DATA CENTERS IN TEXAS

A Citizen's Field Guide

What every resident, business owner, and local official in a fast-growing Texas community should know before a data center proposal reaches City Hall.

INSIDE THIS GUIDE:

- What a Data Center Actually Is
- The Real Economic Benefits ~~and~~ Their Limits
- The Costs Citizens Feel (and Governments Pay For)
- Environmental Impacts: Water, Air, and Energy
- ERCOT and Grid Reliability
- Incentives, Abatements, and Who Really Benefits
- What Good Governance Looks Like
- Three Local Scenarios: Win, Neutral, and Bad Deal
- 12-Term Glossary | 15 Questions for the Public Hearing
- Red Flags | Green Flags | Notes Pages

How to Use This Guide

This guide is designed to be printed and brought to City Hall. Each section covers a key aspect of data center development in plain language, followed by ruled lines for your notes. Start with the Glossary and the 15 Public Hearing Questions if your time is short.

10 minutes	30 minutes	1 hour
Glossary + 15 Questions	Add Red/Green Flags and the Three Scenarios	Read the full guide and annotate

Your notes before you start:

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Page 2

SIDEBAR: Data Center 101 — 12 Terms You'll Hear at City Hall

Keep this page visible during any public hearing or council meeting.

Hyperscale	A massive campus for internet-scale operations (Google, Amazon, Meta). Typically 100 MW+ of electrical demand, covering hundreds of acres.
Colocation (Colo)	A building where the owner provides power/cooling/space and tenants rent rack space for their own servers.
Enterprise Data Center	Operated by a single company for internal IT. Usually smaller and less visible.
Megawatt (MW)	A unit of electrical power. One MW serves roughly 1,000 average homes. A 200 MW data center rivals the load of a small city.
PUE (Power Usage Effectiveness)	Ratio of total facility energy to energy used by computers. PUE 1.2 = efficient. PUE 2.0 = half the energy wasted.
ERCOT	Electric Reliability Council of Texas — the grid operator for most of Texas. Manages load balancing, pricing, and new connections.
Interconnection Queue	The line of new loads and generators waiting for ERCOT approval. Has grown rapidly due to data center demand.
Tax Abatement	A temporary reduction in property taxes offered by a city or county to attract investment. Can erase near-term revenue.
Chapter 312	Texas Tax Code section authorizing municipalities and counties to offer property tax abatements, subject to term limits and job/investment requirements.
TIRZ	Tax Increment Reinvestment Zone: future tax growth from a zone funds improvements in that zone rather than general government.
Demand Response / Curtailment	An agreement to reduce power consumption during grid stress. Can improve stability — ask if it's contractual, not just voluntary.
UPS (Uninterruptible Power Supply)	Battery backup bridging grid failure and diesel generator startup. Lithium-ion UPS banks present specific fire suppression challenges.

Terms I need to look up / ask about:

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Page 3

A. What a Data Center Actually Is

A data center is an industrial building purpose-built to house computer servers, keeping them cool, powered, and connected 24/7/365. There are three main types:

Type	Who Builds/Runs It	Typical Size	Key Trait
Hyperscale	Google, Amazon, Microsoft, Meta	500K–1M+sqft 100– 500+ MW	Enormous power draw, few permanent jobs
Colocation	Third-party landlords	Varies widely	Multiple tenants share the building
Enterprise	Single company for internal IT	Usually smaller	Quieter footprint

Why Texas?

• ERCOT grid - more flexible for permitting and interconnection than grids in other states

• Abundant land at lower cost, especially in the DFW metro fringe

• Existing fiber corridors along major highways (I-20, I-35, US-287)

• No state income tax; historically business-friendly regulatory environment

• Speed-to-permit in many edge cities measured in months, not years

• Proximity to Dallas-Fort Worth corporate headquarters concentration

• Available substation capacity in communities that built ahead of residential demand

What I want to know about this proposal's site selection:

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Page 4

B. The Economic Benefits and Their Limits

When a city's economic development office pitches a data center, they typically lead with three claims: tax base, jobs, and infrastructure. Each deserves scrutiny.

Property Tax Base

A large campus can represent hundreds of millions to over a billion dollars in taxable property —buildings, land, and equipment. That can meaningfully expand the appraisal roll and reduce per-household tax burden over time. **The catch:** tax abatements often dramatically reduce near-term revenue. Always ask for the net figure, not the gross appraised value.

Construction Jobs

A hyperscale campus generates significant construction employment —electricians, ironworkers, concrete finishers, HVAC mechanics —for 2–4 years of active build-out. Industry estimates suggest 1,500–3,000 construction worker-years on a large campus. **These are real and temporary.**

Permanent Jobs

When the doors open, full-time headcount is often 25–200 people depending on size and automation. Well-compensated technical roles —but not a manufacturing plant. **Always ask for the permanent headcount number specifically.**

Grid & Infrastructure Investment

Large facilities require substation expansion and transmission upgrades. When sized with excess capacity and shared broadly, this genuinely benefits the community. When single-purpose, the benefit is narrower. **Ask who owns the new infrastructure and whether it has spare capacity.**

Anchor Tenant Effects

Data centers attract fiber. Fiber attracts tech companies and data-intensive businesses. This clustering effect is real and documented. It can accelerate the commercial and light-industrial growth edge cities want —if the zoning and planning support it.

Benefits claimed in this proposal —what I will verify:

C. The Costs: What Citizens Feel and Governments Pay For

VISIBLE / QUALITY OF LIFE

- **Noise:** Industrial cooling fans and chillers run 24/7. Low-frequency hum can carry hundreds of feet farther in flat Texas terrain.
- **Lighting:** Exterior lighting operates continuously. Without dark-sky standards, glare affects adjacent neighborhoods.
- **Visual scale:** Windowless concrete and metal buildings covering 10–20 football fields can reshape area character.
- **Truck traffic:** Equipment delivery, maintenance, and fuel resupply for generators create persistent but not always heavy traffic.
- **Heat rejection:** Cooling systems exhaust large quantities of heat, creating an industrial thermal environment.

Good design can mitigate most of this: berms and landscaping buffers, noise walls, dark-sky lighting controls, and architectural standards that break up visual mass. **Whether you get good design depends entirely on what the ordinance requires.**

INVISIBLE / BUDGET AND INFRASTRUCTURE STRESS

Electric Load	A hyperscale facility may draw 100–500 MW at full build-out. One MW serves roughly 1,000 average homes. Transmission and substation upgrades must be planned. **Key question: who pays?** If costs flow through utility rate base, all ratepayers share the bill.
Water	Evaporative cooling systems can consume millions sometimes tens of millions of gallons per year. In drought-prone Texas, ask which cooling technology is planned, projected annual consumption at full build, and what happens operationally under drought restrictions.
Roads	The build phase generates heavy truck traffic concrete, steel, electrical equipment. A binding road impact agreement specifying haul routes, pre/post condition assessments, and repair responsibilities is reasonable and common in well-governed jurisdictions.
Emergency Services	Lithium-ion UPS banks present fire suppression challenges not covered by standard training. Diesel fuel storage is a spill and fire hazard. Emergency response planning co-developed with the fire department, with equipment and training funded by the operator, is a legitimate requirement.
Opportunity Cost	Land occupied by a data center cannot also be a mixed-use town center, workforce housing, or neighborhood park. Data centers typically generate no sales tax, few residents, and limited foot traffic three things growing small cities generally need.

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Page 6

Concerns I want to raise about impacts in this proposal:

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Page 7

D. Environmental Impacts: Texas-Specific

Water Consumption

Texas summers are severe, and cooling a data center in August puts facilities in direct competition with residential users. Ask specifically which cooling technology is planned. Air-cooled = no water use, more energy. Evaporative = water-intensive, more efficient. Hybrid = a balance. In drought-exposed communities, this choice matters enormously.

Backup Diesel Generators

Virtually all data centers require diesel generator arrays for emergency power. A large campus may have dozens of generators, each several MW in size. These must be tested regularly ̶often monthly or quarterly ̶producing diesel exhaust, noise, and vibration. Testing schedules, duration limits, and emissions controls can often be tightened through the development agreement before approval.

'Renewable-Powered' Claims

Operators frequently claim facilities are '100% renewable powered.' This may mean Renewable Energy Certificates (RECs) ̶financial instruments that don't guarantee clean electrons on-site. More meaningful: direct Power Purchase Agreements (PPAs) or on-site generation. Ask which model applies and whether it's third-party verified.

E-Waste

Server equipment has a 3 ̶5 year lifecycle. 'Sustainability commitments' in press releases rarely include enforceable local obligations. Ask if there are contractual requirements for responsible disposal of equipment leaving this specific site.

Cooling Technology Comparison

Type	Water Use	Energy Use	Drought Risk	Best For
Air-Cooled	None	Higher	Low	Water-stressed regions
Evaporative (Cooling Tower)	High (millions gal/yr)	Lower	High	Water-rich, energy-cost-sensitive
Hybrid	Moderate	Moderate	Medium	Flexible; can shift with conditions

Environmental questions for this proposal:

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Page 8

E. ERCOT and Grid Reliability: Both Sides

The February 2021 winter storm put ERCOT at the center of Texas political conversation. Data center load has since become a flashpoint. The honest picture is more nuanced than either side usually admits.

The Concern	The Counterpoint
Every new MW of load requires new generation and transmission capacity. If investment doesn't keep pace, reliability margins shrink and prices rise for all Texas ratepayers including communities far from the data center.	Large industrial loads can participate in ERCOT demand response programs agreeing to reduce consumption during grid stress events in exchange for payment or capacity credits. A data center that curtails meaningfully acts as a grid buffer during dangerous peaks.

The Governance Question

Residents should ask: Is there a contractual demand response commitment not just a voluntary one? Under what conditions must the facility curtail? Who monitors compliance? ERCOT publishes long-term planning documents showing data center load growth projections. These are public records. Your council members should have read them.

ERCOT / grid questions for this proposal:

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Page 9

F. Incentives, Abatements, and Who Really Benefits

Texas's Chapter 313 school district tax abatement program expired at the end of 2022 and was not renewed in 2023. But incentive tools remain available to cities and counties.

Chapter 312 Abatement	Municipalities and counties may offer property tax abatements for up to 10 years (sometimes renewable). Must include job/investment commitments. Requires a public hearing and council vote.
TIRZ	Tax Increment Reinvestment Zone: future tax growth from the zone funds improvements in that zone rather than flowing to general government funds.
PILOT	Payment in Lieu of Taxes: developer makes flat negotiated payments rather than standard property tax assessments.
Fee Waivers	Cities may waive development, permitting, or impact fees. Often invisible in public discussions but represent real lost revenue.

THE NET FISCAL IMPACT TEST

Before approving any incentive, your governing body should commission an **independent** fiscal impact analysis (not the developer's) that models:

1. Tax revenue generated after abatements, not gross appraised value
2. Cost of public services required by the facility
3. Cost of infrastructure upgrades borne by the public
4. Timeline to fiscal break-even when does the city actually come out ahead?
5. Clawback provisions if commitments are not met

Incentive terms in this proposal what I need to verify:

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Page 10

G. What Good Governance Looks Like

Before any vote approving a data center or its incentive package, the following should be answered in writing - not just promised verbally. Check each box when you have received a satisfactory written answer.

UTILITIES

- Independent utility capacity study covering power, water, AND wastewater — with a clear answer on who pays for

  upgrades needed solely for this project.

- Written confirmation from the utility provider on available capacity and interconnection timeline.

NOISE & VISUAL IMPACT

- Noise study by a qualified acoustical engineer, with enforceable decibel limits at the property line — not just the

  facility fence.

- Setback requirements and landscaping/buffering standards written into the ordinance.

- Dark-sky-compliant exterior lighting standards with specific foot-candle limits.

GENERATORS & AIR QUALITY

- Generator testing schedule limits, duration caps, and emissions controls in the development agreement.

- All applicable TCEQ permits secured before operations begin.

WATER

- Water source disclosure: where does the water come from?

- Projected annual consumption at full build-out, with engineer certification.

- Written operational protocol for Stage 2 and Stage 3 drought restrictions.

ROADS & CONSTRUCTION

- Road impact analysis with pre-construction photographic condition record.

- Binding repair commitments for designated haul routes - with bond or escrow.

FISCAL & REPORTING

- Independent net fiscal impact study — not the developer's — reviewed publicly before any vote.

- Public-facing annual reporting on power consumption, water use, and curtailment events.

- Sunset clauses on all abatements tied to benchmarks: jobs, investment levels, timeline.

- Clawback provisions if benchmarks are not met.

EMERGENCY SERVICES

- Emergency response plan co-developed with the fire department before approval.

- Equipment and training for lithium battery fire suppression — specified and funded in the development agreement.

Items still outstanding — who I will follow up with:

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Page 12
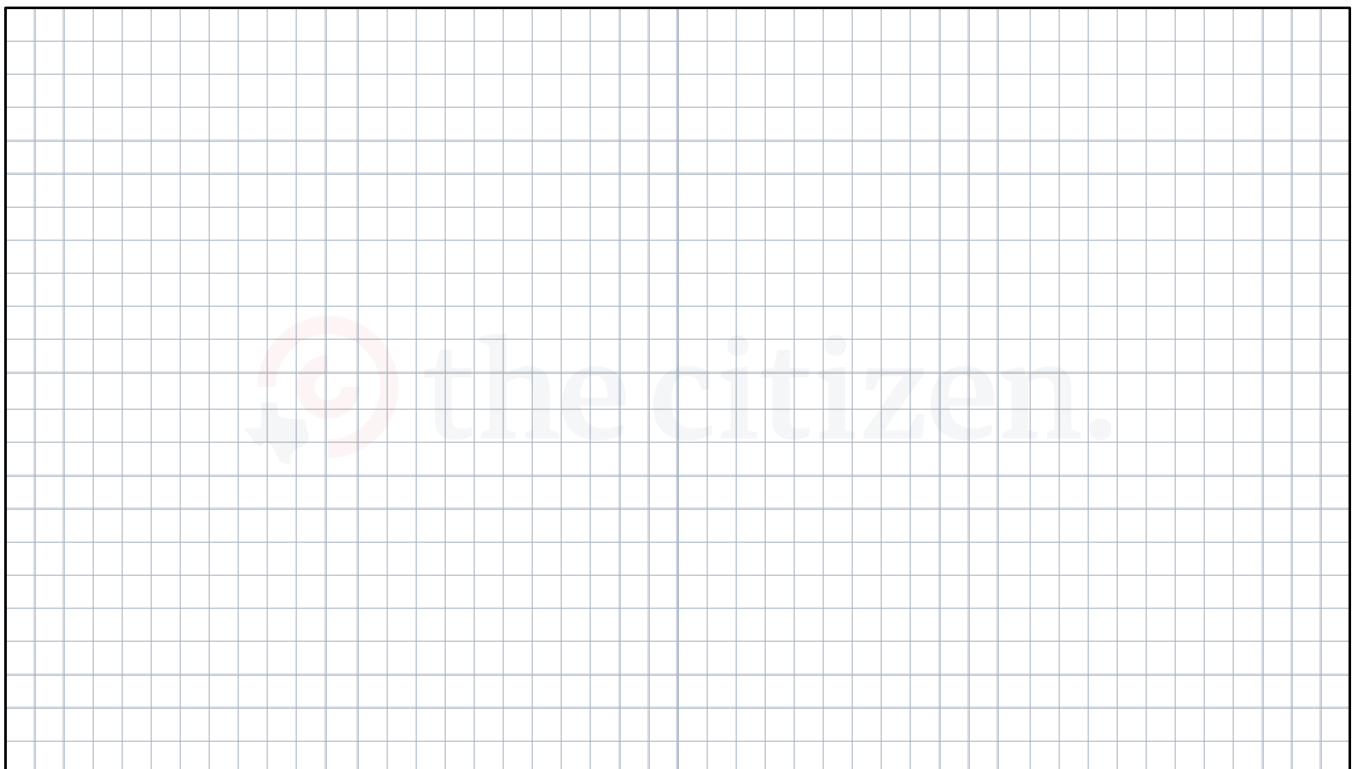
H. Three Local Scenarios: Win, Neutral, and Bad Deal

These are hypothetical scenarios set in a Texas edge-city environment. They are illustrative, not based on any specific named project.

SCENARIO 1: The Win

A mid-size edge city west of Fort Worth hires an independent fiscal consultant *before* any negotiation. The analysis shows the facility generates meaningful property tax revenue even with a partial, time-limited abatement.

The developer agrees to fund a substation upgrade sized 30% larger than needed, creating capacity for a light industrial park the city has wanted. Noise walls and a landscaped berm are required by ordinance. The developer funds fire department training on lithium battery fires.

Water consumption is modest because the developer chose hybrid cooling in response to the city's drought vulnerability assessment.

After 15 years: The facility is a top-five taxpayer, has indirectly attracted two other tech employers, and road conditions are better than pre-project because repair commitments were enforced.

SCENARIO 2: The Neutral Deal

A county outside the metro approves a hyperscale data center on scrubland adjacent to a transmission corridor. Construction jobs boost local contractors for three years. Permanent employment is 60 people.

The property tax base expands, though abatements reduce near-term revenue. Noise is a recurring complaint from a subdivision half a mile away; the city negotiates adjustments but enforcement is imperfect.

After 12 years (when the abatement expires): The facility is net-positive fiscally. Not transformative, but manageable. The county wishes it had negotiated harder on noise standards.

SCENARIO 3: The Bad Deal

A small city in rapid growth mode approves a hyperscale campus on land planned for mixed-use development near its future town center. Eager to close the deal before a neighboring city does, the council approves a decade-long abatement, waives development fees, and funds road improvements to the site.

The facility employs 35 people. Permanent tax revenue during the abatement is negligible. The substation upgrade flows through utility rate base —all customers in the service territory share the cost. The town center site is gone.

Residents notice diesel exhaust during monthly generator tests. Twelve years in, the facility is sold and the new owner renegotiates. The fiscal benefit promised never materialized.

The legacy: An industrial anchor on the prime development parcel, a road maintenance backlog, and an ongoing public conversation about who approved this and why.

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Page 13

Which scenario does this proposal most resemble? Why?

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Page 14

Red Flags & Green Flags

Use these as a quick diagnostic during public hearings and council deliberations.

✗ RED FLAGS — Slow Down	✔ GREEN FLAGS — Good Signs
• Developer requests approval before independent analysis is complete • Fiscal impact study provided only by the developer's consultants • Abatement terms contain no clawback for unmet commitments • Utility capacity questions answered with 'the utility will work it out' • Noise/visual mitigation described as 'we'll follow standard industrial code' no site-specific study • Water consumption figures not provided or described as proprietary • Emergency response planning deferred until after approval • The site is in or adjacent to the city's mixed-use or town center priority area • Council briefed primarily by developer representatives without parallel staff input • The phrase 'thousands of jobs' used without distinguishing construction from permanent positions	• Developer voluntarily provides detailed water, power, and noise studies before the hearing • Abatement terms include clear benchmarks and clawback provisions • Infrastructure upgrades are developer-funded and sized to benefit future development beyond the facility • Hybrid or air-cooled system proposed in recognition of local drought exposure • Emergency response plan co-developed with the fire department before approval vote • Independent fiscal impact study commissioned by the city not the developer • Noise and lighting standards written into the development agreement with third-party enforcement • Permanent job count stated clearly and separately from construction employment • Developer participates in ERCOT demand response programs with documentation • Developer references a track record verified by city staff in comparable communities

Flags I observed at the most recent meeting:

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Page 15

SIDEBAR: 15 Questions to Ask at the Public Hearing

Read the question. Write down the answer received. Follow up if the answer is vague or verbal only.

Q 1

What is the peak electrical demand in megawatts, and what grid upgrades are required to serve it?

Answer received:

Q 2

Who pays for those grid upgrades —the developer, the utility, or ratepayers?

Answer received:

Q 3

What is the projected water consumption per year at full operation?

Answer received:

Q 4

Which cooling technology is planned, and what is the drought contingency if water restrictions are imposed?

Answer received:

Q 5

What is the permanent full-time employee count at full operation?

Answer received:

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Page 16

Q 6

What are the construction job estimates and are those local hires or imported contractor crews?

Answer received:

Q 7

Has an independent fiscal impact study been done, and can the public see it before the vote?

Answer received:

Q 8

What is the net fiscal impact to the city and school district after incentives, over 10 and 20 years?

Answer received:

Q 9

Are there clawback provisions if investment or job commitments are not met?

Answer received:

Q 10

What are the enforceable noise limits at the property line, and who measures compliance?

Answer received:

Q 11

What generator testing schedule is planned, and what emissions controls apply?

Answer received:

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Page 17

Q 12 What setbacks, buffers, and landscaping requirements will be written into the ordinance?

Answer received:

Q 13 Has the fire department reviewed the emergency response plan, and is equipment/training funding included?

Answer received:

Q 14 What road impact mitigation is required, and who enforces the repair commitments?

Answer received:

Q 15 Is this the highest and best use of this land given the city's long-term comprehensive plan?

Answer received:

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Page 18

I. Bottom Line

> # Data centers aren't inherently good or bad for Texas edge cities. They're a contract.

The terms of that contract ̶how utilities are paid for, how noise is controlled, how water is consumed, what abatements are offered and under what conditions they expire ̶determine whether the community wins or loses.

The communities that do well aren't the ones that move fastest or offer the most. They're the ones that show up prepared: with independent analysis, enforceable conditions, and elected officials who understand that 'economic development' is not automatically a synonym for 'good deal.'

The residents of fast-growing Texas communities have every right to demand the receipts before the ribbon is cut.

My Notes: This Proposal

Project Name / Location / Applicant:

_____

_____

Council / Commissioner Meeting Dates:

_____

_____

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Page 19

Commitments Made by Developer (with dates):

Commitments Made by City/County Staff:

Concerns I Still Have:

People I Need to Contact:

Documents I Have Requested:

Documents Received (with dates):

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Page 20

How I Voted / My Recommendation to Council:

_____

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Follow-Up Actions After the Vote:

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Page 21

Additional Notes

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Page 22