

Building data centers in Texas: Why early community engagement is now project-critical

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This paper reflects Ramboll's operational, environmental, and regulatory analysis. It is not legal advice. Developers and communities should consult qualified counsel on specific obligations under SB 6, PUC rules, and local ordinances.

Executive summary

Texas is one of the fastest-growing data center markets in the US. It is also a test case for whether digital infrastructure can grow at the speed the market demands while maintaining public trust. Communities are asking questions about water demand, electric bills, noise, land use, local benefits, and whether they are engaged early enough to understand and help shape project decisions.

The best opportunity to manage those questions comes before design decisions harden. Siting, cooling technology, layout, noise controls, lighting, and engagement timing are largely set before permit applications are filed. Choices that are simple on a drawing can become expensive, constrained, or unavailable once procurement and construction begin.

The industry's drive for speed can push community engagement too late. When communities believe decisions have already been made, concerns can harden into opposition, permitting delays, litigation, and calls for new regulation. Engagement should be managed as a core project deliverable, alongside uptime, power performance, environmental performance, and compliance.

For developers, the path forward is practical: engage early, minimize water demand, show how utility connections and upgrades will be handled, make local benefits clear and contractual, and tailor communication to each community. Texas remains attractive for investment, but expectations are changing.

1. Texas is a proving ground for data center growth

Texas is attracting major data center investment because of its land availability, energy market, transmission buildout, business environment, and access to growing technology and industrial corridors. Public reporting and market analysis point to a large pipeline of planned projects across the state, including many outside city limits where local authority can be limited.

The scale is significant. Some publicly announced campuses are measured in gigawatts, and the largest projects can require power and water planning on a scale that resembles major industrial infrastructure. That is why data centers are increasingly viewed not only as commercial real estate or technology facilities, but also as community, utility, and infrastructure projects.

Recent polling indicates that many Americans have questions regarding data center development. Gallup polling conducted in March 2026 found that roughly seven in ten Americans opposed a data center being built in their area. Respondents cited concerns about water, energy, pollution, noise, quality of life, local costs, and whether promised economic benefits would be meaningful locally.

The pattern is increasingly familiar. When communities believe project decisions have already been made, concerns can evolve into organized opposition, litigation, permit opposition, zoning action, or calls for state-level intervention. When engagement starts earlier and is tied to real design choices, developers have more room to address concerns before positions become fixed.

2. What data centers bring to Texas

Data centers are the physical infrastructure of the modern digital economy, supporting cloud computing, telecommunications, financial systems, healthcare applications, streaming platforms, and more. They bring capital investment, property tax base, and strategic infrastructure. They also bring modest permanent employment and require coordinated planning for supporting infrastructure and resources.

Industry research prepared by PwC for the Data Center Coalition reports substantial economic contributions from data centers, including GDP, tax revenue, and direct, indirect, and induced employment. Those benefits are real, but they may not tell the full story.

For that reason, economic development messaging is strongest when paired with clear commitments on local infrastructure, construction management, utility impacts, noise control, workforce opportunities, and long-term community benefit.

3. What communities care about

Residents are looking for tangible, science-based information on issues they can see and feel, including the following:

- Environmental and biodiversity impacts
- Water use
- Noise pollution and acoustics
- Energy use / cost
- Economic benefits
- Traffic and construction
- Light pollution
- Visual impact/aesthetics
- Transparency and communication

Gallup's follow-up survey reflected the same themes. Asked an open-ended question about their reasons, about half of opponents cited perceived excessive resource use, split evenly between water and energy. Sixteen percent cited the potential for pollution, including noise. Roughly one in five cited perceived quality-of-life impacts such as traffic and land use, and economic concerns. Supporters most often cited economic benefits, with 55% naming jobs specifically.

These categories have surfaced across Texas. Residents near compute or data center facilities have raised questions about mechanical noise, nighttime lighting, traffic, and construction or operational impacts. Residents increasingly arrive at hearings with specifics: meeting minutes, complaint logs,

photographs, and measurements. General reassurance is less effective when communities are asking for project-specific information.

Land-use and permitting questions follow a similar pattern. Residents and local businesses may raise concerns about rezoning, construction impacts, or conversion of rural or semi-rural land to digital infrastructure. The questions are usually site-specific: how the project looks, sounds, draws resources, affects traffic, or changes the surrounding area.

Many questions emerge before project-specific information is available. That makes transparent design assumptions, engineering analysis, and clear commitments essential to distinguishing perception from project reality. The risk is not that every concern becomes opposition; it is that concerns harden when people believe impacts were settled before they had a meaningful voice.

4. The energy question

In April 2026, ERCOT filed its first Long-Term Load Forecast under SB 6. The preliminary forecast projects roughly 278,000 megawatts of peak demand by 2029 and nearly 368,000 megawatts by 2032, more than four times the all-time peak of 85,508 megawatts set in August 2023. ERCOT describes the filing as a preliminary planning snapshot rather than a prediction of what will be built.

ERCOT also noted that many submitted projects may never be built on time, at full scale, or at all. Analysts often describe this gap as phantom load: duplicative or speculative requests that buy developers optionality but leave regulators, communities, and competing developers with a queue they cannot fully trust.

For the public, gigawatt load forecasts usually translate into two questions: Will this raise my electric bill? Will my lights stay on?

On bills, the issue is who pays for grid investments associated with large new loads. Project developers generally bear the direct costs of interconnection and project-specific upgrades needed to serve their facilities. Serving concentrated new load may require new transmission lines or other grid upgrades, and how those costs are allocated can affect delivery charges. Cost allocation is now an active policy issue, including whether costs associated with large-load infrastructure should be project-specific, system-wide, or otherwise allocated.

On reliability, communities worry that data centers could compete with existing customers during constrained conditions. That concern may vary from region to region, but developers can build confidence by explaining, in verifiable terms, how their projects will operate during grid stress, what curtailment commitments apply, and how reliability performance will be monitored.

Texas policy already provides part of the framework. SB 6 requires new large loads at transmission voltage to be curtailable during firm load-shed events. Combined with direct-cost payment for interconnection and, where feasible, new generation or storage, developers can address cost and reliability questions with commitments communities can verify.

5. The water question

The best independent estimate comes from the Houston Advanced Research Center (HARC). Its January 2026 white paper calculated that existing Texas data centers consume roughly 25 billion gallons of water per year, including indirect water for electricity generation. HARC projected growth between 29

and 161 billion gallons annually by 2030, up to 2.7% of total state water use. Current use is about 0.4% of statewide consumption. The wide range in the projection reflects variables such as design, climate, utilization, electricity generation, and cooling technology.

HARC identified reporting as a possible weak point and called for additional reporting from data centers on water and electricity use, along with forward-looking demand forecasting in state water planning. At the local level, regulators and planners need site-specific information on projected water use, cooling design, water sources, reuse options, and operational controls.

6. Costs, investments, and who pays

Texas enacted its data center sales tax exemption in 2013, when facilities were generally smaller than today's largest campuses. As more projects qualify, policymakers are reassessing how incentives align with today's project scale, including if they remain appropriately targeted and how public benefits are documented, durable, and locally relevant.

The policy discussion reflects two practical considerations. The industry maintains that data centers should receive the same sales tax treatment on inputs as other manufacturers and that repeal would chill investment. Well-structured projects can also deliver significant local value through private infrastructure investment, expanded tax base, workforce opportunities, and community commitments that extend beyond the facility itself. Skeptics emphasize that companies site data centers where land, power, and water are available, making incentives less decisive and prompting a closer review of how incentives are targeted and measured against local outcomes.

Recent state-level attention reflects that shift. A useful distinction is between direct interconnection costs, which are generally borne by the requesting customer or developer, and broader transmission upgrades, where cost allocation can be more complex. Governor Abbott has directed the PUC and ERCOT to protect residential ratepayers from data center infrastructure costs and has signaled interest in future legislation addressing water-efficient cooling, usage reporting, incentives, setbacks, noise reduction, and other community protections.

7. Setting clear expectations for data center growth

Texas is defining a realistic model for governing data center growth without stopping it: data centers are welcome, but they will be expected to demonstrate clear cost responsibility, prove their projects are real to obtain utility commitments, and disclose their footprint. SB 6 directed the PUC to create standards for loads of 75 megawatts or more, require contribution to utility connection costs, disclose duplicative requests and backup generation, enable curtailment during grid emergencies, and review whether transmission costs are fairly allocated.

Implementation is moving quickly. Texas has begun developing large-load interconnection standards that emphasize site control, financial security, cost responsibility, disclosure, and coordinated study of large projects. These measures are designed to distinguish real projects from speculative requests and to give planners more reliable information. Large data center projects will be expected to provide better information, clarify cost responsibility for project-specific infrastructure, and show how they will manage local considerations. For developers, that is not simply a compliance issue. It is a delivery issue.

Taken together, the agenda mirrors community concerns: bills, capacity, water, transparency, infrastructure planning, and noise. Texas is moving toward a more balanced approach that supports

investment while placing greater emphasis on cost clarity, project readiness, planning transparency, and local impact management.

However, local authority remains uneven. Cities and counties do not have the same tools, and communities outside municipal boundaries may have fewer formal ways to influence land use. That makes early, voluntary engagement more important. Where communities have real information and a real forum, projects are more likely to be negotiated; where information channels are limited, projects are more likely to face friction.

8. The path forward: Five practical levers for earning trust

Lever 1: Early Engagement Can Aid Alignment of Perception with Reality

Done well, early engagement improves delivery strategy by identifying concerns while meaningful choices are still available. Effective engagement often includes:

- Town halls, listening sessions, focus groups, site walks, and open houses scheduled when people can attend
- Plain-English sessions on power, water, noise, air quality, lighting, and construction impacts
- Workshops where input can change design choices, including cooling, sound barriers, testing windows, setbacks, screening, and dark-sky lighting

A community advisory board and public issues log can turn one-time consultation into a durable relationship and a visible record of good faith.

Lever 2: Pay your own way, and prove it

Cost-causation is the emerging principle of Texas policy. Treat SB 6 and rule 25.194 obligations as the floor. Where feasible, make projects capacity-additive by bringing generation or storage to the grid rather than demand alone. Publicly sharing planned infrastructure investments and community programs can help translate private investment into locally understood benefits, especially when commitments are specific, measurable, and updated over time.

Lever 3: Water by design, reported by default

For new Texas builds, water-minimizing cooling should be the baseline where technically and commercially feasible. Developers can build trust by publishing projected and actual water use, responding to state water-use surveys, disclosing water usage effectiveness alongside power usage effectiveness, and supporting forward-looking demand in state water planning. A credible water strategy is increasingly part of the license to build.

Lever 4: Make local benefits contractual

Performance-based agreements convert projections into obligations and lend visibility to the benefits provided by new development. Where local incentive agreements are used, developers are better positioned if benefits are tied to measurable employment, investment, buy-local, infrastructure, and community-protection commitments. A projection is a forecast. A contract term is a commitment.

Lever 5: Message to the questions people actually ask

In Texas, messaging is strongest when it starts with directly addressing the questions people actually ask: water, electric bills, noise, traffic, land use, and local benefit. The carbon story can support the message, but it should not carry it alone. Commitments matter only if residents understand what they mean, how they are enforced, and how they apply locally.

9. Conclusion

Texas remains highly attractive for data center investment, but expectations are changing. Communities are looking beyond investment figures alone, and policymakers are focused on how infrastructure costs associated with large-load growth are allocated. The path forward is proactive project development: engage early, provide transparent water and power information, make local benefits contractual, identify the risks associated, determine management strategies, and communicate progress through clear, public reporting. In today's Texas market, early community alignment is not a detour from delivery; it is part of the critical path.

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