




City of Phoenix

PLANNING AND DEVELOPMENT DEPARTMENT

To: Alan Stephenson
Deputy City Manager

Date: June 26 2025

From: Joshua Bednarek 
Planning and Development Director

Subject: ITEM I08 ON THE JULY 2, 2025, FORMAL AGENDA – PUBLIC HEARING -
AMEND CITY CODE - ORDINANCE ADOPTION – DATA CENTERS - Z-TA-2-25-
Y (ORDINANCE G-7396) - CITYWIDE

Item I08, is a request to hold a public hearing on a proposed text amendment Z-TA-2-25-Y to amend the Phoenix Zoning Ordinance Chapter 2, Section 202 (Definitions) to add a definition for data centers; amend Chapter 5, Section 507 Tab A.II.D (Guidelines for Design Review, City-Wide Design Review Guidelines, Specialized Uses) to modify the section title and add design standards for data centers; and amend Chapter 6, Section 647 (Special Permit Uses), Section 647.A.2 to add data centers within 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, with a Special Permit and performance standards.

Fourteen Village Planning Committees have considered the request. Two VPCs recommended approval, per the staff recommendation; three VPCs recommended approval, per the staff recommendation, with direction; one VPC recommended approval, per the staff recommendation, with a modification; one VPC recommended approval, per the staff recommendation, with a modification and direction; three VPCs recommended denial; four VPCs recommended denial, with direction; and one VPC did not have quorum.

The Planning Commission heard this item on June 5, 2025, and recommended approval, per the memo from the Planning and Development Department Deputy Director dated June 4, 2025, by a vote of 9-0.

The proposed regulatory framework in Z-TA-2-25 responds to the challenges data centers pose to the health and safety of Phoenix residents. The regulatory framework is also consistent with City Council adopted policy and initiatives regarding access to healthy food, health care services and heat response. Staff have compiled an overview of the health and safety risks data centers present along with the City Council policy and initiative intersections in a report. The report is attached to this memo as Exhibit A.

Exhibit B attached to this memo is a copy of the proposed text amendment language as approved by the Planning Commission.

Since the Planning Commission hearing, staff have continued to engage with industry stakeholders and partners regarding their comments on the proposed text amendment language. In response to those comments staff propose changes to the draft text amendment provisions.

The first change is the addition of language that clarifies that applicants for Special Permits will be required to comply with additional stipulations, or any studies related to fire protection, water consumption, power consumption on-site energy generation, noise and hazardous materials that may be required as part of the Special Permit review. The new language reinforces that the studies will be required and that applicants will be required to adhere to their findings through stipulations to the Special Permit.

The second change updates the noise standards for data center special permits by establishing maximum noise levels as opposed to ambient noise levels. There is also a change in the same section regarding required compliance with the noise study or the specific noise standard stipulated as a condition of the approved Special Permit. The Planning Commission approved the new language regarding the specific noise standards but the subsequent section regarding it being a condition of issuance for the certificate of occupancy was not amended. This change makes both sections consistent. Many stakeholders requested that a defined noise level be utilized instead of the ambient noise background standard. Staff worked with a noise consultant to develop the proposed standard to address that concern.

Staff recommend approval, per the modified text amendment language in **CAPITAL** and **BOLD** font below:

Amend Chapter 2, Section 202 (Definitions) to add a definition for data centers.

Section 202. Definitions.

DATA CENTER: A FACILITY USED PRIMARILY FOR DATA SERVICES, INCLUDING THE STORAGE, PROCESSING, MANAGEMENT, AND TRANSMISSION OF DIGITAL DATA. A FACILITY SHALL NOT BE CONSIDERED A DATA CENTER WHEN 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.

Amend Chapter 5, Section 507 Tab A.II.D (Guidelines for Design Review, City-Wide Design Review Guidelines, Specialized Uses) to modify the section title and add design standards for data centers, and to read as follows:

Section 507 Tab A. Guidelines for design review.

- II. CITY-WIDE DESIGN REVIEW GUIDELINES. The design review guidelines indicate ~~specific standards of implementation and are categorized as Requirements (R), Presumptions (P), or Considerations (C).~~ INDICATED WITH THE MARKERS (R), (R*), (P), (T), AND (C) SHALL BE APPLIED AND ENFORCED IN THE SAME MANNER AS INDICATED IN SECTION 507. ITEMS NOT INDICATED WITH AN (R), (R*), (P), (T), AND (C) SHALL BE TREATED AS (R).

D. **Specialized Uses.**

5. **DATA CENTERS.**

- 5.1. **SETBACKS.** ALL MECHANICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO ELECTRICAL TRANSFORMERS AND GENERATORS, SHALL BE SET BACK A MINIMUM OF 150 FEET FROM ABUTTING RIGHT-OF-WAY OR RESIDENTIALLY ZONED PROPERTY; IN ADDITION TO THE FOLLOWING: (R*)

5.1.1. THE EQUIPMENT MUST BE FULLY SCREENED BY A BUILDING THAT IS VISUALLY INTEGRATED WITH THE DESIGN OF THE OVERALL DEVELOPMENT;
OR

5.1.2 THE EQUIPMENT MUST BE FULLY SCREENED BY A DECORATIVE SCREEN WALL HAVING VARIATIONS IN COLORS, MATERIALS, PATTERNS, TEXTURES, AND/OR AN ART INSTALLATION SUCH AS A MURAL.

RATIONALE: GROUND EQUIPMENT SHOULD BE ENCLOSED AND SET BACK TO PROVIDE VISUAL SCREENING AND REDUCE NOISE LEVELS.

- 5.2. **LANDSCAPE SETBACK.** A MINIMUM 30-FOOT WIDE PERIMETER LANDSCAPE SETBACK SHALL BE PROVIDED, SUBJECT TO THE FOLLOWING:

5.4.1. TWO STAGGERED ROWS OF LARGE CANOPY SHADE TREES PLANTED 20 FEET ON CENTER OR IN EQUIVALENT GROUPING SHALL BE PROVIDED, AS APPROVED BY THE PDD LANDSCAPE ARCHITECT. (T)

5.4.2 FIVE 5-GALLON SHRUBS PER TREE SHALL BE PROVIDED, AT A MINIMUM. (T)

5.4.3 GROUNDCOVERS SHALL BE PROVIDED TO SUPPLEMENT THE TREES AND SHRUBS SO THAT A MINIMUM 75% LIVE COVERAGE IS ATTAINED. (T)

RATIONALE: AN ENHANCED LANDSCAPE SETBACK WITH A DENSE NUMBER OF TREES AND SHRUBS HELPS TO MITIGATE NEGATIVE VISUAL IMPACTS.

5.3. **ARCHITECTURE.**

5.3.1. BUILDING FACADES THAT EXCEED 100 FEET SHOULD CONTAIN ARCHITECTURAL EMBELLISHMENTS AND DETAILING SUCH AS TEXTURAL CHANGES, PILASTERS, OFFSETS, RECESSES, WINDOW FENESTRATION (INCLUDING FAUX WINDOWS), SHADOW BOXES, AND OVERHEAD/CANOPIES. (P)

5.3.2. ALL SIDES OF A BUILDING/STRUCTURE SHOULD PROVIDE AN ENHANCED DESIGN INCLUDING A VARIATION IN COLORS, MATERIALS, PATTERNS, TEXTURES, HEIGHT, WINDOWS (INCLUDING FAUX WINDOWS), ARTICULATION, AND/OR ART INSTALLATIONS. (P)

5.3.3. EACH MAIN ENTRANCE SHOULD INCLUDE A FEATURE THAT DIFFERENTIATES IT FROM THE REMAINDER OF THE BUILDING FACADE BY A CHANGE IN BUILDING MATERIAL, PATTERN, TEXTURE, COLOR, AND/OR ACCENT MATERIAL, AND THAT PROJECTS OR IS RECESSED FROM THE ADJOINING BUILDING PLANE. (P)

5.3.4. ARCHITECTURAL DESIGN SHOULD TAKE INTO ACCOUNT THE SOLAR CONSEQUENCES OF BUILDING HEIGHT, BULK, AND AREA. (C)

RATIONALE: DATA CENTER BUILDINGS SHOULD INCLUDE ENHANCED ARCHITECTURAL DESIGN FEATURES IN ORDER TO PROVIDE VISUAL INTEREST, TO BREAK UP THE MASS OF THE BUILDING/STRUCTURE AND TO PROVIDE AN ENHANCED DESIGN INTERFACE WHERE VISIBLE FROM A RIGHT-OF-WAY AND/OR RESIDENTIALLY ZONED PROPERTY.

5.4. **STREETSCAPE.** FOR EACH STREET FRONTAGE, A MINIMUM 6-FOOT-WIDE DETACHED SIDEWALK SEPARATED FROM THE CURB BY A MINIMUM 8-FOOT-WIDE LANDSCAPE STRIP, SUBJECT TO THE FOLLOWING:

5.4.1. SINGLE-TRUNK, LARGE CANOPY SHADE TREES, PLANTED 20 FEET ON CENTER OR IN EQUIVALENT GROUPINGS, SHALL BE PROVIDED ON BOTH SIDES OF THE SIDEWALK AND PROVIDE A MINIMUM OF 75% SHADE. (T)

5.4.2 A MIXTURE OF SHRUBS, ACCENTS, AND VEGETATIVE GROUNDCOVERS WITH A MAXIMUM MATURE HEIGHT OF TWO FEET SHALL BE DISTRIBUTED THROUGHOUT THE LANDSCAPE AREAS TO ACHIEVE A MINIMUM OF 75% LIVE COVERAGE. (T)

5.4.3 ALL NEW OR RELOCATED ELECTRIC LINES 12 KV AND SMALLER, COMMUNICATIONS AND CABLE TELEVISION AND ALL ON PREMISE WIRING SHALL BE PLACED UNDERGROUND IN ALL DEVELOPMENTS WHERE VISIBLE FROM STREETS OR ADJOINING PROPERTIES, UNLESS OTHERWISE APPROVED THROUGH A TECHNICAL APPEAL. (T)

RATIONALE: AN ENHANCED STREETSCAPE HELPS TO SOFTEN THE EDGE OF THE DEVELOPMENT OF A LARGER NON-RESIDENTIAL USE.

5.5. **SHADE.**

5.5.1. ALL ON-SITE PEDESTRIAN PATHWAYS SHOULD BE SHADED A MINIMUM OF 75% BY A STRUCTURE, LANDSCAPING, OR A COMBINATION OF THE TWO. (P)

5.5.2 DEDICATED MULTI-USE TRAILS ADJACENT TO THE SITE SHOULD BE SHADED A MINIMUM OF 50% AT TREE MATURITY. (P)

RATIONALE: ENHANCED PEDESTRIAN COMFORT SHOULD BE PRIORITIZED ADJACENT TO AND WITHIN DATA CENTER DEVELOPMENTS ACROSS THE CITY.

Amend Chapter 6, Section 647 (Special Permit Uses), Section 647.A.2 to add data centers within 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, with performance standards to read as follows:

Section 647. Special Permit Uses.

- A. **Permitted uses.** There shall be permitted, in addition to the uses enumerated in the several use districts, certain additional uses subject to the requirements of this section.

2. A special permit may be granted by the Council upon recommendation of the Commission to establish the following uses in the use districts named:

KK. DATA CENTERS IN THE C-2, C-3, CP/GCP, A-1 AND A-2 ZONING DISTRICTS, SUBJECT TO THE FOLLOWING **REQUIREMENTS. THE APPLICANT FOR THE SPECIAL PERMIT WILL BE REQUIRED TO COMPLY WITH ADDITIONAL STIPULATIONS OR STUDY REQUIREMENTS TO ADDRESS HEALTH AND SAFETY CONCERNS, WHICH MAY INCLUDE BUT ARE NOT LIMITED TO FIRE PROTECTION, WATER CONSUMPTION, POWER CONSUMPTION, ON-SITE ENERGY GENERATION, NOISE, AND HAZARDOUS MATERIALS, AND TO MITIGATE ADVERSE IMPACT TO EXISTING USES. FAILURE TO COMPLY WITH THE THESE REQUIREMENTS MAY BE GROUNDS FOR REVOCATION PER SECTION 504.1.C.6.b.**

- (1) THE DEVELOPMENT SHALL BE NO CLOSER THAN 2,640 FEET FROM AN APPROVED HIGH-CAPACITY TRANSIT STATION.

- (2) PRELIMINARY SITE PLAN APPROVAL WILL NOT BE GRANTED FOR A DATA CENTER UNTIL SUCH TIME THAT A LOCAL UTILITY COMPANY PROVIDES A CONTRACTUAL AGREEMENT THAT AFFIRMS ITS CAPACITY AND COMMITMENT TO SERVE THE ENERGY DEMAND FOR THE PROPOSED DATA CENTER. THE AGREEMENT FROM THE UTILITY COMPANY SHALL BE SUBMITTED TO PDD CONCURRENT WITH THE PRELIMINARY SITE PLAN.
- (3) THE FOLLOWING SHALL APPLY ~~WHEN THE SITE IS LOCATED WITHIN 300 FEET OF A RESIDENTIAL ZONING DISTRICT:~~
 - (a) PRELIMINARY SITE PLAN APPROVAL FOR A DATA CENTER SHALL NOT BE GRANTED UNLESS IT HAS BEEN DEMONSTRATED THAT THE DATA CENTER, INCLUDING ALL ON-SITE MECHANICAL EQUIPMENT AND FACILITIES, WILL NOT EXCEED **A SOUND LEVEL OF 55 DB(A) WHEN MEASURED AT THE PROPERTY LINE OF THE NEAREST RESIDENTIAL ZONING DISTRICT TO THE PROPOSED DATA CENTER PROPERTY BETWEEN THE HOURS OF 7:00 A.M. AND 10:00 P.M. AND 45 DB(A) BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M. THE EXISTING AMBIENT NOISE LEVEL FOR THE SITE BY MORE THAN 5% OR A SPECIFIC NOISE STANDARD MAY BE STIPULATED AS A CONDITION OF AN APPROVED SPECIAL PERMIT.**
 - (b) ~~TO DETERMINE COMPLIANCE WITH THE PRIOR SUBSECTION, THE DEVELOPER SHALL SUBMIT A NOISE STUDY TO PDD PRIOR TO OR CONCURRENT WITH THE PRELIMINARY SITE PLAN. THE NOISE STUDY SHALL BE PERFORMED BY A THIRD-PARTY ACOUSTICAL ENGINEER TO DOCUMENT BASELINE NOISE LEVELS IN THE AREA OF THE PROPOSED DATA CENTER, INCLUDING NOISE LEVELS MEASURED AT THE PROPERTY LINE OF THE NEAREST RESIDENTIAL ZONING DISTRICT TO THE PROPOSED DATA CENTER PROPERTY.~~

- (c) UPON APPROVAL OF THE NOISE STUDY, THE METHODS PROPOSED TO MITIGATE NOISE SHALL BE STIPULATED AS A CONDITION OF FINAL SITE PLAN APPROVAL. A FINAL CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED IF THE **AMBIENT NOISE LEVELS EXCEEDS A SOUND LEVEL OF 55 DB(A) WHEN MEASURED AT THE PROPERTY LINE OF THE NEAREST RESIDENTIALLY ZONED PROPERTY TO THE PROPOSED DATA CENTER PROPERTY BETWEEN THE HOURS OF 7:00 A.M. AND 10:00 P.M. OR 45 DB(A) BETWEEN THE HOURS OF 10:00 P.M. AND 7:00 A.M. THE PRIOR EXISTING NOISE LEVEL BY MORE THAN 5% OR THE SPECIFIC NOISE STANDARD STIPULATED AS A CONDITION OF THE APPROVED SPECIAL PERMIT.**
- (4) THESE REGULATIONS AND THE DESIGN GUIDELINES SET FORTH IN SECTION 507 TAB A.II.D.5., DATA CENTERS ARE NOT APPLICABLE TO DATA CENTERS WHICH HAVE RECEIVED FINAL SITE PLAN APPROVAL; OR A DATA CENTER USE THAT IS SPECIFICALLY LISTED AS A PERMITTED USE OR SPECIFICALLY DISCUSSED IN A COUNCIL ADOPTED PLANNED UNIT DEVELOPMENT NARRATIVE PRIOR TO *[THE EFFECTIVE DATE OF THIS ORDINANCE]*. OTHERWISE, THE DEVELOPMENT IS SUBJECT TO THESE REGULATIONS AND ALL APPLICABLE DESIGN GUIDELINES SET FORTH IN SECTION 507 TAB A, INCLUDING THOSE FOR SECTION II.D.5, DATA CENTERS.

Approved: _____



Alan Stephenson, Deputy City Manager

Exhibit A: Report on Health and Safety Impacts of Data Centers

Exhibit B: Draft Ordinance

HEALTH AND SAFETY IMPACTS: DATA CENTERS

2025

Report prepared by the City of Phoenix Planning and Development Department



This report provides additional information regarding GPA-2-25-Y and Z-TA-2-25. The report outlines health and safety concerns implicated by the evolution of data centers from small 5,800 square-foot office-like buildings to 48-foot-tall industrial buildings on one hundred plus acre parcels with unprecedented energy demands and on-site power generation. The report was compiled with input from the Office of Environmental Programs and the Fire, Community and Economic Development and Information Technology departments.

Growth of Phoenix, and of “Data Centers”

Phoenix continues to be one of the fastest growing cities in the country. According to the U.S. Census Bureau, Phoenix added more than 16,000 residents to its population between July 1, 2023, and July 2024 putting it in the top ten of growth for cities in the country.ⁱ

Phoenix has seen tremendous amounts of investment with this growth in a variety of industries and sectors, including data centers. Based on a review of available data there are more than a dozen existing data centers within Phoenix’s boundaries and there are six data centers in the development review process, with the Planning and Development Department as of the writing of this memo.

As noted in the staff report for Z-TA-2-25-Y, Phoenix does not define nor explicitly address data centers in the Phoenix General Plan and the Phoenix Zoning Ordinance. Historically, city staff considered some data centers as analogous to a general office, or to a telecommunications facility or “telecom hotel.” Some of these comparisons were documented by way of informal interpretations in an administrative process by city staff. However, the concept of a “data center” has changed dramatically over the years, and today’s data centers bear little resemblance to those that were built twenty, ten, or even five years ago.

The activities carried out within today’s data centers have also shifted greatly in the last few years; as described below, an AI data center is a fundamentally different land use when compared to a traditional office or to the old concept of a “telecom hotel,” and it features unique equipment and energy use patterns that create unique threats to public health and safety beyond the borders of the data center property.ⁱⁱ

Data Centers: Change in Scale, Intensity + Health and Safety Impacts

Many of the data centers in Phoenix have been built within the last decade. Within that time frame, they have increased dramatically in scale.ⁱⁱⁱ Fifteen or twenty years ago, a “data center” might fill a few thousand feet of an existing office building, without requiring significant modifications to that building. But one of the more recent data centers built near 40th Street and McDowell Road is more than 80 acres in size and requires the development of a new electrical substation. This change in the scale and intense use of electrical power has necessitated a new definition of “data center” to differentiate it from uses which can no longer be considered analogous and has created the need for new zoning standards that account for the impact this use has on surrounding properties. Given their size, energy demands, and potential desire for onsite energy generation, today’s data centers are not analogous to office uses or telecommunication facilities.

Related to their intense operations, recent incidents across the United States and the world have highlighted the health and safety challenges data centers pose to residents including, but not limited to, strains on energy and water resources, threats to the electrical grids existing users rely upon, increased emissions created by heavy energy consumption, noise, heat, and strain on public safety resources. In addition, data centers pose unique risks to first responders due to their size, sensitivity, and high concentration of batteries and electrical equipment.

Data Center Energy Demand: Significant Risks to the Electrical Grid

Projections provided by the electricity utility providers Arizona Public Service (APS) and Salt River Project (SRP) show that energy demand in the industrial sector of their service areas is anticipated to be more than 90% for data center development (Figure 1). As Phoenix and the region continue to grow, ensuring that there are sufficient energy resources to support a reliable electrical grid, especially during the hot summer months, is one of the greatest challenges facing utility companies and municipalities.

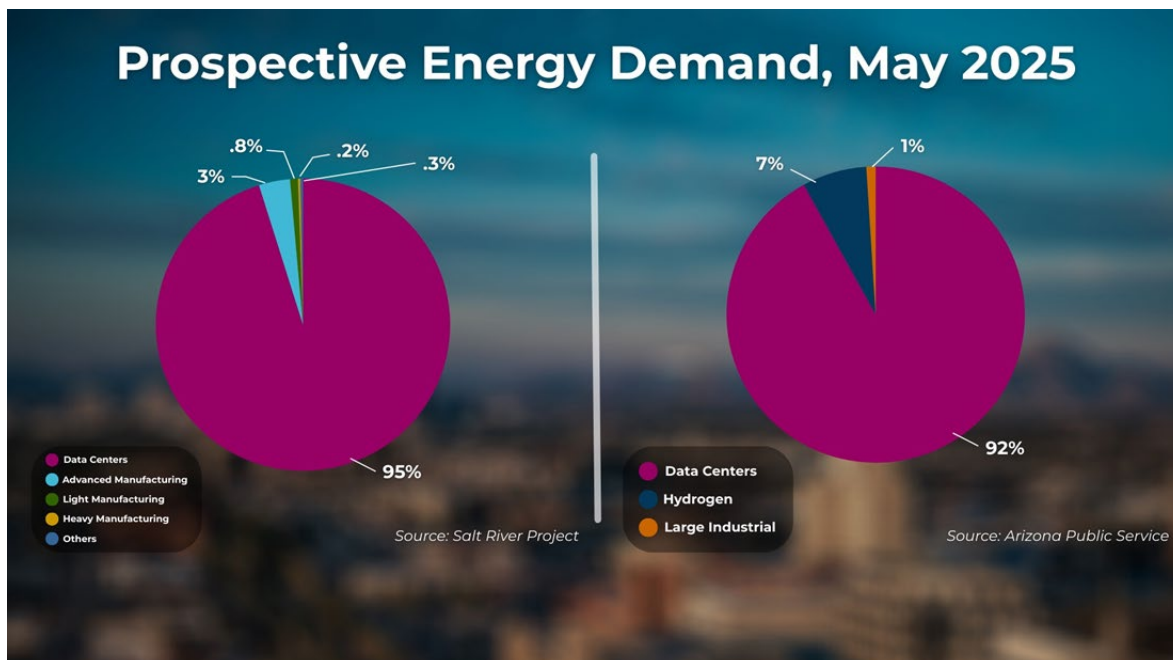


Figure 1: Projected Industrial Energy Demand

In a 2024 updated report by the Lawrence Berkeley National Laboratory, funded by the Department of Energy at the request of Congress, entitled *United States Data Center Energy Usage Report (2016)*, historical data center electrical consumption was reviewed back to 2014, and future demand was projected out to 2028. Of note, the report found that by 2018 data centers would account for 1.9% of all electricity consumption in the United States. The report found that electrical consumption grew at an accelerated rate, with annual growth at 7% from 2014 to 2018, increasing to 18% between 2018 and 2023 and projected to further increase 13%-27% between 2023 and 2028. That translates into data centers consuming 6.7% to 12% of all the electricity in the United States.^{ivv}

The projected growth in Data Centers represents an unprecedented surge in demand for electricity. The Department of Energy has predicted that data center electricity use will double or triple by 2028^{vi}. According to the Arizona Corporation Commission (ACC), Data Center electricity use has increased 67% over the last year and that figure does not include the 170-175 megawatts of product under construction as of the end of 2024.^{vii} For context, according to the ACC, 100 megawatts are enough to power several thousand homes in a day, and Arizona data centers rank 4th in the nation for electricity they consume when compared with data centers in other cities.^{viii}

APS recently indicated that it expects its peak load to jump 40% by 2031 (5 years from now). In late 2024, an APS official explained that the utility “has about 10 GW in pending interconnection requests from data centers, but the utility cannot commit to serving them because it would put existing customers at risk of having poor reliability.”^{ix}

APS provided an update on these figures in response to GPA-2-25-Y and Z-TA-2-25, and as of the date of this report it “is planning to serve 3.3GWs of power to new data center projects. In addition, we have a queue of requests from data centers for approximately 15GWs^{xi}. As APS suggests in its update, the scope of pending data center projects calls for “early-stage coordination with City departments – such as Planning and Development, Water Services, and Economic Development” to understand the demand these projects will have on the grid and “to ensure that new growth proceeds in a manner that is both technically viable and aligned with broader infrastructure capabilities.” Meanwhile, SRP is currently reviewing requests for over 17 GW of load from approximately 60 pending data center projects^{xii}.

The ACC recently opened a new matter to study the likely impacts of data centers on existing utility customers. In opening the matter, its Chairman explained: “Our utilities are currently having a challenging time meeting the generational challenges of existing customers. We need to explore potential solutions for developing behind-the-meter solutions to meet large customer needs and growth that don't jeopardize the integrity of our grid.”^{xiii xiv}

Data Center Demands on Available Land

This elevated demand for energy coincides with a corresponding increase in demand for land for data centers. If data centers are treated like regular offices, properties zoned for commercial, commerce park and industrial land uses can be developed into data centers with very few restrictions. Commercial, commerce park and industrially zoned land equate to approximately 20% of Phoenix's land area (108 square miles / 530 square miles). Of these 108 square miles, only 3% of it (17 square miles) is vacant and ready for development such as employment, health care, grocery stores or services.

As a fast-growing city, Phoenix has increasing needs for a diversity of jobs, health related services and access to healthy food. Continued unfettered build-out of data centers within Phoenix hinders the private sector market's ability to provide these resources to city residents.

Health and Heat in Phoenix (Importance of Grid Stability to the Health and Safety of Existing Residents and Land Users)

In response to increases in summertime temperatures and the number of days Phoenix experiences temperatures more than 110 degrees; the City of Phoenix established the Office of Heat Response and Mitigation in 2021. The Office coordinates programs and policies to help lower urban temperatures and protect public health. It also tracks trends, collects data, and collaborates with other governments and organizations to share ideas and solutions for dealing with heat including the development of the [Phoenix Heat Response Plan](#).

The 2025 Heat Response Plan documents the increased heat challenges and public health risks Phoenix is attempting to address including:

- *The 2024 Heat Season in Phoenix set many records with respect to the severity and duration of extreme heat conditions. The most notable records from 2024 included new all-time highs for the number of days with temperatures reaching 110°F (70) and the number of nights with temperatures failing to drop below 90°F (39).*
- *The 2024 season also set a record for the number of consecutive days with temperatures reaching at least 100°F (113). Average high and low temperatures for June, September, and October all set historical records; average low temperatures in August were also record-setting.*
- *Heat-related deaths have increased considerably in Maricopa County since 2014. Particularly large year-over-year increases were evident from 2015 to 2016 (+83%), 2019 to 2020 (+62%), and 2021 to 2022 (+25%). Another large increase is evident from 2022 to 2023, with an increase of more than 47% to the record high of 625 cases in Maricopa County that was recorded that year.*

Within this context of a growing desert city attempting to respond to the health challenges that heat poses for its residents, the added strain that an influx of data centers will place on the energy grid warrants a more strategic approach regarding where they are developed and what steps should be taken to mitigate their impact on existing users.

Phoenix is not unique in grappling with energy demand challenges posed by data centers, but a stable electric grid is especially important here because it powers air conditioning, which is essential to human life for much of the year and which places its own heavy burden on the grid. The risk to Phoenix and all cities is highlighted by research done by the North American Electric Reliability Corporation (NERC), the federal regulator for grid reliability. The NERC founded a taskforce to study electrical grid disruptions caused by data centers and crypto miners. The NERC released a report in December of 2024 that found that the risk of power outages will only grow as new data centers come online. Nearly all the United States will face higher risks of energy shortfalls over the next 5 to 10 years, according to the report^{xv}.

The data center threat to grid stability and to existing power users is not simply a matter of total demand. In addition to their unparalleled energy appetite, data centers further stress the grid with inconsistent flow patterns and short bursts of high usage.^{xvi} This phenomenon is especially pronounced with data centers that support AI, which produce unpredictable

energy spikes and which “are being built faster than grid upgrades can keep up.”^{xvii} These spikes can lead to immediate grid failures, but they can also cause “bad harmonics” that degrade the lifespan of connected electrical equipment including home appliances, can lead to sparks and home fires, and can eventually lead to grid blackouts as effects compound and escalate.^{xviii} These effects have been observed in other jurisdictions, including Loudoun County, Virginia, where bad harmonic readings have been reported to reach four times the national average.^{xix} These are direct negative impacts on existing users of all types, so expectations of large-scale intermittent power use must be identified and addressed on the front end in order to mitigate major adverse consequences on public health and safety.

Onsite Power Generation and Emissions

One of the data center industry’s responses to the power demand their facilities are placing on the electrical grid is to try to go it alone by establishing onsite power generation independent of the grid. This response has been seen in Arizona, where utilities, utility regulators, and the state legislature have all publicly called for “on-site” or “behind-the-meter” generation to help ease the impact data centers have on our electric grid. ACC Chairman Thompson recently stated that “we need to explore potential solutions for developing behind-the-meter solutions to meet large customer needs and growth that don’t jeopardize the integrity of our grid.”

The utilization of onsite power generation poses numerous challenges including potentially unregulated and independent power generation without state or federal oversight; establishing power generating plants in neighborhoods, with all the related impacts to residents; environmental impacts from air and water emissions, depending how the energy is generated; the unknown impacts to an existing electrical grid in the event onsite power generation fails and data centers revert to their backup power all at once. As an example, power companies in Virginia had to scramble during the summer of 2024 when 60 of the area’s 200 data centers out of Washington D.C. came off the grid and started using backup power all at once, nearly setting off a series of rolling blackouts.^{xx}

In 2024, the company xAI opened a data center in southwest Memphis, Tennessee. The facility had negotiated an agreement with the public utility, Memphis Light, Gas and Water, to draw 150 megawatts of power from the local grid. This was the amount the utility had determined it could safely provide without affecting the availability and reliability of power for existing users – but it was not enough to fully power the data center, which has applied for an additional 150 megawatts. While its request for additional grid power was pending, xAI is reported to have installed 35 gas-powered generators on its property. These generators ignited significant concern and opposition from the surrounding community and from environmental and health advocacy groups, which cited to the potential human health and air-quality consequences of what a local lawmaker described as a “gas plant in the middle of a neighborhood.”^{xxi}

This experience highlights the need to understand where a data center will receive its power. A data center that produces its own power – either permanently or while a local utility is ramping up its generating capacity – presents different health and safety considerations than a data center that gets all its power from a public utility, and large-scale on-site power production may not be compatible with existing residential or other uses. Even when a data center can be fully powered by the local utility, it may need a new substation or the installation of new high-capacity transmission lines, and the impact of such infrastructure on existing nearby uses should be understood.

The power source for backup and onsite power generation of many data centers is a diesel generator.^{xxii} As noted by the Washington Department of Ecology in analyzing data centers' use of diesel power generation:

- *Diesel exhaust is a toxic air pollutant, containing fine particles that can cause health problems for people who are exposed frequently and at high enough levels. These tiny particles are too small to be filtered out of the air by the nose and upper respiratory system. The particles go deep into the lungs, where they can cause damage and chemical changes.*
- *Nitrogen dioxide (NO₂) is another toxic air pollutant that can cause breathing problems even when you're exposed for a short time, from 30 minutes to 24 hours. Nitrogen dioxide can make breathing harder for people who already have lung problems, such as asthma. It also adds to acid rain and smog^{xxiii}.*

Nuclear energy has been identified as a dedicated power source for data centers^{xxiv}. Amazon, Microsoft, Google and Meta are investing in nuclear power to provide power for their data center needs. These may include “small modular reactors” which are small, cost-effective sources when compared to the traditionally large (and very expensive) nuclear power plants most people are familiar with^{xxv}. The Georgetown Environmental Law Review Online (February 27, 2025) reports that the Virginia legislature adopted a statutory scheme to incentivize nuclear power to meet growing energy needs of artificial intelligence (AI) from a zero-carbon, climate friendly, renewable source.^{xxvi}

Onsite nuclear power generation has gained enough support in Arizona that a bill to support it was approved by the state legislature in its current session. HB 2774, which received support from all three of the State's largest electric utilities but was ultimately vetoed by the Governor, encouraged “small modular nuclear reactors” to “collocate” with data centers by exempting collocated reactors from the requirement to obtain an environmental compatibility certificate. The specter of small, loosely regulated nuclear power plants popping up everywhere to meet the accelerating demand for energy is further proof that the location of a new data center must be carefully considered, and this consideration must account for the data center's expected power sources. As state authorities encourage data centers to include major power generation facilities, it becomes increasingly important to carefully consider the locations of such data centers.

Data Center Water Usage

While much of the attention regarding the resource demands of data centers has focused on electricity, water resources are an area that still must be factored into their evaluation. Data center water usage has improved in recent years due to changes in the cooling methodology used, but recent studies suggest that water savings come at the cost of increased electricity use and point to the industry continuing to need larger amounts of water^{xxvii}. For desert cities and water providers like Phoenix, the ability to properly evaluate and regulate data center water usage is paramount for the City's survival.

Data Centers and Fire Safety

Data centers represent a new and challenging service area for firefighters. According to the International Association of Fire Fighters the growing presence of data centers requires specialized training, lots of planning and close cooperation with on-site security and engineering teams at these new sites^{xxviii}.

The City of Phoenix Fire Department has noted the following challenges with data centers:

- Fires in data centers can produce vast quantities of dense, corrosive smoke, which contains known carcinogens. Visibility may become nearly impossible, and when combined with unfamiliar building configurations, the prospect of disorientation is clear. Often, even a small fire isolated by the building's fire protection systems is a high-risk and long-duration incident for responding firefighters.
- Two physical hazards in large data centers, which are generally not present to the same intensity as other occupancies, are large lithium-ion batteries and electrical power.
- Lithium-ion batteries contain volatile electrolytes that can release flammable gases when exposed to high temperatures or physical damage.
- If a battery generates more heat than it can dissipate for any reason, it can lead to rapid and uncontrolled heat releases, resulting in a fire (thermal runaway). In many instances, fire sprinkler systems prevent fire spread, but cannot extinguish.
- Accidental battery overcharging can lead to fires.
- Batteries can be ejected from their casing during a fire, potentially spreading the fire or causing secondary ignitions.
- Burning batteries release toxic chemicals into the air.
- Due to the large amounts of energy required, electrical distribution and fires involving electrical components are another possibility. Firefighters must be familiar with the power disconnect procedures and the vast electrical hazards of large data centers.
- Fire incidents in large data centers can necessitate using large volumes of water to bring the fire under control, and contaminated runoff is an additional concern. This runoff may contaminate surrounding soil and could get into the city's storm drain system and impact land miles away from the actual location.
- Fires involving lithium-ion batteries also release toxic heavy metal particulates, requiring specialized decontamination of firefighter personal protective equipment.

Advanced review of proposed data centers would provide an opportunity for the Phoenix Fire Department to provide critical insight into the proposed location, design and operation of future data centers. That review will include an assessment of existing resources available to serve the proposed data center location. Fire resources are not evenly distributed throughout the City, and in some cases the City may need to invest in new infrastructure, equipment, or resources to ensure its ability to serve new data center developments, or to serve new data center developments without leaving existing users unprotected. This analysis will be especially important when large data centers replace farmland, or other much lower intensity uses (and such replacements have become increasingly common).

The Phoenix Fire Department works with other emergent technologies to address fire safety concerns and to ensure safety for building occupants, the surrounding public, and responding fire crews. As a contribution to this report, the Department wrote that it “is fully committed to understanding new technologies and the associated evolution of our fire protection efforts (i.e., fire suppression, prevention, and public education). We are a recognized industry leader in this space and a couple examples include lithium-ion batteries and energy storage systems, large warehouses, semiconductors, photovoltaics, electric, hybrid vehicles, etc.” The Department shared several examples of its specialized preparation for fires caused by other specialized land uses; those examples were consulted for this report, and several can be accessed in the references section.

Fire Department review will also ensure compliance with the Phoenix Fire Code and industry best practices and will allow the Fire Department to learn about and prepare for the specific energy generation and storage equipment that will be present in a new data center. Energy storage technologies continue to rapidly evolve, and that makes this level of review critical to ensure that fire crews have equipment or techniques required based on the design and chemistry of such equipment. Without the opportunity to prepare for these new risks, the chance of a fire ignited by batteries or other electrical equipment spreading beyond a data center’s walls to harm those on nearby properties will be greatly increased.

Data Center Security and Public Safety

According to a recent analysis by the Information Technology Department, data centers are high-value investments and sometimes high-value targets, which may attract threats from foreign actors who seek to disrupt data centers for espionage or sabotage, or to access them for sabotage, disruption, or to exfiltrate valuable information. Considering the size and cost of today’s data centers, the high profile of many data center owners, and the vast quantities of data stored within a single data center, this risk assessment should not come as a surprise. The sophistication and frequency of these attacks, including from foreign locations, has increased. As more data centers come online in the region, a complex challenge emerges that requires federal partnerships, strict resource management, and increased regional costs in cyber resilience and protection to ensure community safety and sustainability. Phoenix has already seen significant incidents targeting major industrial

facilities, and future data centers storing highly valuable commercial information, or information related to national defense and security, may face even greater risks. The location of this kind of sensitive data center should be carefully considered to protect existing users and to ensure that adequate public safety resources are available in the relevant area.

Access to Healthcare Services

As one of the largest and fastest growing cities in the country the City of Phoenix has made providing residents with access to life-saving health care services one of its highest priorities. To that end, the City recently partnered with Arizona State University and the Arizona Board of Regents to establish a new medical school in downtown Phoenix to be opened in 2028.

While there is excitement about the new medical school and the progress it will position Phoenix and the state to make, there are active areas of need in the health care sector in Phoenix. Some areas in Phoenix are considered a Health Professional Shortage Area (HPSA). A HPSA is a geographic area, population, or facility that has a substantial shortage of primary, dental, or mental health care providers designated by the Health Resources & Services Administration. For example, in Phoenix's Laveen Village, there are 12 HPSA areas and in the South Mountain Village there are 24 HPSA areas. In addition, the Laveen and South Mountain villages do not have a Level 1 Trauma Center as defined by the Arizona Department of Health Services. Laveen and South Mountain are home to some of the largest areas where data centers could concentrate, preventing other development that could serve the surrounding community. Without an updated zoning framework, it will be nearly impossible to ensure that there will be any available land for a hospital or other medical services in these villages.

Access to Healthy Food

The Laveen and South Mountain villages also highlight challenges Phoenix faces in ensuring its residents have access to healthy food. In 2020 the Phoenix City Council adopted the [2025 Food Action Plan](#) to establish goals, policies and strategies to achieve a robust and healthy food system for Phoenix residents.

The Food Action Plan analyzes the challenges Phoenix faces in achieving its envisioned food system. According to the report, there are 55 food deserts in Maricopa County, and there are 43 food deserts in Phoenix that amount to nearly half of Phoenix's populated area. The Plan identifies the South Mountain, Laveen and Maryvale villages in Phoenix as areas most impacted by food deserts.

Like the challenges in ensuring there is enough land area to provide the necessary health services to residents, Phoenix has a decreasing amount of available land for grocery stores. Preserving opportunities for access to healthy food, especially in areas that have been identified as food deserts, is critical for protecting the health of Phoenix residents. Allowing data centers to uncontrollably fill in and concentrate in these areas would run counter to the Phoenix's Food Action Plan and frustrate plans to address food deserts.

Data Center Noise Pollution

One common detrimental health and safety consequence of data centers, which has been discussed during the public hearing process for Z-TA-2-25, has been noise. While there has been some debate regarding the minimum standards and methodology the city should employ, there has been little pushback on the notion that data centers do generate significant noise with significant impacts to neighboring properties.

Data centers contribute to noise pollution due to the equipment inside making noise as it operates.^{xxix} Noise around areas of data centers can reach up to 92 dB(A) for sites with greater densities of equipment, and up to 96 dB(A) inside.^{xxx} The National Institute for Occupational Safety and Health (NIOSH) threshold for requiring hearing protection is 85 dB(A) over an eight-hour period. As a result, people working in data centers and people residing in neighborhoods around them may be impacted by noise pollution.

Constant humming and buzzing noises in nearby neighborhoods may have adverse health impacts including headache, stress, and sleep disturbance^{xxxi}. Poor quality sleep and stress can also contribute to cognitive impairment and cardiovascular risks.

With more information regarding noise generated by data centers becoming available, providing a regulatory framework that ensures that they are not located near residents will help protect the health and well-being of Phoenix residents.

Regulatory Framework: Not a Ban

The City does not have any plan or desire to enact a ban on data centers, and many data center projects may be warmly welcomed. However, a Special Permit requirement, like the requirement applicable to a self-storage warehouse in the city's commercial zoning districts, would be a vehicle to help contain or mitigate the health and safety impact data centers have on nearby users. The Phoenix City Council has approved dozens of Special Permits for self-storage and car dealerships in the last 10 years and may well approve a similar number of new data centers once health and safety challenges have been adequately addressed.

The Special Permit Process: Response to Years of Council-Adopted Policy + A Collaborative Framework for the Future

The policy and regulatory framework proposed in GPA-2-25-Y and Z-TA-2-25 position Phoenix to employ a holistic approach to the development of today's "data centers," which bear so little resemblance to the land uses that once used that same name. This new policy and regulatory framework are focused on protecting public health and safety from threats that easily cross the boundaries of a data center property, including fire, power disruption, and heat, noise, air, and wastewater pollution, and they respond to several existing City Council adopted policies including the Food Action Plan and Phoenix Heat Response Plan. The Special Permit process provides opportunities for city staff to evaluate proposed data center facilities and ensure that the location, design, site and operational features take into consideration the health and safety needs of the community. The requirements for agreements with electric utility providers will help the City understand the level of on-site

generation, high-voltage transmission, or other infrastructure that is being approved, and to evaluate the likely impact of such infrastructure on the health and safety of existing nearby users.

The Special Permit process will also allow the City to assess the adequacy of public safety resources near the data center, to assess the likely impact of the data center's operation on those resources, and to determine whether additional resources will need to be developed or deployed. The Special Permit provides an opportunity for landowners, data center developers, city staff, neighbors and the Phoenix City Council to collaborate and ensure that new investments in data centers are strategically located within the city limits, and serve the best interests of the City, neighbors, and the data center developer.

ⁱ <https://www.census.gov/newsroom/press-releases/2025/vintage-2024-popest.html>

ⁱⁱ <https://www.forbes.com/sites/rpapier/2025/03/26/how-ai-data-centers-are-reshaping-americas-electric-grid/>

ⁱⁱⁱ See Report by the International Energy Administration (<https://iea.blob.core.windows.net/assets/40a4db21-2225-42f0-8a07-addcc2ea86b3/EnergyandAI.pdf>): “Data centres – at least at the scale seen today – are relatively new actors in the energy system at the global level, and data collection and reporting on their electricity consumption remain limited.”

^{iv} <https://escholarship.org/uc/item/32d6m0d1#page=50>

^v <https://www.eesi.org/articles/view/data-center-energy-needs-are-upending-power-grids-and-threatening-the-climate> (see section “Data Centers as a Paradigm Shift in the Electricity Sector”)

^{vi} <https://www.energy.gov/articles/doe-releases-new-report-evaluating-increase-electricity-demand-data-centers>

^{vii} <https://ktar.com/arizona-business/acc-protect-payers-energy/5693869/>

^{viii} <https://ktar.com/arizona-business/acc-protect-payers-energy/5693869/>

^{ix} <https://www.utilitydive.com/news/data-center-grid-reliability-residential-cost-aps-load-growth/732480/>

^x ACC Chairman Kevin Thompson recently noted “it took Arizona Public Service about a century to build a grid that meets the 8,400 megawatts demand it has now,” and that the utility will have to “double or triple their current grid capacity in a very short time to meet anticipated demand.” (<https://ktar.com/arizona-business/acc-protect-payers-energy/5693869/>)

^{xi} APS Letter dated June 25, 2025 (attachment A)

^{xii} SRP Letter dated June 26, 2025 (Attachment B)

^{xiii} ACC Chairman Kevin Thompson, April 10, 2025 statement upon opening “In the Matter of the Commission’s Inquiry and Review of the Existing Rate Classifications and other Potential Issues relating to Data Centers” (Docket No. E-00000A-25-0069).

^{xiv} This closely tracks a recent statement by Virginia State Corporation Chair Jehmal Hudson, who has been quoted stating: “When it comes to adding transmission and generation capacity, we’re trying to make a determination: how can we fulfill those needs to data centers, but also keep the lights on in the commonwealth?” (<https://www.utilitydive.com/news/data-center-grid-reliability-residential-cost-aps-load-growth/732480/>)

^{xv} <https://www.reuters.com/technology/big-techs-data-center-boom-poses-new-risk-us-grid-operators-2025-03-19/#:~:text=%22What%20it%20tells%20us%20is,U.S.%20Federal%20Energy%20Regulatory%20Commission.>

^{xvi} <https://www.rcrwireless.com/20250417/fundamentals/ai-infra-energy-spikes>

^{xvii} <https://carboncredits.com/ais-energy-hunger-is-straining-americas-power-grids-and-your-home-appliances/>; the impacts of AI are so significant that one researcher describes AI as “a big hammer” on the grid (<https://www.datacenterdynamics.com/en/news/ai-data-centers-causing-distortions-in-us-power-grid-bloomberg/>)

^{xviii} <https://www.datacenterdynamics.com/en/news/ai-data-centers-causing-distortions-in-us-power-grid-bloomberg/>; and <https://carboncredits.com/ais-energy-hunger-is-straining-americas-power-grids-and-your-home-appliances/>

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- ^{xix} <https://www.datacenterdynamics.com/en/news/ai-data-centers-causing-distortions-in-us-power-grid-bloomberg/>
- ^{xx} <https://www.reuters.com/technology/big-techs-data-center-boom-poses-new-risk-us-grid-operators-2025-03-19/>
- ^{xxi} <https://amp.cnn.com/cnn/2025/05/19/climate/xai-musk-memphis-turbines-pollution>
- ^{xxii} <https://www.microgridknowledge.com/distributed-energy/article/11427459/why-do-data-center-operators-choose-diesel-backup-over-cleaner-microgrids>
- ^{xxiii} <https://ecology.wa.gov/air-climate/air-quality/data-centers#:~:text=Air%20pollution%20from%20data%20centers,can%20be%20built%20or%20expanded.>
- ^{xxiv} <https://www.eia.gov/todayinenergy/detail.php?id=63304#:~:text=Although%20historically%20costly%20to%20build,us%20about%20data%20center%20demand?>
- ^{xxv} <https://www.youtube.com/watch?v=58zHJL1dKtw>
- ^{xxvi} *Going Nuclear: Virginia's Answer to the Intensive Energy Needs of Artificial Intelligence Data Center*, Georgetown Environmental Law Review Online, February 27, 2025, Sarah Bosworth.
- ^{xxvii} <https://www.bloomberg.com/graphics/2025-ai-impacts-data-centers-water-data/>; see also https://www.sciencedirect.com/science/article/abs/pii/S0921344922000428?fr=RR-2&ref=pdf_download&rr=94fff2af6fb1341c (describing the “trade-off between water and energy consumption” in data center design, by analyzing two Phoenix data centers served by SRP and identifying unique challenges presented by our “hot-dry climate.”)
- ^{xxviii} <https://www.iaff.org/news/data-centers-are-booming-and-fire-fighters-must-adapt-to-new-challenges/>
- ^{xxix} <https://www.datacenterknowledge.com/sustainability/why-data-centers-are-loud-and-how-to-quiet-them-down>
- ^{xxx} <https://www.sensear.com/blog/data-centers-arent-loud-right>
- ^{xxxi} <https://www.techtarget.com/searchdatacenter/tip/Understanding-the-impact-of-data-center-noise-pollution>

Fire Department References:

- [Data-Driven Fire Operations - Firefighting - Fire Engineering](#)
- [Lithium-Ion Batteries, Fire Investigations, and Keeping Pace with Emerging Technologies - BESS](#)
- [The Impact of Solar Energy on Firefighting](#)
- [FPRF FireFitherSafety.pdf](#)
- [EVTrainingEmergencyResponders.pdf](#)

Attachment A: Letter from APS dated June 25, 2025

Attachment B: Letter from SRP dated June 26, 2025

Attachment A: June 25, 2015 letter from APS



June 25, 2015

City of Phoenix

Office of Mayor Kate Gallego
CC: Members of City Council
200 W. Washington Street
Phoenix, AZ 85003

Dear Mayor Gallego and Members of the Phoenix City Council,

As the state's largest electric utility, Arizona Public Service (APS) remains committed to maintaining clear and coordinated communication with the City of Phoenix as we work to meet the growing energy needs of the region.

We are aware of the increased activity and interest in large-scale data center development across the Phoenix area and the state. APS is working to ensure that power for data centers is not provided at the expense of grid reliability or at the expense of existing customers. In fact, in our recently filed rate case we proposed new cost-allocation methodologies to ensure that fast growing customer classes, like data centers and other high-load factor customers, are directly responsible for paying the costs caused by their growth.

As of today, APS is planning to serve 3.3GWs of power to new data center projects. In addition, we have a queue of requests from data centers for approximately 15GWs. These facilities present significant and often complex impacts on local energy infrastructure, land use, and long-term system planning. APS continues to assess each service request based on technical requirements, system capacity, and overall grid reliability. While we strive to support economic development in all sectors, doing so responsibly requires proactive engagement and data sharing from local jurisdictions. Early-stage coordination with City departments—such as Planning and Development, Water Services, and Economic Development—is essential to understanding the full scope of demand that new projects may place on our system.

We appreciate the opportunity to continue working with the city to ensure that new growth proceeds in a manner that is both technically viable and aligned with broader infrastructure capabilities.

Sincerely,

Ashton Futral-Princell

Ashton Futral-Princell
APS Public Affairs
Email: Ashton.Futral@Pinnaclewest.com

Attachment B: June 26, 205 letter from SRP

June 26, 2025

The Honorable Kate Gallego
Mayor of Phoenix
200 W Washington Street
Phoenix, AZ 85003

RE: Ordinance Adoption - Data Centers - Z-TA-2-25-Y

Dear Mayor Gallego,

The unprecedented growth seen across the nation in the power industry, including data centers, will require a complete transformation of our power system.

This letter serves to address your request for an outline of current data center projects within the SRP service territory. SRP currently has approximately sixty data center projects in our pipeline. Collectively, these projects represent over 17 GW of requested load.

The projects fall into two categories:

1. Prospective sites under evaluation, and
2. Customer-submitted sites that are actively progressing through our process, which includes stages such as study, conceptual design, detailed design, and construction.

Excluding potential future expansion requests from existing sites, we are currently managing 3.1 GW of load requests from fourteen (14) projects/customers, within the City of Phoenix. These requests are in various stages of our process, ranging from initial study reviews to active construction.

SRP continues our commitment to meet the needs of all our customers, despite regulatory and supply chain challenges, to ensure there is sufficient power capacity well into the future.

Sincerely,

A handwritten signature in blue ink, appearing to read "Patricia DiRoss", is shown within a light blue rectangular box.

Patricia DiRoss
Sr. Local Government Affairs Representative
Salt River Project

EXHIBIT B

**THIS IS A DRAFT COPY ONLY AND IS NOT AN OFFICIAL COPY OF THE FINAL,
ADOPTED ORDINANCE**

ORDINANCE G-

AN ORDINANCE AMENDING PORTIONS OF THE CODE OF THE CITY OF PHOENIX, ARIZONA, PART II, CHAPTER 41, THE ZONING ORDINANCE OF THE CITY OF PHOENIX BY AMENDING CHAPTER 2, SECTION 202 (DEFINITIONS) TO ADD A DEFINITION FOR DATA CENTERS; AMENDING CHAPTER 5, SECTION 507 TAB A.II.D (GUIDELINES FOR DESIGN REVIEW, CITY-WIDE DESIGN REVIEW GUIDELINES, SPECIALIZED USES) TO MODIFY THE SECTION TITLE AND ADD DESIGN STANDARDS FOR DATA CENTERS; AND AMENDING CHAPTER 6, SECTION 647 (SPECIAL PERMIT USES), SECTION 647.A.2 TO ADD DATA CENTERS WITHIN 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, WITH A SPECIAL PERMIT AND PERFORMANCE STANDARDS.

WHEREAS, the City of Phoenix (the “City”) is in the top 10 of fastest growing cities in the country, adding over 16,000 residents between July 1, 2023, and July 1, 2024; and

WHEREAS, while managing this population growth, the City is seeing ever-increasing interest in data centers; and

WHEREAS, today’s data centers are typically very large and intense uses, with some data centers being more than 90 acres in size and often require a new electrical substation or other significant new infrastructure; and

WHEREAS, the activities carried out within today’s data centers have also shifted greatly in the last few years; and AI data centers are fundamentally different land uses when compared to an office or the outdated concept of a “telecom hotel.” Today’s data centers, and AI data centers in particular, feature unique equipment and energy use patterns that create unique threats to public health and safety beyond the borders of their properties; and

WHEREAS, the proliferation of data centers within certain areas of the City may result in adverse impacts on local neighborhoods and other existing uses; and

WHEREAS, there is convincing documented evidence that data centers pose risks to public health, and safety, including, but not limited to, potential negative impacts to the availability and reliability of power for neighboring properties because of significant, and

sometimes erratic, data center power consumption, potential air quality degradation and adverse noise impacts from onsite power generation, increased fire danger and response challenges, and potential adverse effects from typical operational noise, all of which extend beyond the boundaries of a data center property; and

WHEREAS, because of the potential public health and safety impacts, land use considerations for data centers require individualized analysis; and

WHEREAS, the City Council desires to avoid outright bans on data centers in most zoning districts and prefers to utilize the special permit process to ensure data centers comply with reasonable land use standards designed to address public health and safety concerns and to minimize negative secondary effects to the neighborhoods, businesses and residents around data centers, while still providing for opportunities for data centers at various locations within the City; and

WHEREAS, when evaluating the negative secondary effects of data centers, the City is permitted to consider the impacts on health and safety that have been experienced in other urban areas; and

WHEREAS, the City has compiled substantial data from other urban areas relating to negative secondary effects of data centers on surrounding neighborhoods, along with the findings and research previously conducted by its staff and consultants, in a report entitled *“Health and Safety Impacts: Data Centers 2025”* (the “Health and Safety Report”), which has been provided to and reviewed by the City Council, and is the primary impetus for its adoption of this ordinance; and

WHEREAS, the City Council has determined this ordinance is necessary to address the health and safety challenges associated with data centers, including (i) risks to the public health and safety in the communities in which they are located, (ii) unique firefighting challenges, (iii) adverse environmental impacts to air, land, and water, (iv) extensive water usage, (v) noise pollution, (vi) significant energy demand, (vii) land use challenges, including a loss of land for jobs and housing, inactive frontages along public streets, and (viii) conflicts with the City’s approach of maximizing transportation investments with walkable communities.

NOW THEREFORE, BE IT ORDAINED BY THE COUNCIL OF THE CITY OF PHOENIX, as follows:

SECTION 1: Purpose.

It is the purpose of this ordinance to (i) provide a process to review, monitor, and regulate data centers to ensure that the negative secondary effects of data centers do not adversely impact the health and safety of the residents of the City, and (ii) establish reasonable and uniform regulations to prevent and mitigate such adverse impacts (existing and potential) to residents, neighborhoods, and the City as a whole. This

ordinance is not intended to ban data centers in most zoning districts, nor is it intended to discourage location of data centers in the City of Phoenix.

The special permit regulatory framework employs a holistic approach to data center development and provides opportunities for City staff to evaluate the health and safety needs of the community and to ensure that the health and safety consequences associated with the location, design, site and operational features are taken into consideration. In addition to the traditional site-related considerations, the City has determined it is necessary to require evidence of agreements with electric utility providers to ensure the local community will not be negatively impacted or imperiled by demands on the power infrastructure created by the data center, or by on-site power generating facilities that are incompatible with the health and safety of the existing residents. The special permit provides an opportunity for landowners, data center developers, City staff, neighbors and the Phoenix City Council to collaborate and ensure that new investments in data centers are strategically located in appropriate areas of the City and serve the best interests of the City, the neighbors, and the data center developer.

SECTION 2: Findings.

Studies, news articles, research articles, industry publications, relevant data, input from experts and consultants, and the review of the operations and impact of data center sites in other locations including, but not limited to, Phoenix, Mesa, Los Angeles, Memphis, Houston, Lincoln, Nebraska, Boston, Ogden, Utah, Seattle, Virginia, and overseas locations including South Korea, Belgium, Indonesia, Strasbourg, Milan, Belfast, and Madrid were gathered and reviewed. The results have been summarized, with links to the source data, in the Health and Safety Report. Upon review of the Health and Safety Report, and the source materials as deemed necessary, the City Council make the following findings:

1. Increase in Size, Scale, Number and Power Usage. Phoenix is a desirable location for data centers due to its favorable climate. Within the last decade, data centers have increased dramatically in scale, becoming intense users of land and local resources. This change in the scale and intense use of electrical power has necessitated a new definition of “data center” to differentiate it from uses that can no longer be considered analogous and has created the need for new zoning standards that account for the impacts data centers have on surrounding properties. Related to their intense operations, recent incidents across the United States and the world have highlighted the health and safety challenges data centers pose to residents including, but not limited to, strains on energy and water resources, threats to the electrical grids existing users rely upon, increased emissions created by heavy energy consumption, noise, heat, and on-site generating facilities and strain on public safety resources. In addition, data centers pose unique risks to first responders due to their size, sensitivity, and high concentration of batteries and electrical equipment.
 - a) Significant Power consumption. Arizona Public Service (“APS”) and Salt River Project (“SRP”) anticipate that more than 90% of the energy demand in the

industrial sector of their service areas is related to data center development. The projected growth in data centers represents an unprecedented surge in demand for electricity. The Department of Energy has predicted that data center electricity use will double or triple by 2028. The special permit process, and in particular the requirement for the City Council to fully understand how power will be provided to meet the data center needs, is designed to ensure that the data center is proposed for a location with appropriate infrastructure, that an appropriate plan has been developed to construct that infrastructure, and that gap-bridging on-site infrastructure will not endanger existing nearby users.

- b) Potential to Destabilize Local Power Grid. As Phoenix and the region continue to grow, ensuring that there are sufficient energy resources to support a reliable electrical grid, especially during the hot summer months, is one of the greatest challenges facing utility companies and municipalities. The risk to Phoenix is highlighted by research done by the North American Electric Reliability Corporation (“NERC”), the federal regulator for grid reliability. The NERC founded a taskforce to study electrical grid disruptions caused by data centers and crypto miners. The NERC released a report in December of 2024 that found that the risk of power outages will only grow as new data centers come online. Nearly all the United States will face higher risks of energy shortfalls over the next 5 to 10 years, according to the report. Understanding a data center’s power usage, needs, and plans for providing that power, is an essential part of the special permit process, which is necessary to ensure that the introduction of a data center to an area does not imperil critical power reliability for nearby residents and businesses.

The data center threat to grid stability and to existing power users is not simply a matter of total demand. In addition to their unparalleled energy appetite, data centers further stress the grid with inconsistent flow patterns and short bursts of high usage. These consequences are especially pronounced with data centers that support AI, which produce unpredictable energy spikes. These spikes can lead to immediate grid failures, but they can also cause “bad harmonics” that degrade the lifespan of connected electrical equipment including home appliances, can lead to sparks and home fires, and can eventually lead to grid blackouts as effects compound and escalate. These effects have been observed in many places, including Loudoun County, Virginia, where bad harmonic readings have been reported to reach four times the average rate. These are direct negative impacts on existing users of all types, so expectations of large-scale intermittent power use should be addressed on the front end to mitigate major consequences on public health and safety.

- c) Onsite Power Generation. SRP and APS are anticipating unprecedented additional demand for power related to data centers. APS expects its peak load to jump 40% by 2031. APS officials have recently explained that the utility has more pending interconnection requests from data centers than it can fulfill without putting existing customers at risk of having poor reliability, and recent proceedings before the Arizona Corporation Commission have revealed support for developing

“behind the meter solutions” for data center power. The lack of power from the electrical grid will place additional pressure on data centers to produce their power on-site. During the 2025 legislative session, the Arizona legislature approved HB 2774 (vetoed by the Governor but supported by the State’s three largest utilities), which incentivized small nuclear reactors that collocate with large industrial users by eliminating the requirements for collocated reactors to receive environmental compatibility certificates. As detailed in the Health and Safety Report, in Memphis, Tennessee, a large data center utilized 35 gas-powered generators for on-site power generation in response to a lack of available power from the local power company. HB 2774 and the examples from other jurisdictions highlight the need for the City Council to ensure that the methods of power generation are closely evaluated (through the special permit process) to ensure the health and safety of neighboring residents and businesses are not adversely impacted.

2. Limited available land employment generators; health care; and grocery stores. Of the land zoned commercial, commerce park and industrially zoned, only 3% of it is vacant and ready for development such as employment, health care, grocery stores or services. Phoenix has increasing needs for a diversity of jobs, health related services and access to healthy food. Continued unfettered build-out of data centers within the City hinder the private sector market’s ability to provide these resources to Phoenix residents. Phoenix has Health Professional Shortage Areas (“HPSA”), which are geographic areas that have a substantial shortage of primary, dental, or mental health care providers and food deserts. In Phoenix’s Laveen Village there are 12 HPSA areas and in the South Mountain Village there are 24 HPSA areas.

There are food deserts in Phoenix. The City of Phoenix has adopted a 2025 Food Action Plan which analyzes the challenges residents face in achieving a healthy and robust food system. Data centers contribute to the decreasing amount of land area available to provide the necessary health services to residents, including grocery stores. Preserving and opportunities for access to healthy food, especially in areas that have been identified as food deserts, is critical in protecting the health of Phoenix residents. The special permit process allows the City Council to evaluate the impact of a proposed data center on health services for an area.

3. Water usage. While Data center water usage has improved in recent years due to changes in the cooling methodology used, these technologies tend to require larger amounts of power and recent studies point to the industry continuing to need larger amounts of water. Additionally, for desert cities and water providers like Phoenix, the ability to properly evaluate and regulate data center water usage is paramount for the City’s survival.
4. Fire Safety. Data centers represent a new and challenging service area for firefighters. According to the International Association of Fire Fighters the growing presence of data centers requires specialized training, considerable planning, and close cooperation with on-site security and engineering teams at these new sites. As detailed in the Public Safety Report, data centers have components that are typically

not present at the same scale and intensity in other occupancies of a similar size. The proposed special permit process for data centers will provide an opportunity for the Phoenix Fire Department to provide critical insight into the proposed location, design and operation of future data centers. That review will include an assessment of existing resources available to serve the proposed data center location. Fire resources are not evenly distributed throughout the City, and in some cases the City may need to invest in new infrastructure, equipment, or resources to ensure its ability to serve new data center developments, or to serve new data center developments without leaving existing residents and businesses unprotected. This analysis will be especially important when large data centers replace farmland or other much lower intensity uses.

Fire Department review will also ensure compliance with the Phoenix Fire Code and industry best practices, and will allow the Fire Department to learn about and prepare for the specific energy generation and storage equipment that will be present on-site. Energy storage technologies continue to rapidly evolve, and that makes this level of review critical to ensure that fire crews have equipment or techniques required based on the design and chemistry of such equipment. Without advance knowledge, the chance of a fire sparked by large batteries or other electrical equipment spreading beyond a data center's walls to harm those on nearby property will be greatly increased.

5. Noise. Noise around areas of data centers can reach up to 92 dB(A) for sites with greater densities of equipment, and up to 96 dB(A) inside. The National Institute for Occupational Safety and Health (NIOSH) threshold for requiring hearing protection is 85 dB(A) over an eight-hour period. These constant humming and buzzing noises may have adverse health impacts in nearby neighborhoods including headache, stress, and sleep disturbance. Poor quality sleep and stress can also contribute to cognitive impairment and cardiovascular risks. The special permit process will allow the City to evaluate potential noise impacts to the surrounding areas to ensure that neighboring residents and businesses are not negatively impacted by unreasonable noise from the introduction of a data center to the area.
6. Holistic Review of Health and Safety. In addition to the key concerns enumerated here, other jurisdictions have experienced other health and safety challenges including heat, noise, air, and stormwater pollution. Furthermore, as the quantity, value, and sensitivity of the data stored in today's data centers continues to increase, these facilities become increasingly sensitive and generate security issues that can affect nearby users and the sufficiency of public safety resources. Given the rapid pace of evolution in data center size, equipment, power usage, and activities, a holistic review of new data center projects is required to ensure that they are located and designed with consideration for the many well-documented, and therefore predictable, consequences to the health and safety of existing residents and land users.

SECTION 3: The Code of the City of Phoenix, Chapter 2, Section 202 (Definitions) to hereby amended to add a definition for "Data Centers" to read as follows:

Section 202. Definitions.

DATA CENTER: A FACILITY USED PRIMARILY FOR DATA SERVICES, INCLUDING THE STORAGE, PROCESSING, MANAGEMENT, AND TRANSMISSION OF DIGITAL DATA. A FACILITY SHALL NOT BE CONSIDERED A DATA CENTER WHEN 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.

SECTION 4: The Code of the City of Phoenix, Chapter 5, Section 507, Tab A.II.D (Guidelines for Design Review, City-Wide Design Review Guidelines, Specialized Uses), is hereby amended to modify the section title and add design standards for data centers, and to read as follows:

Section 507 Tab A. Guidelines for design review.

- II. CITY-WIDE DESIGN REVIEW GUIDELINES. The design review guidelines ~~indicate specific standards of implementation and are categorized as Requirements (R), Presumptions (P), or Considerations (C).~~ INDICATED WITH THE MARKERS (R), (R*), (P), (T), AND (C) SHALL BE APPLIED AND ENFORCED IN THE SAME MANNER AS INDICATED IN SECTION 507. ITEMS NOT INDICATED WITH AN (R), (R*), (P), (T), AND (C) SHALL BE TREATED AS (R).

D. Specialized Uses.

5. DATA CENTERS.

5.1. **SETBACKS.** ALL MECHANICAL EQUIPMENT, INCLUDING BUT NOT LIMITED TO ELECTRICAL TRANSFORMERS AND GENERATORS, SHALL BE SET BACK A MINIMUM OF 150 FEET FROM ABUTTING RIGHT-OF-WAY OR RESIDENTIALLY ZONED PROPERTY; IN ADDITION TO THE FOLLOWING: (R*)

5.1.1. THE EQUIPMENT MUST BE FULLY SCREENED BY A BUILDING THAT IS VISUALLY INTEGRATED WITH THE DESIGN OF THE OVERALL DEVELOPMENT; OR

5.1.2 THE EQUIPMENT MUST BE FULLY SCREENED BY A DECORATIVE SCREEN WALL HAVING VARIATIONS IN COLORS, MATERIALS, PATTERNS, TEXTURES, AND/OR AN ART INSTALLATION SUCH AS A MURAL.

RATIONALE: GROUND EQUIPMENT SHOULD BE ENCLOSED AND SET BACK TO PROVIDE VISUAL SCREENING AND REDUCE NOISE LEVELS.

5.2. **LANDSCAPE SETBACK.** A MINIMUM 30-FOOT WIDE PERIMETER LANDSCAPE SETBACK SHALL BE PROVIDED, SUBJECT TO THE FOLLOWING:

5.2.1. TWO STAGGERED ROWS OF LARGE CANOPY SHADE TREES PLANTED 20 FEET ON CENTER OR IN EQUIVALENT GROUPING SHALL BE PROVIDED, AS APPROVED BY THE PDD LANDSCAPE ARCHITECT. (T)

5.2.2 FIVE 5-GALLON SHRUBS PER TREE SHALL BE PROVIDED, AT A MINIMUM. (T)

5.2.3 GROUNDCOVERS SHALL BE PROVIDED TO SUPPLEMENT THE TREES AND SHRUBS SO THAT A MINIMUM 75% LIVE COVERAGE IS ATTAINED. (T)

RATIONALE: AN ENHANCED LANDSCAPE SETBACK WITH A DENSE NUMBER OF TREES AND SHRUBS HELPS TO MITIGATE NEGATIVE VISUAL IMPACTS.

5.3. **ARCHITECTURE.**

- 5.3.1. BUILDING FACADES THAT EXCEED 100 FEET SHOULD CONTAIN ARCHITECTURAL EMBELLISHMENTS AND DETAILING SUCH AS TEXTURAL CHANGES, PILASTERS, OFFSETS, RECESSES, WINDOW FENESTRATION (INCLUDING FAUX WINDOWS), SHADOW BOXES, AND OVERHEAD/CANOPIES. (P)
- 5.3.2. ALL SIDES OF A BUILDING/STRUCTURE SHOULD PROVIDE AN ENHANCED DESIGN INCLUDING A VARIATION IN COLORS, MATERIALS, PATTERNS, TEXTURES, HEIGHT, WINDOWS (INCLUDING FAUX WINDOWS), ARTICULATION, AND/OR ART INSTALLATIONS. (P)
- 5.3.3. EACH MAIN ENTRANCE SHOULD INCLUDE A FEATURE THAT DIFFERENTIATES IT FROM THE REMAINDER OF THE BUILDING FACADE BY A CHANGE IN BUILDING MATERIAL, PATTERN, TEXTURE, COLOR, AND/OR ACCENT MATERIAL, AND THAT PROJECTS OR IS RECESSED FROM THE ADJOINING BUILDING PLANE. (P)
- 5.3.4. ARCHITECTURAL DESIGN SHOULD TAKE INTO ACCOUNT THE SOLAR CONSEQUENCES OF BUILDING HEIGHT, BULK, AND AREA. (C)

RATIONALE: DATA CENTER BUILDINGS SHOULD INCLUDE ENHANCED ARCHITECTURAL DESIGN FEATURES IN ORDER TO PROVIDE VISUAL INTEREST, TO BREAK UP THE MASS OF THE BUILDING/STRUCTURE AND TO PROVIDE AN ENHANCED DESIGN INTERFACE WHERE VISIBLE FROM A RIGHT-OF-WAY AND/OR RESIDENTIALLY ZONED PROPERTY.

- 5.4. **STREETSCAPE.** FOR EACH STREET FRONTAGE, A MINIMUM 6-FOOT-WIDE DETACHED SIDEWALK SEPARATED FROM THE CURB BY A MINIMUM 8-FOOT-WIDE LANDSCAPE STRIP, SUBJECT TO THE FOLLOWING:

5.4.1. SINGLE-TRUNK, LARGE CANOPY SHADE TREES, PLANTED 20 FEET ON CENTER OR IN EQUIVALENT GROUPINGS, SHALL BE PROVIDED ON BOTH SIDES OF THE SIDEWALK AND PROVIDE A MINIMUM OF 75% SHADE. (T)

5.4.2 A MIXTURE OF SHRUBS, ACCENTS, AND VEGETATIVE GROUNDCOVERS WITH A MAXIMUM MATURE HEIGHT OF TWO FEET SHALL BE DISTRIBUTED THROUGHOUT THE LANDSCAPE AREAS TO ACHIEVE A MINIMUM OF 75% LIVE COVERAGE. (T)

5.4.3 ALL NEW OR RELOCATED ELECTRIC LINES 12 KV AND SMALLER, COMMUNICATIONS AND CABLE TELEVISION AND ALL ON PREMISE WIRING SHALL BE PLACED UNDERGROUND IN ALL DEVELOPMENTS WHERE VISIBLE FROM STREETS OR ADJOINING PROPERTIES, UNLESS OTHERWISE APPROVED THROUGH A TECHNICAL APPEAL. (T)

RATIONALE: AN ENHANCED STREETSCAPE HELPS TO SOFTEN THE EDGE OF THE DEVELOPMENT OF A LARGER NON-RESIDENTIAL USE.

5.5. SHADE.

5.5.1. ALL ON-SITE PEDESTRIAN PATHWAYS SHOULD BE SHADED A MINIMUM OF 75% BY A STRUCTURE, LANDSCAPING, OR A COMBINATION OF THE TWO. (P)

5.5.2 DEDICATED MULTI-USE TRAILS ADJACENT TO THE SITE SHOULD BE SHADED A MINIMUM OF 50% AT TREE MATURITY. (P)

RATIONALE: ENHANCED PEDESTRIAN COMFORT SHOULD BE PRIORITIZED ADJACENT TO AND WITHIN DATA CENTER DEVELOPMENTS ACROSS THE CITY.

SECTION 5: The Code of the City of Phoenix, Chapter 6, Section 647 (Special Permit Uses), Section 647.A.2 is hereby amended to add data centers within 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, with performance standards to read as follows:

Section 647. Special Permit Uses.

- A. **Permitted uses.** There shall be permitted, in addition to the uses enumerated in the several use districts, certain additional uses subject to the requirements of this section.

2. A special permit may be granted by the Council upon recommendation of the Commission to establish the following uses in the use districts named:

KK. DATA CENTERS IN THE C-2, C-3, CP/GCP, A-1 AND A-2 ZONING DISTRICTS, SUBJECT TO THE FOLLOWING:

- (1) THE DEVELOPMENT SHALL BE NO CLOSER THAN 2,640 FEET FROM AN APPROVED HIGH-CAPACITY TRANSIT STATION.
- (2) PRELIMINARY SITE PLAN APPROVAL WILL NOT BE GRANTED FOR A DATA CENTER UNTIL SUCH TIME THAT A LOCAL UTILITY COMPANY PROVIDES A CONTRACTUAL AGREEMENT THAT AFFIRMS ITS CAPACITY AND COMMITMENT TO SERVE THE ENERGY DEMAND FOR THE PROPOSED DATA CENTER. THE AGREEMENT FROM THE UTILITY COMPANY SHALL BE SUBMITTED TO PDD CONCURRENT WITH THE PRELIMINARY SITE PLAN.
- (3) THE FOLLOWING SHALL APPLY WHEN THE SITE IS LOCATED WITHIN 300 FEET OF A RESIDENTIAL ZONING DISTRICT:

- (a) PRELIMINARY SITE PLAN APPROVAL FOR A DATA CENTER SHALL NOT BE GRANTED UNLESS IT HAS BEEN DEMONSTRATED THAT THE DATA CENTER, INCLUDING ALL ON-SITE MECHANICAL EQUIPMENT AND FACILITIES, WILL NOT EXCEED THE EXISTING AMBIENT NOISE LEVEL FOR THE SITE BY MORE THAN 5% OR A SPECIFIC NOISE STANDARD MAY BE STIPULATED AS A CONDITION OF AN APPROVED SPECIAL PERMIT.
- (b) TO DETERMINE COMPLIANCE WITH THE PRIOR SUBSECTION, THE DEVELOPER SHALL SUBMIT A NOISE STUDY TO PDD PRIOR TO OR CONCURRENT WITH THE PRELIMINARY SITE PLAN. THE NOISE STUDY SHALL BE PERFORMED BY A THIRD-PARTY ACOUSTICAL ENGINEER TO DOCUMENT BASELINE NOISE LEVELS IN THE AREA OF THE PROPOSED DATA CENTER, INCLUDING NOISE LEVELS MEASURED AT THE PROPERTY LINE OF THE NEAREST RESIDENTIAL ZONING DISTRICT TO THE PROPOSED DATA CENTER PROPERTY.
- (c) UPON APPROVAL OF THE NOISE STUDY, THE METHODS PROPOSED TO MITIGATE NOISE SHALL BE STIPULATED AS A CONDITION OF FINAL SITE PLAN APPROVAL. A FINAL CERTIFICATE OF OCCUPANCY SHALL NOT BE ISSUED IF THE AMBIENT NOISE EXCEEDS THE PRIOR EXISTING NOISE LEVEL BY MORE THAN 5%.

- (4) THESE REGULATIONS AND THE DESIGN GUIDELINES SET FORTH IN SECTION 507 TAB A.II.D.5., DATA CENTERS ARE NOT APPLICABLE TO DATA CENTERS WHICH HAVE RECEIVED FINAL SITE PLAN APPROVAL; OR A DATA CENTER USE THAT IS SPECIFICALLY LISTED AS A PERMITTED USE OR SPECIFICALLY DISCUSSED IN A COUNCIL ADOPTED PLANNED UNIT DEVELOPMENT NARRATIVE PRIOR TO [THE EFFECTIVE DATE OF THIS ORDINANCE]. OTHERWISE, THE DEVELOPMENT IS SUBJECT TO THESE REGULATIONS AND ALL APPLICABLE DESIGN GUIDELINES SET FORTH IN SECTION 507 TAB A, INCLUDING THOSE FOR SECTION II.D.5, DATA CENTERS.

PASSED by the Council of the City of Phoenix this 2nd day of July, 2025.

MAYOR

ATTEST:

City Clerk

APPROVED AS TO FORM:

City Attorney

REVIEWED BY:

City Manager