

# High-Load Computing and Data Processing Facilities in Texas

High-load computing and data processing facilities are large-scale operations that house dense concentrations of servers and computing equipment to perform activities such as cloud services, artificial intelligence processing, cryptocurrency mining, and other data-intensive functions. These facilities are characterized by their continuous, high-demand use of electricity and, in many cases, significant water use for cooling, placing substantial and sustained demands on local infrastructure and resources.

Today we may be talking about Data Centers, but I ask the Court to broaden their consideration.

High-Load Computing and Data Processing Facilities — whether that’s AI, cloud, or crypto — all have the same impacts on water and electricity, and they are all flooding our state with unknown, potentially dire consequences.

## DATA CENTERS IN TEXAS

What We Know, What We Don’t, and Why It Matters to Somervell County

### REPORTING LIMITATIONS

#### WHY HARD FACTS ARE LIMITED

It is **difficult to provide fully transparent, project-specific facts** about data centers because this industry routinely:

- Operates under non-disclosure agreements with local governments
- Does not publicly disclose electricity demand, infrastructure needs, or full build-out plans until late stages
- Aggregates impacts across multiple buildings and phased development

As a result, counties are often **without access to the same information developers, utilities, and grid planners have**. Information below reflects the **best available public data** from Texas agencies, ERCOT, and industry research.

#### WHAT WE KNOW

**How many data centers exist in Texas today?** (Source: Texas Comptroller of Public Accounts as of 2024)

- **279** data centers operating statewide
- **141** located in the Dallas–Fort Worth region

**How many data centers are proposed or in process?**

Because Texas does not maintain a centralized public registry of proposed data centers, counts rely on industry trackers, utility interconnection data, and commercial real estate research.

- Industry trackers and grid filings indicate **dozens to over one hundred additional data center projects or campuses** are in various stages statewide.
- The exact number of proposed facilities is **intentionally opaque**, but **electric demand requests reveal scale more clearly than building counts**. which is why ERCOT data is critical.

## DATA CENTERS ELECTRICITY DEMANDS

*Based on projects already being planned, data centers in Texas are on track to use at least **twice as much electricity** as all Texas households combined.*

*And based on what's being requested from ERCOT, the demand could be closer to **ten times current household use**.*

### TEXAS ELECTRICITY DEMAND AND HOUSEHOLD EQUIVALENTS

What is the current electricity demand annually by households?

- **~144 billion kWh**
  - ~11 million households x ~13.1 thousand kWh per household

What is the current electricity demand annually by data centers?

- **~23.7 billion kWh; = ~1.8 million households**

What is the **estimated proposed or anticipated** electricity demand annually by data centers?

(Projects that are actively being developed, announced, or realistically moving forward)

- Industry and grid tracking indicate **~333 billion kWh; = ~25 million households**

What is the **estimated large load request** electricity demand annually?

(Everything companies have asked the grid for)

- **~1.5 trillion kWh; = ~112 million households**

### ELECTRICITY PRICES: CURRENT VS POTENTIAL

There is no publicly available Texas study that assigns a precise percentage of past residential bill increases to data centers alone. However, the cost mechanism is well documented:

- Large new loads require:
  - New power generation
  - New substations
  - **Major transmission line construction**
- Texas is evaluating **tens of billions of dollars** in new or upgraded transmission
- Transmission and delivery costs are **socialized**, so as large industrial loads grow faster than population, residential customers absorb a **growing share of fixed grid costs**:
  - Residents and small businesses pay through delivery charges
  - Customers cannot opt out
  - **Delivery charges now account for roughly 40% to 50% of the typical electric bill.**

## WHAT ERCOT IS REPORTING (WHY THIS MATTERS)

ERCOT has publicly reported:

- **~2.09 trillion kWh per year (annualized equivalent) of large-load interconnection requests statewide**
- **Over 70% attributed to data centers; = ~1.46 trillion kWh or ~ 112 million households**
- **More than three times higher than just one year earlier and roughly 10x the annual electricity use of all Texas households combined**

This is **not a future concern**. It is already reshaping how the Texas grid is planned. These requests are driving:

- **Changes to ERCOT large-load interconnection rules**
- **New transmission planning assumptions**
- **Increased concern about long-term reliability and affordability**

## DATA CENTERS WATER DEMANDS

### TEXAS WATER DEMAND AND HOUSEHOLD EQUIVALENTS

Because Texas has not historically required centralized reporting, statewide figures are estimates based on research aggregating direct cooling water and indirect water used for electricity generation.

What is the current water demand annually by households?

- **~840 billion gallons**
  - **~11 million households × ~76,000 gallons per household per year**

What is the current water demand annually by households in Johnson County?

- **~5 billion gallons**
  - **~65k households × ~76,000 gallons per household per year**

What is the current average water demand annually by data centers, per facility?

- **~89 million gallons; Household equivalent = ~1,170 households**

What is the current water demand annually by all data centers?

- **~25 billion gallons; Household equivalent = ~329,947 households (Houston Advanced Research Center analysis)**

What is the estimated proposed or anticipated annual water demand by data centers in Texas?

(Projects that are actively being developed, announced, or realistically moving forward)

- **~29–161 billion gallons; Household equivalent = ~382,000 to ~2.12 million households**

## LOCAL WATER CONTEXT: JOHNSON COUNTY

### What is the current local water supply?

- Johnson County relies on a combination of municipal water systems (City of Cleburne, Burleson, Joshua, etc.), regional surface water providers (including Brazos River Authority sources), groundwater wells and private systems in rural areas
- Water supply is a mix of surface water and groundwater, with increasing demand due to population growth and development

### How does a data center compare at the local scale?

Published ranges for large data centers indicate:

- **1–5 million gallons per day (MGD)** depending on size, cooling method, and climate
- Household equivalents: 1 MGD ≈ **~4,800 households**; 5 MGD ≈ **~24,000 households**
- One large data center could use the equivalent of **~35%** of current Johnson County annual household water usage

### Why water risk increases with proposed facilities

- Water demand from data centers is:
  - Continuous, non-seasonal and **difficult to curtail** once operational
  - During **drought conditions**, industrial demand **competes** directly with residential supply, fire **protection** and schools and hospitals
- Unlike residential growth, **industrial water demand is concentrated and immediate**

Texas regulators have acknowledged this growing concern:

- The Texas Public Utility Commission has initiated statewide efforts to better quantify **AI data center water use**, including indirect water impacts tied to electricity generation.

## BOTTOM LINE

As data centers, or any high-load computing and data processing facilities approach the County to discuss incentives, please understand they are not there for cost savings. In most cases, any incentive could be equivalent to a rounding error for the company.

What they gain from an agreement is **not the money, it is the message**. An incentive agreement allows them to say they are a good neighbor working with the community, even though the county has no meaningful enforcement power once the facility is built. Incentive agreements do not stop the impacts we have discussed. **They only decide whether public dollars help legitimize them.**

**It is imperative for High-Load Computing and Data Processing Facilities to know that they are not welcome in Johnson County until statewide studies are completed and for Johnson County to demand a moratorium at the state level.**

# INTEGRAL OPPORTUNITY: REGIONAL AND STATEWIDE COORDINATION

*This is not a local problem that can be solved with a local incentive. It is a statewide infrastructure issue that demands statewide coordination. Until that happens, individual County negotiations only accelerate harm, while weakening the collective leverage of Texas communities.*

## CURRENT SITUATION

Individual counties spend months in one-off discussions on individual efforts, while missing the greater opportunity to coordinate publicly with other Texas communities facing the same pressures.

**This is not an argument against data centers or AI. It is an argument for pace, scale, and sustainability.**

Texas is currently absorbing data center demand for:

- National cloud services

Small and rural communities are being asked to shoulder:

- Long-term water risk
- Permanent electricity cost increases
- Infrastructure strain
- Limited local benefit

A temporary moratorium or pause would allow:

- Uniform statewide standards
- Transparent water and electricity planning
- Fair cost allocation
- Community consent before irreversible commitments are made

## WHY THIS MATTERS FOR JOHNSON COUNTY

Johnson County is not an outlier. It is part of a statewide pattern:

- Projects targeting smaller counties with:
  - fewer regulatory tools
  - limited water resilience
  - less public visibility
- Impacts that do not stop at county lines:
  - grid costs are socialized statewide
  - water systems are interconnected regionally
  - precedent spreads quickly