

Planning For **DATA CENTERS IN CRAWFORD COUNTY**



**AN INTRODUCTORY GUIDE FOR DATA
CENTER DEVELOPMENT**

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DATA CENTERS —

What Are They?

Data centers are specialized facilities that house computer servers, data storage systems, and network equipment, which form the backbone of today's digital world. They are increasingly considered critical infrastructure, enabling everyday online activities, from streaming videos and cloud computing to business data processing.

To prepare for potential data center proposals in Crawford County, municipal officials, planning staff, and citizen planners need practical recommendations that welcome this development in a way that benefits the community and safeguards local priorities.

ALIGNING WITH OUR GOALS

Crawford County Planning's *Crawford Inspired: It's Our Future* comprehensive plan emphasizes the importance of infrastructure, economic resilience, and quality of life. Through proactive planning measures, data centers can advance several *Crawford Inspired* priorities.

- **Consistent & Clear Governance** - By **proactively updating ordinances** to address data centers, municipalities can avoid case-by-case confusion and demonstrate a business-friendly yet community-minded approach. Clear standards will expedite review processes and provide certainty for both developers and residents.
- **Community Character & Environmental Stewardship** - With **proper siting, design guidelines, and impact mitigation**, data centers can be compatible with community character. Planning policies can require aesthetic improvements, buffering, and environmental safeguards so that new facilities do not conflict with their surroundings.
- **Prosperity & Economic Growth** - While data centers do not create a significant number of permanent jobs, they can substantially **boost the tax base** and help fund schools, emergency services, and local amenities. They can be part of a diversified growth strategy, complementing other economic development efforts.
- **Investing in Infrastructure** - Data centers require robust infrastructure — particularly **high-capacity power and fiber-optic broadband** — and their development can incentivize improvements that benefit the broader community.

LOCATION REQUIREMENTS

For Data Centers

Data centers often feature large, windowless structures with extensive electrical and cooling systems, backup generators, and enhanced security features. Notably, they do not generate the traffic, noise, or workforce of a traditional factory or warehouse but still have various requirements for key location sites.

- **Reliable Electric Supply** - Access to massive power capacity is paramount. **Investing in grid improvements** not only supports data centers but also aligns with broader infrastructure upgrades, benefiting residents and businesses.
- **Fiber-Optic Broadband Connection** - Ideal sites lie along **major fiber routes or near internet backbone nodes**. By improving broadband infrastructure in strategic locations, the County can both serve residents and attract data center investment.
- **Abundant Water** - A robust water supply (and discharge capacity) is a key factor for data centers, which use water-intensive cooling systems to prevent overheating. Municipalities should assess the capacity of local water treatment plants and consider **non-potable water sources** (not suitable for drinking, cooking, or bathing) to avoid straining drinking water supplies.
- **Safe, Stable Environment** - Data center operators seek locations with a **low risk of natural or human-made disasters**. Crawford County's moderate climate and low incidence of major natural disasters are a selling point. Even so, due diligence should include environmental hazard reviews.
- **Land Availability** - Municipalities should identify sites or corridors where **larger contiguous parcels** are available (e.g., underutilized industrial lands or open tracts near infrastructure). However, care should be taken with greenfield sites if land is agricultural or environmentally sensitive. In some cases, retrofitting existing structures is possible.

INFRASTRUCTURE READINESS

Making the community “data-center ready” is as critical as ensuring that data centers benefit that same community. Without sufficient infrastructure, successful development is unlikely.



Electric Power

Municipalities should review codes on bulk fuel storage, hazardous materials, and noise to ensure they account for data centers' need for reliable, high-capacity electricity.



Broadband & Network Connectivity

Municipalities should coordinate with telecom providers to expand fiber networks to industrial areas or business parks, as a reliable network is critical for data centers.



Water Supply & Cooling

Municipalities should assess peak water usage scenarios and/or encourage the use of non-potable water. Stormwater management must be engineered to handle large impervious surfaces typical of data centers.



Transportation & Site Access

For construction phases, municipalities should ensure that road weight capacities and bridges can accommodate construction deliveries. Maintaining proper access to the site is essential for ongoing operations and emergency services.

LAND USE & SITE SELECTION

Data centers can't — and shouldn't — be placed on just any parcel of land. The *right* sites need to be selected, so communities are prepared to welcome data centers in a controlled and positive manner. Here are the best practices for municipalities to consider:

WHY READINESS MATTERS.

While data centers don't come with the smokestacks of a traditional factory, they still generate emissions and require a significant amount of power, water, and land. They can disrupt natural environments, leading to latent unwanted outcomes that impact the daily lives of residents. For example, high water usage can impact biodiversity, which could lead to a decrease in deer population, making hunting difficult throughout the County. It is up to local municipalities to plan for these data centers effectively to abate these environmental impacts.

- 1. Target Appropriate Zones and Locations.** Permit data centers in zones that anticipate **larger buildings and utility infrastructure**, away from residential neighborhoods, like industrial, light industrial, or similar heavy commercial uses.
- 2. Consider Overlay Zones.** One approach for land use is to create a **Data Center Overlay District** that highlights prime locations for data centers with robust infrastructure. This can prevent data centers from spanning across an entire base zoning district.
- 3. Avoid Prime Farmland and Sensitive Areas.** Steer data centers toward **already developed or disturbed lands** (think idle industrial sites, brownfields, closed landfills, or expansive parking lots) to help preserve the County's rural character.
- 4. Implement Buffers for Land Use Compatibility.** Good planning practice involves requiring **buffering and setbacks** when data centers abut residential or public land uses. Many communities require a buffer yard between a data center and any dwelling or residential zoning district and require data centers to orient any potential noise sources away from residential areas.
- 5. Value Design and Aesthetics.** Municipalities should promote **attractive and consistent design** to maintain community character. Existing design standards for industrial or commercial buildings should be applied to data centers.

ZONING AND PERMITTING

Effective zoning and permitting practices will eliminate uncertainty regarding the use, location, and standards of data centers.

- **Define Data Centers in the Zoning Ordinance** - “Data center” must be explicitly defined as a land use in the zoning code. Even a broad definition can help eliminate future confusion.
- **SALDO** - Don’t have zoning in your municipality? Consider addressing data centers in a subdivision and land development ordinance (SALDO). Through a SALDO, impacts of such developments could be mitigated through regulations that account for environmental and safety implications, limited reuse options, and decommissioning requirements.
- **Permitted Zoning Districts** - After defining the use of data centers, the next question is *where* they are allowed. Municipalities should provide a clear path for approval in districts that make sense and avoid uncertainty.
- **Streamlining Approvals** - For communities interested in attracting data centers, allowing them by-right (*as a permitted use*) is the most business-friendly approach. For communities that prefer a more cautious approach, consider opting for conditional use or special exception processes in specific zones.
- **Zoning Standards & Regulations** - Municipalities should review their zoning development standards for data centers’ unique aspects.

Lot Size and Coverage – A set minimum lot size in zoning can ensure that data centers have enough space.

Building Height – As multi-story data centers become more common, zoning should not arbitrarily cap the height too low. An allowance of at least 80 feet has been suggested.

Accessory Structures – Zoning should allow for typical accessory structures (e.g., guardhouses at entrances, security fences, chillers or cooling towers).

Parking and Traffic – Since data centers have low staffing, parking requirements should be light, so consider a custom standard.

Noise and Lighting – Data centers should be incorporated into existing noise regulations that are enforced consistently.

Security and Fencing – Zoning should expect perimeter fencing, but consider guiding the aesthetics to avoid a fortress-like appearance.

- **Permitting Process** - Municipalities need to prepare an efficient permitting process that includes building permits, environmental permits, and coordination with state agencies. Consider establishing a single point of contact within the municipality for data center projects and incorporating public engagement opportunities into the permitting process.

LEARN FROM EXAMPLE.

Pioneer communities for data center development (e.g., Loudon County, Virginia, and New Albany, Ohio) are constantly updating their planning requirements to better suit the needs of their residents. Crawford County can learn from these examples: plan ahead, set ground rules, and remain adaptable as technology evolves.

COMMUNITY & ENVIRONMENTAL *Considerations*

Municipal leaders must balance the benefits and challenges that arise when introducing data centers to a community and should be ready to address the concerns of residents.

ECONOMIC & COMMUNITY BENEFITS

- **Tax Revenue** - The greatest benefit of data centers is perhaps the addition of high-value property to the tax rolls, generating local tax revenue that can help fund schools, road improvements, and other community priorities.
- **Upgraded Infrastructure** - Data center construction necessitates upgrades (e.g., power grid upgrades, internet fiber, roads) that leave a lasting benefit for the community.
- **Jobs & Economic Development** - While data centers do not create large numbers of jobs, the jobs they do create are often high-salary positions. The presence of data centers might also attract ancillary companies.

CHALLENGES & MITIGATIONS

When well-regulated, data center development can coexist with community goals, but this can only be accomplished by proactively addressing possible challenges.

- **High Resource Consumption** - Data centers require a lot of electricity and water, which raises sustainability questions and potential resource strain. Mitigation lies in careful **capacity planning** and **negotiating contributions** from the developer.
- **Environmental Impacts** - Backup generators at data centers can impact air quality. Municipalities can encourage modern Tier 4 emission-standard generators or explore alternatives. The hum of cooling fans and generator tests can also be bothersome to neighbors. If a site is near homes or schools, municipalities should require the **employment of acoustical engineers** to ensure compliance with noise ordinances.
- **Land Use and Aesthetics** - Data centers are not small and could potentially conflict with a community's desired character. Proper siting and buffering can mitigate these concerns, as well as **community benefit agreements**, so that the developer can contribute a tangible positive to the community.

- **Limited Direct Employment** - Once built, data centers do not employ large numbers of people, which can lead to perception challenges as residents question a project that doesn't create many jobs. Municipalities should **highlight the indirect and long-term benefits** that build capacity for future growth.
- **Community Engagement & Trust** - Municipalities should require or facilitate **community information sessions** when a data center is proposed to boost residential trust. The community should be treated as a partner in the planning process — listen to their concerns, adapt to those concerns, and articulate the benefits reasonably.

KEY RECOMMENDATIONS

To Plan For Data Centers



Update Plans and Ordinances.

Acknowledge data centers in local comprehensive plans and amend zoning ordinances to prevent case-by-case uncertainty.



Identify Suitable Sites.

Collaborate with planning staff to identify suitable sites for data centers with existing high-voltage electric lines, robust broadband fiber, ample water supply, and compatible land uses.



Invest in Infrastructure Readiness.

Coordinate with utility planners to ensure capacity for future data center projects, creating "shovel-ready" sites with the necessary utilities planned or in place.



Streamline Permitting in Target Areas.

For suitable locations, allow data centers by-right with standard site plan review to expedite approvals and develop a clear review process checklist specific to data centers.



Adopt Design and Buffer Standards.

Incorporate performance standards to mitigate potential impacts from data center construction and development.



Protect Community Assets.

Establish criteria to safeguard assets in rural or agricultural zones, ensuring that development does not come at the cost of environmental degradation or loss of valued open space.

**Engage and Educate the Community.**

Be proactive and hold information sessions explaining what data centers are and how the municipality will manage their impacts responsibly. When projects come up, hold public meetings and/or hearings.

**Leverage Support and Partnerships.**

Look to state-level guidance and industry best practices. Seek out regional planning agencies and national organizations for resources, model ordinances, and published guidance.

ADDITIONAL RESOURCES

Cumberland County Planning Department (2025) – *“Planning for Data Centers”*

American Planning Association – *“Data Centers at the Edge” (Planning Magazine, 2021)*

Data Center Knowledge – *“Zoning and Land Use Considerations for Data Centers” (2025)*

Urban Land Institute (2024) – *“Local Guidelines for Data Center Development”*

Reed Smith LLP – *“Site Selection Considerations for Hyperscale Data Centers” (2025)*



Crawford County Planning is a countywide entity made up of the Planning Office and Planning Commission. The Planning Office consists of County staff who coordinate long-term investments and community development with the Crawford County Planning Commission and local municipalities. Since 1963, the Planning Commission consists of local volunteers from across the County who make recommendations, offer guidance, and advocate for local planning and community development efforts. Together, the Office and Commission work to lead and empower thriving communities across Crawford County.

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