

Texas Data Center Analysis

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Table of **Contents**

01	Texas Data Center Analysis
02	Texas Data Center Landscape
03	Offtake Capacity Overview
04	Economic Impact
05	Technological Trends
06	Challenges & Opportunities

Texas Data Center **ANALYSIS**

Data Centers have earned their place in the digital economy with their increasing demand over the last decade. As Landgate data forecasts, the data center market has become a vital pillar in supporting the digital revolution and is expected to grow 51.4% over the next decade, doubling power capacity till 2029.

Texas stands out as the second largest data center market within the United States and is an increasingly attractive location for new data center projects. Aided by its favorable business environment, abundance of land, reliable energy resources, and a developmental friendly state, Texas has gained rightful traction over the last decade and is home to major players in the market such as Digital Realty Trust, Lumen Technologies, Databank, Amazon Web Services, Google, Microsoft, Meta, and CyrusOne.



Texas Data Center

LandGate's extensive state profiling assesses development, economic impact, technological and advancements. off-take capacity analyses across the region and highlights the critical functions of each in supporting growing demands. energy LandGate stands out as the only platform providing a comprehensive profile on the US data market including data centers, fiber optic lines, and off-take capacity. With over 95% of data centers in exact locations, LandGate exclusively offers its users the most precise data for white space, gross max power, power usage effectiveness, and parcel acreage data across data center resources.



According to LandGate's data, Texas is home to over 437 data centers including colocation, hyperscale, cloud and enterprise data centers. Most data centers within Texas average at 45 MW with a white space. Considering this, colocation data centers are most popular with hyperscale data centers (over 100 acres) not far behind.







Recently, with an increase in planned projects, hyperscale data centers have also experienced a rise in numbers. Large market players are interested in the various incentives Texas holds to create large scale data centers in the area. For example, Compass Datacenters acquired 375 acres of land in Texas, thereby doubling their landholding in the area. Stack Infrastructure announced plans to develop 220 MW of power in Lancaster near the airport. Major market holders such as Microsoft and Google have announced plans to expand their already existing data centers in the area in San Antonio and Midlothian respectively.

As of now, LandGate is the leading provider of planned and expanding data centers with 10 planned for expansion and 8 planned data centers in the state respectively.



According to LandGate's market analysis, planned data center hotspots are in Dallas Fort-Worth and Austin. LandGate stands out as a resource by providing its users with the most up-to-date, exclusive data for planned and expanding data centers. Find planned data centers on <u>LandGate's</u> platform.

Location Quality + Offtake Capacity **OVERVIEW**

There are many factors that developers consider while setting up a data center. LandGate generates property reports and market analyses to identify the locations that are prime for data centers and attract the most business. Additionally, LandGate is also the only resource that provides offtake capacity overview, allowing its understanding of the data center market to stand out from other resources.

Offtake Capacity refers to the authorized amount of power that can be drawn from an electrical grid for use in data centers or other large industrial projects. This capacity is essential to the efficient operation of data centers and to ensure that company needs are being met.



Within Texas, infrastructure is designed to ensure that energy demands are being met across companies with compliance with the Electric Reliability Council of Texas (ERCOT).

While the current hubs for data centers are in Dallas, San Antonio, and Houston, other areas have also shown an increase in numbers, and are becoming popular locations for planned projects. In Dallas Fort-Worth, offtake capacity rates are the lowest across the state, making it a promising location for hyperscale projects. Austin offers more tech-centric growth, while San Antonio and Houston remain business hubs for companies that want to capitalize on their infrastructure.



Moreover, LandGate has comprehensive land profiling for data centers and offtake capacity specific analytics to ensure reliable power supply to meet demand adequately.

A prime location for a data center will be in close proximity to fiber optic lines, water sources, and electrical supply. LandGate's database includes all of the above to show prime locations for data centers and assess whether existing or planned projects are set to run smoothly.



Fiber Optics Network in Dallas, TX

Based on LandGate's site control data for wind, battery storage, and solar energy sources, Texas is following exponential trends in energy expansion and growth. Data centers in Texas are expected to grow in the same manner, doubling peak load by 2030 in accordance with LandGate's market analysis.

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Texas data centers have gained much deserved traction because their impacts extend beyond just the data center industry. Over the last year, Texas' data center industry grew its total power by over 200%, and created numerous jobs while making great strides in the environmental sustainability and artificial intelligence sectors.

Data center projects create a multitude of jobs from when they begin construction to when they become active, benefitting numerous economic sectors such as construction, information technology, and corporate sectors.

Project	Status	Description	
Google Midlothian	Planned for Expansion	 \$600 Million facility 100+ jobs across construction, on-site, and full time positions Power: 170 MW Whitespace: 15,850 m2 	
Meta Dallas Fort Worth	Active	 \$1 Billion facility 1200 jobs across construction and full time placements Power: 500 MW Whitespace: 185,806 mz 	

Texas' Data Center Markets ENVIRONMENTAL IMPACT

Data centers within Texas have also taken upon environmental sustainability methods by taking advantage of state energy programs and grants which offset costs of implementing green technology within the industry. Despite Texas having a dry, humid climate, data centers have evolved construction and ventilation methods to ensure they function all year round and to diminish the threat of any natural disaster, remaining a pristine location for development. Several projects around the state have adopted advanced technical solutions: Google signed a long-term contract to purchase 100% renewable energy from local wind farms to ensure a stable supply of power in the face of natural disasters and power outages. Digital Reality implemented advanced cooling techniques in Dallas to achieve Power Usage Effectiveness (PUE) of 1.2, while the rest of the market averages at 1.5. The adoption of innovative cooling technologies such as liquid cooling or advanced HVAC can reduce overall energy consumption considering that cooling costs can account for up to 40% of the total energy consumption of a data center in peak hot Texas climate.

Technological Trends & Economic **GROWTH PROSPECTS**

With Texas' infrastructure and strategic location, it is a prime spot for edge computing, machine learning, and artificial intelligence integration methods. Companies such as Equinix and Digital Realty have actively expanded their computing abilities and taken advantage of latency reduction methods. With a large increase in incorporating artificial intelligence into data center technology, major market players have greatly benefitted by increasing their energy efficiency and reducing cooling and water costs. For example, Google's data center operations in Houston have led to an overall 40% reduction in energy consumption, thereby increasing energy efficiency.

The state also offers monetary incentives to companies and landowners looking to develop data centers. The Texas Enterprise Fund (TEF) provides incentives to companies looking to create data centers within Texas given they create a specific number of jobs and generate a said amount of revenue per year. The state also welcomed a Data Center Tax Exemption Program for data center equipment, cooling, ventilation systems and electricity supply given the center meets threshold criteria.



With a multitude of promising incentives for data centers to thrive, as well as be part of large economic hubs within Texas, stakeholders must prioritize data accuracy and technological innovation. For more information on data center trends, availability, and specifics on offtake capacities, schedule a demo with LandGate's data center team.



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