms of waste.
- **Energy and Climate Resilience** EC2 – Encourage increase energy efficiency in new private building construction and facilitate the transition of new private construction toward net-zero buildings.
- **Energy and Climate Resilience** EC6 – Facilitate community use of solar power and other renewable energy sources.7.3.
- **Industrial Areas Building Block** LT28.7.3 – Support environmentally sensitive design that protects the integrity of existing neighborhoods, complements adjacent land uses, and enhances overall function and visual quality of the street, adjacent properties, and the community.
- **Jobs and Workforce Development** JW1 – Recognize and enhance the three interrelated building blocks of a strong economy: a high quality of life and vibrant urban environment, a skilled and talented workforce, and a diversified, high wage job market.
- **Jobs and Workforce Development** JW3 – Increase and promote environmentally sensitive businesses, industries, and technologies, including desert adapted technologies and goods and services tailored to the special needs of Tucson as a desert community.
- **Jobs and Workforce Development** JW5 – Expand opportunities to fulfill local needs with locally produced goods and services to help Tucson capture a greater market share and advance a sustainable economy.

Attachments:
A. August 6, 2025 Mayor and Council Legal Action Report
B. Zoning Administrator Determination Letter for Large-Scale Data Centers

CITY OF TUCSON

PLANNING AND DEVELOPMENT SERVICES DEPARTMENT

ZONING ADMINISTRATION

September 9, 2025

Koren Manning, Interim Director
Planning and Development Services

Sent via email to: koren.manning@tucsonaz.gov

SUBJECT: Zoning Administrator Determination
Large-scale data centers
Applicability - Citywide
Activity # TZ-CMP-0925-00157

Dear Director Manning:

I am in receipt of your email requesting clarification regarding the appropriate land use classification for large-scale data centers. This request is also related to directions received from the Mayor and Council.

This letter serves as a Determination pursuant to Unified Development Code (UDC) 1.5.1.A and the classification of an undefined land use pursuant to UDC 11.3.1.B: "*Where a specific use does not conform to the wording of any Land Use Class description or conforms to the wording of two or more Land Use Class descriptions, the Zoning Administrator shall determine the most appropriate Land Use Class for that use. Such a determination is an administrative decision.*"

Background

Large-scale data centers have become an increasingly prevalent land use in recent years, as technology, computing, and data needs have rapidly shifted. Numerous facilities have been built in the Phoenix region. In recent code amendments regarding data centers, Phoenix, Chandler, Mesa, and Marana have broadly defined data centers as:

A facility, or a portion of a facility, whose principal use is to store and manage computer systems, servers, networking equipment, and components related to digital data operations. These operations include the storage, processing, and distribution of digital information and may encompass activities related to artificial intelligence, blockchain technology, cryptocurrency mining, computational modeling, weather modeling, and genome sequencing, among other computationally intensive applications.

The facility typically houses networked computer systems and telecommunications equipment used for remote storage, processing, and distribution of data. It also includes related infrastructure, office space, and staff areas necessary to support digital data

operations. This associated infrastructure can include air handlers, power generators, water cooling and storage facilities, and utility substations to support sustained operations. A facility is generally not considered a data center if it does not exceed 10% of the gross floor area of all on-site buildings, is used to serve the enterprise functions of the on-site property owner and is not used to lease data services to third parties.

Analysis

I have reviewed relevant sections of the UDC and determined that large-scale data centers are most directly correlated to a Utilities: Generating System land use, and as such, have determined that this is the most appropriate land use class for this use under the current UDC. This is based on the following analysis.

When evaluating an undefined land use, the approach is to examine different defined land uses and determine the appropriateness of defining the new land use as an existing land use. This appropriateness is based upon 1) similarity of the uses and 2) the implied impacts based upon the permitted locations and use specific standards.

During the preliminary review, data centers were evaluated as potentially an Industrial, Storage, or Utilities land use. Although some characteristics of large-scale data centers can be found in numerous other uses, most did not capture the scale and potential impacts of the use. The exception being a Generating System land use, which is defined in UDC 11.3.11.B as: *"A facility that produces energy. Typical uses include electrical generating plants."*

Although this land use would typically include an electrical generating plant, the intensity of large-scale data centers is similar to a Generating System for several reasons. Large-scale data centers generate massive amounts of a product to be distributed throughout an interconnected system. Like a utility use, they provide a service which is becoming increasingly necessary to daily life, but which was not a contemplated use when the current UDC land uses were defined. Additionally, large-scale data centers are integrated into multiple existing utility systems, including water, electricity, and internet providers, which puts a large demand on those utilities.

Generating Systems are not currently permitted by right in any zone but may be permitted through establishment of a Planned Area Development (PAD). This indicates that Generating Systems are considered a unique land use with potential impacts that may require mitigation through the establishment of specialized zoning with community input and Mayor and Council approval. The PAD process typically takes 6-12 months from submittal to adoption.

Conclusion

In summary, large-scale data centers will be considered a Generating System land use. Any potential data center facility will be evaluated within the broad definition established in

this letter. Any facility that is an accessory use, also as defined within this letter, will not be considered a Generating System. Lastly, any small-scale data center of approximately less than 50,000 square feet in size will likewise not be considered a Generating System.

A future UDC code amendment, as directed by Mayor and Council during the study session of August 6, 2025, will address large-scale data centers and will establish a defined use, appropriate zones, necessary use specific standards, and the approval process for this use. Large-scale data centers will likely fall within the Utilities Use Group. This UDC code amendment will follow the procedures defined in the UDC which includes a public hearing with the Planning Commission as well as Mayor and Council. In addition to the public process required by the UDC, PDSD will conduct community engagement to collect input which will inform a proposed code amendment to regulate this use.

Should you require further zoning information regarding this matter, please contact me via e-mail at Elisa.Hamblin@tucsonaz.gov or my direct telephone number (520) 837-4966.

This determination may be appealed to the Board of Adjustment per UDC Section 1.5.1.E. Please contact Mark Castro for questions about the appeal process via email at Mark.Castro@tucsonaz.gov or by telephone at (520) 837-4979.

Sincerely,

Elisa Hamblin, AICP
Zoning Administrator

CITY OF TUCSON
PLANNING & DEVELOPMENT SERVICES

September 17, 2025

Large-Scale Data Center UDC Amendment

Planning Commission Study Session

Background

- Large-scale data centers emerging land use nationwide
- Increased need for data centers due to ai, cloud computing and support of wired devices
- “Project Blue” considered by Mayor & Council, did not move forward
  - Mayor and Council requested UDC amendment for large-scale data centers, and
  - Separate Large Quantity Water Users ordinance

Present Considerations

- UDC currently addresses data centers (smaller) as a storage use
- Large-scale data centers not covered by the UDC
- Zoning Administrator Determination that large-scale data centers are currently classified as Generating System Land Use
  - Not permitted by right in any zone, only permitted by PAD
- Large Quantity Water User ordinance was adopted by Mayor and Council on August 19, 2025

Specific Mayor and Council Direction

- UDC Amendment for Large-Scale Data Centers requested by Mayor and Council at the August 6, 2025 meeting
- Include a Clear Definition of Data Center
- Zoning Examiner Legislative Procedure with Mayor and Council Special Exception
- Informed by Examples of other Jurisdictions

Data Center Regulations in other Jurisdictions

CITY OF TUCSON
PLANNING & DEVELOPMENT SERVICES

City of Chandler

Regulatory Area	Requirements
Definition	Broad definition; networked systems, telecom, data storage/processing
Where Allowed	Principal use only in PAD; accessory with limits
Community Input	Neighborhood notice + meetings required
Noise Requirements	Baseline + post-construction + annual monitoring; mitigation; liaison
Site & Building Design	Setbacks, screened equipment, landscaping, architectural treatments
Backup Power / Generators	Restricted hours, notice, sound mitigation
Utilities / Water	Considered during PAD review
Parking & Transportation	Not specified in code amendment
Enforcement	Conditional on PAD + ongoing noise monitoring

Town of Marana

Regulatory Area	Requirements
Definition	Broad; servers, utilities, digital data management
Where Allowed	Principal via Specific Plan; accessory in LI/HI
Community Input	Neighborhood notice required
Noise Requirements	Baseline + post-construction + annual monitoring; max levels by use
Site & Building Design	Setbacks, screening, underground utilities, landscape buffers, building mass/height limits
Backup Power / Generators	Diesel Tier IV, emergency use, limited hours
Utilities / Water	Must demonstrate adequate electricity/water; potable water prohibited for cooling
Parking & Transportation	Not specified in code amendment
Enforcement	Compliance tied to Specific Plan; annual monitoring

City of Phoenix

Regulatory Area	Requirements
Definition	Includes only primary-use facilities; small owner-only uses excluded
Where Allowed	Only select zones with Special Permit
Community Input	Noise mitigation required near residential; no formal meetings
Noise Requirements	Noise study within 300 ft of residential; mitigation required; max 5% increase
Site & Building Design	Setbacks (150 ft mechanical), landscape buffers, façade treatments, streetscape, shaded paths
Backup Power / Generators	Screened/setback; must meet noise limits
Utilities / Water	“Will-serve” letter; water source documentation
Parking & Transportation	Minimum distance from transit; streetscape/shaded paths
Enforcement	Certificate of occupancy conditional on noise compliance

CITY OF TUCSON
PLANNING & DEVELOPMENT SERVICES

City of Phoenix

City of Mesa

Regulatory Area	Requirements
Definition	Very broad; includes advanced operations (AI, blockchain, crypto, modeling)
Where Allowed	Principal via PAD Overlay; accessory allowed under conditions
Community Input	PAD review includes input; not explicitly required
Noise Requirements	General operational compliance; enforcement tied to occupancy
Site & Building Design	Setbacks, PAD standards, landscape buffers, massing/façade treatments; flexible via PAD
Backup Power / Generators	Covered under operational/PAD review
Utilities / Water	Reviewed during PAD/special approval
Parking & Transportation	Minimum parking ratios defined
Enforcement	Civil penalties; escalating fines for repeat violations; habitual offenders may face criminal charges

Key Takeaways from Other Jurisdictions

- All jurisdictions require some form of entitlements approval process, such as a PAD
- All jurisdictions require demonstration of adequate utility capacity, including water and electricity
- Marana prohibits use of potable water for cooling
- Chandler has the most robust engagement, requiring both notice and neighborhood meetings
- Mesa has the most extensive definition, covering different technologies such as ai, blockchain, and crypto
- Phoenix includes more robust noise mitigation

Community Engagement

- Technical Advisory Committee
  - Committee to inform development of regulations for large-scale data centers
  - Comprised of subject matter experts from multiple disciplines related to data centers
- Community Meetings
  - Hold both in person and virtual meetings to gather community feedback

CITY OF TUCSON
PLANNING & DEVELOPMENT SERVICES

Considerations for Tucson UDC Amendment

- Data center definition, including a size threshold for large-scale data centers
- Required Mayor and Council Special Exception process for large-scale data centers
- Establishing zoning districts where large-scale data centers are permitted
- Potential use specific standards
- Other considerations as identified through Planning Commission feedback, the Technical Advisory Committee, and community engagement process

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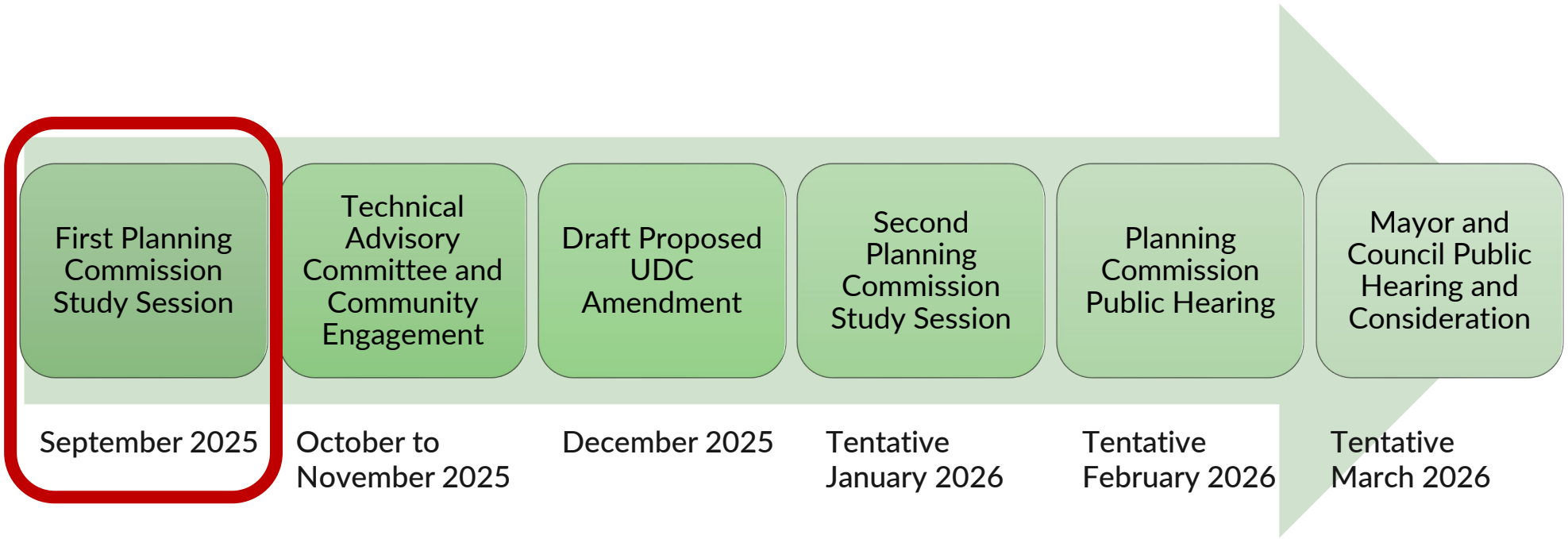
Data Centers UDC Amendment Timeline



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Planning Commission Discussion

Staff requests the Planning Commission provide feedback on potential Unified Development Code (UDC) amendments related to large scale data centers.

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Thank You

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