

Agenda

- 6:00** Arrivals and Open House
with Topical Stations
- 6:30** Welcome and Introductions
Meeting Overview
- 6:40** Proposed Regulation:
Presentation and
Community Feedback
- 7:25** Wrap up and next steps
- 7:30** Open House and Additional
Feedback



PDSD Website on Large-
Scale Data Centers



Meeting Format and Guidelines

- All feedback is welcome.
- Please respect everyone's time and refrain from disruption.
- Your feedback will be collected in writing in these initial community meetings, several ways are provided (online survey, paper form and/or sticky notes in lobby)
- All written feedback will be shared with Mayor and Council, and made public.
- Conversation and additional written feedback are encouraged with City staff during the open house in the lobby. Please hold your questions for then, as well as submitting questions and comments via the online or paper survey.
- An FAQ will be created on the City's website to provide answers to questions * stay tuned.

DEFINITION AND PROCESS

LARGE-SCALE DATA CENTER



PSD Website on Large-Scale Data Centers



Proposed Large-Scale Data Center Definition

Priorities

- Include a size threshold for large-scale data centers.
- Define size based on gross floor area due to land use impacts.
- Base definition on industry standard language.

Proposed Definition for a Large-Scale Data Center

A large-scale data center is a facility, multiple facilities, or portion of a facility on a contiguous site with the same controlling ownership interest, and a gross floor area greater than 50,000 square feet, housing networked computer systems and telecommunications equipment use for remote storage, processing, and distribution of data.



Propose Eligible Locations and Review Process

Priorities

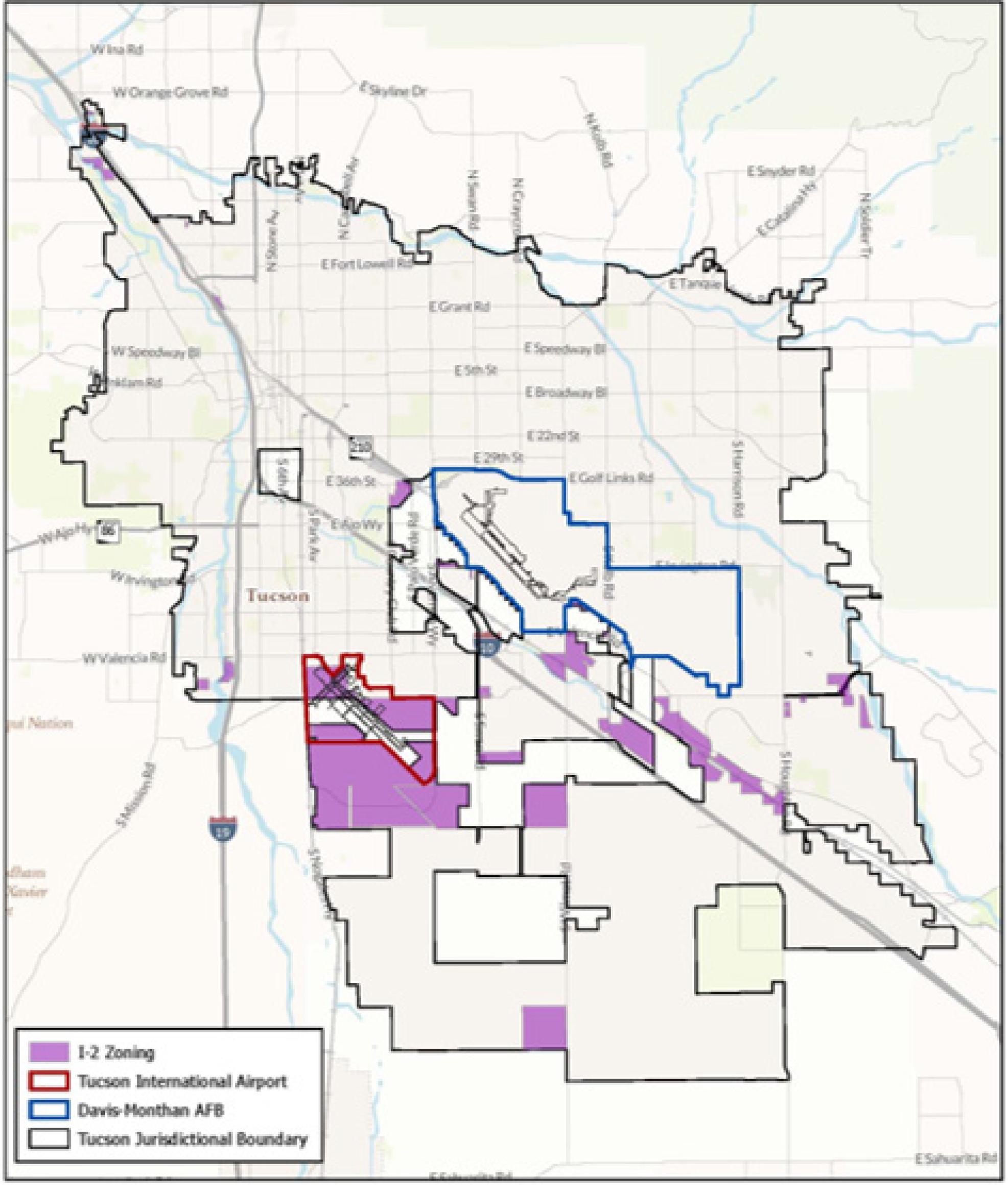
- Allow in I-2 Industrial zone, or through a Planned Area Development (PAD) or Planned Community Development (PCD).
- Review proposals for consistency with Plan Tucson and other City Policy Documents. Documents such as the Climate Action and Adaptation Plan and One Water 2100 are referenced in Plan Tucson.
- Expand public notice requirements to be consistent with PCD notice due to noise impacts that extend beyond the standard 400-foot notice area and likely development in less populated areas.

Proposal

- Permit in I-2 Heavy Industrial zone or through a PAD or PCD.
 - In I-2 zone, a Mayor and Council Special Exception Process would be required, demonstrating compliance with use-specific conditions.
 - PAD or PCD require Mayor and Council approval.
- A Mayor and Council Special Exception, or PAD or PCD rezoning requires:
 - Neighborhood meeting
 - Public Hearing with the Zoning Examiner
 - Review by Mayor and Council
- Require a notification area for neighborhood meeting and public hearing of 2,640 feet (1/2 mile), and notification of neighborhood associations within two (2) miles.

I-2 ZONING MAP

LARGE SCALE DATA CENTER



FEEDBACK

DEFINITION & PROCESS LARGE SCALE DATA CENTER



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SETBACKS & DESIGN STANDARDS

LARGE-SCALE DATA CENTER



PSDS Website on Large-Scale Data Centers



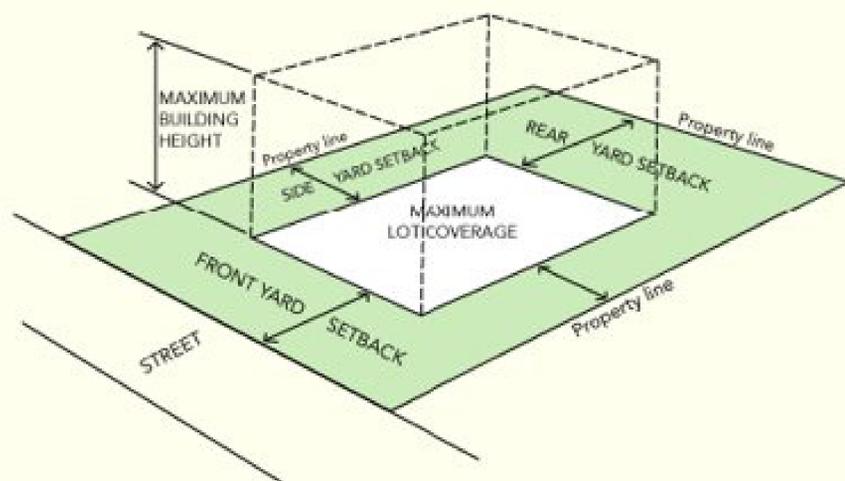
Proposed Setbacks

Priorities

- Establish minimum setbacks from property lines to residential zoning districts and noise sensitive uses to address a key community concern.
- Establish minimum setback from property lines to commercial or office zones to address a key community concern.

Proposal

- Require a minimum setback 400-feet from data center use to urban residential zoning districts, excluding SH (Suburban Homestead) and RH (Rural Homestead), but to include RX-1 and RX-2 Residence Zones, and other noise sensitive uses such as a schools or nursing homes.
- Require a setback of 200-feet from data center use to commercial or office zones.



Proposed Design & Aesthetic Standards

Priorities

- Address standards for Façade treatments and/or murals or other aesthetic treatments.
- Address any potential glare impacts, particularly in the Airports Environs Zone.
- Parking requirements should be right sized to ensure they are in line with actual need for the data center use.

Proposal

- Utilize existing Airports Environs Zone and Industrial Use Group standards for glare.
- Define minimum parking ratios for data center use.



FEEDBACK

SETBACKS & DESIGN STANDARDS

LARGE SCALE DATA CENTER



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ENERGY & WATER USE

LARGE-SCALE DATA CENTER



PSD Website on Large-Scale Data Centers



Proposed Energy Consumption and Sourcing

Priorities

- Demonstrate access to adequate energy supply.
- Applicant disclose the proposed energy mix, including renewables.

Proposal

- Require the applicant to certify access to adequate energy supply at time of application.
- Require the applicant to discuss the proposed energy mix, including renewables in their application materials.



Proposed Water Use and Sourcing

Priorities

- Demonstrate access to adequate water supply.
- Demonstrate compliance with Large Quantity Water Users Ordinance if applicable.
- Prohibit the use of potable water for data center cooling.

Proposal

- Require the applicant to certify access to adequate water supply at time of application.
- Prohibit the use of potable water for data center cooling.



FEEDBACK

ENERGY & WATER USE

LARGE SCALE DATA CENTER



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NOISE & GENERATOR USE LARGE-SCALE DATA CENTER



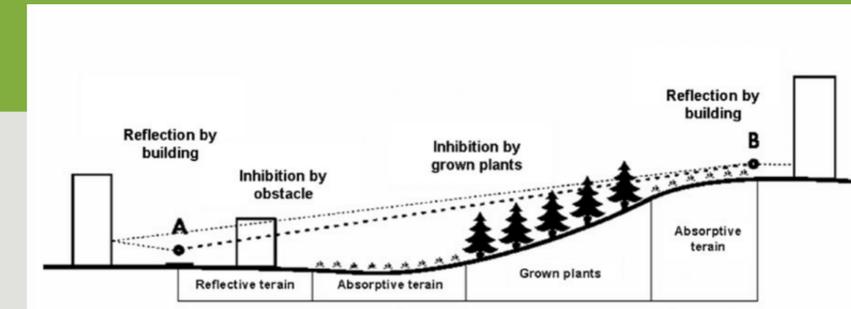
PSDS Website on Large-Scale Data Centers



Proposed Noise Attenuation & Vibration Control

Priorities

- Identify noise impacts at the time of application.
- Establish limits on noise at the property line, especially when in proximity to
- Allow for design features such as increased landscaping and site requirements for sound absorption including the installation of berms and/or walls to mitigate impacts based on noise studies.
- Post construction compliance / monitoring / liaison and require annual monitoring and reporting on noise compliance.



Proposal

- Require a baseline noise study and noise contour exhibit, signed and sealed, from an independent acoustic engineer that addresses both decibels and frequency.
- Establish decibel limits at the property line that are consistent with the Maximum permissible sound levels established in Section 16-31 of the Tucson Code of Ordinances.
- Require sound blocking and screening for generators and other noise producing mechanical equipment by a solid screened wall or roof screening.
- Require submittal of a plan with building permit application that demonstrates:
- Installation of high efficiency diesel generators (Tier IV or newer) with low emission profiles, or natural gas / dual fuel generators.
- A combination of generators and battery backup, and mandate battery use as a first line for grid instability.
- Prohibition of load shifting (running generators in non-emergency situations instead of relying on external power source).
- Certification that generator operation will only during emergency situations, or for preventative maintenance.
- Certification that non-emergency maintenance operations will be limited to 9-5, Mondays through Fridays.



FEEDBACK

NOISE & GENERATOR USE

LARGE SCALE DATA CENTER



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ENVIRONMENTAL COMPATABILITY, LANDSCAPING AND PARKING STANDARDS LARGE-SCALE DATA CENTER



Proposed Heat & Thermal Impacts

Priorities

- Require heat reflective or absorbent materials.
- Include open space and landscaping requirements for heat island mitigation and wildlife habitat, including maximum lot coverage standards requirements for enhanced landscaping borders.

Proposal

- Require enhanced landscaping borders of 20 feet.



Proposed Wildlife Friendly Features

Priorities

- Preservation of open space or habitat areas
- Preservation of wildlife corridors or crossings
- Adherence to Pima County's Land Conservation System as a requirement of application
- Adhere to existing ERZ, WASH, and hillside development standards, including protection of existing arroyos and washes through these standards.

Proposal

- Address through relevant items addressed elsewhere in the Code and Plan Tucson.
- Require applicants adhere to existing ERZ, WASH, and hillside development standards, including protection of existing arroyos and washes through these standards.



PDSD Website on Large-Scale Data Centers

FEEDBACK

OPEN SPACE, LANDSCAPING
& SCREENING

LARGE SCALE DATA CENTER



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Relevant Items Addressed Elsewhere in the Code

LARGE-SCALE DATA CENTER



Relevant Items Addressed Elsewhere in the Code

- Smaller data centers are currently defined and addressed in the code as storage uses
- Water use addressed through the City's Large Quantity Water Users Ordinance in the Tucson Code of Ordinances Section 27-20.
- Excessive Noise addressed in the Tucson Code of Ordinances Section 16-31, Excessive Noise
- Hazardous materials storage, such as generator fuel storage is addressed in the UDC under Section 4.9.10
- Wildlife habitat and sensitive areas development addressed through existing ERZ, WASH, and Hillside Development standards.
- Airport Hazard District and Industrial Use Group standards "any activity producing intense glare or heat shall not be performed in such a manner as to create a nuisance for data centers within the applicable areas.
- Require under the Building Code heat reflective or heat absorbent materials.
- Water Harvesting is addressed in the Commercial Rainwater Harvesting Ordinance.

Other Items Identified by the Technical Advisory Committee (TAC)

The TAC identified the following items as relevant to data centers and documented them here for reference. However, these items generally cannot be regulated through zoning and are therefore not included in the proposal.

- Power consumption
- On site power generation
- Requirements for renewable energy
- Water use for power generation



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FEEDBACK

ANYTHING WE MISSED?



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