# POWER, INVESTMENT, AND THE AI REVOLUTION

*The explosive evolution of the data center landscape*

**By Ross Widham**, Managing Director, The Bank Street Group LLC

The data center landscape is booming for both investment and innovation. This article explores the trends, challenges, and opportunities in how the market is shifting in line with this unprecedented growth.

## CONSTRUCTIVE FISCAL POLICY ENCOURAGING FURTHER INVESTMENT

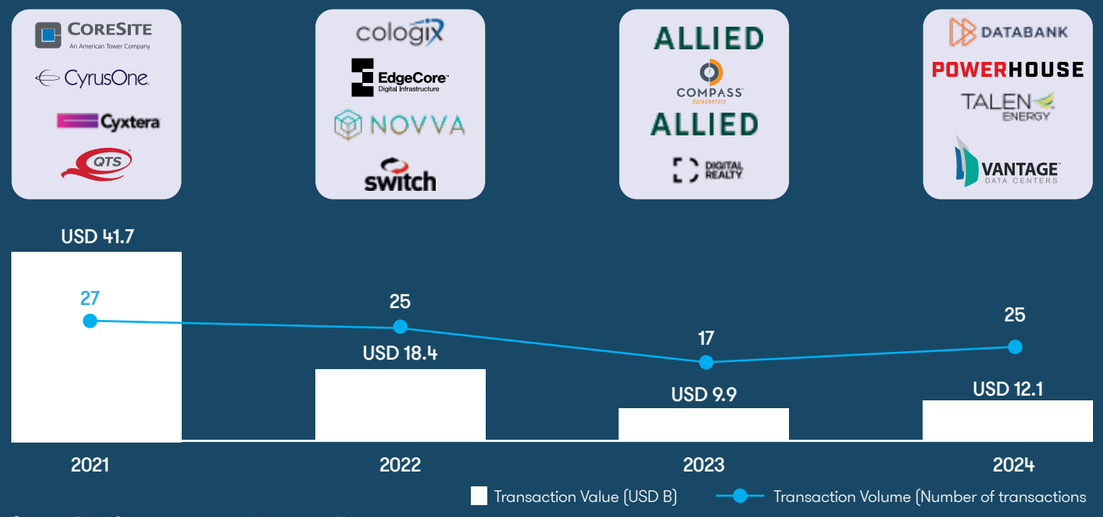
After interest rates peaked in 2023, the Federal Reserve started reducing rates in September, with a half-point cut followed by two quarter-point cuts. Amidst these fiscal policy changes, investors are debating what impact the new administration may have on trade, regulation, tariffs and tax policy, which could reshape the outlook for growth in the coming years. In particular, President Trump has promised to rapidly approve electrical infrastructure projects, from which the data center sector would significantly benefit given the current power and grid constraints nationally. Power development and data center demand remain at the forefront of investors' minds entering 2025 as they look to meet the demands of a rapidly growing digital economy.

## M&A AND PUBLIC MARKET ACTIVITY REMAINS STRONG IN THE SECTOR

The data center industry has seen a flurry of M&A activity, with 2021 marking a record year. CyrusOne, CoreSite, and QTS all went private, representing over 35 billion USD in transaction value. While the pace of M&A has since normalized, with 2022–2024 combined activity equaling the 40 billion USD total from 2021, the market's resilience highlights the ongoing strength of the sector.

US power demand is set to grow significantly in the coming decades. From 2020–2040, demand is projected to increase by 38 percent, from 3,800TWh to 5,300TWh—four times the rate of historical growth.

**Figure 1: US Data Center M&A Volume and Transaction Count (in billions)**




**Source:** Bank Street estimates and company filings
**Notes:** Includes Allied Data Center Canadian transaction. Only includes publicly announced transactions for dollar volume.

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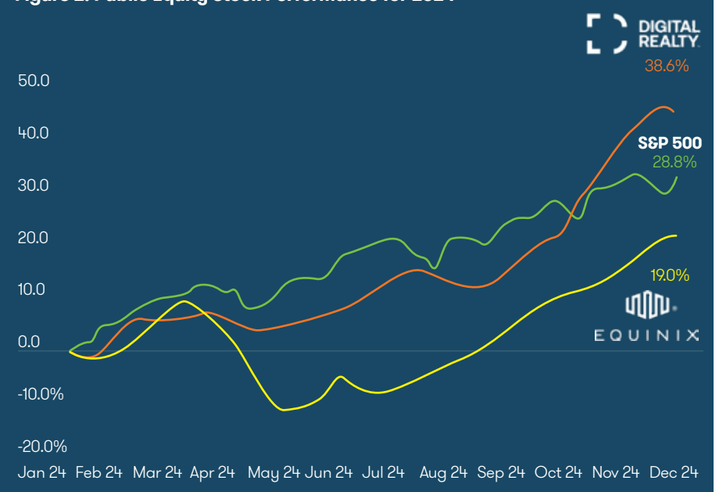
**Figure 2: Public Equity Stock Performance for 2024**




**Source:** Pitchbook Data
**Notes:** Stock price performance uses Volume Weighted Average Price of prior 30 days.

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Valuations for quality assets have remained high, particularly for wholesale and interconnection businesses with owned real estate. Infrastructure funds, which often have access to low-cost capital and align well to underwrite high-credit-quality customers, are offering attractive deals for wholesale operators—sometimes paying EBITDA multiples in the 20s. These funds tend to focus on long-term contracts with investment-grade tenants, which provide steady cash flow and lower risk. Additionally, international strategics like KDDI have sought land grabs for unique interconnection businesses, such as its one billion USD acquisition of Toronto's most interconnected building, previously owned by Allied Properties. The retail/enterprise segment has also picked up momentum with both DRFortress and DartPoints recently transacting to 1547 and NOVA Infrastructure respectively, both of which were Bank Street led deals. Further, companies such as TierPoint, DataBank, and CenterSquare have all tapped the ABS market to the tune of almost two billion USD in the last 18 months.

Digital Realty and Equinix, the last two pure-play public data center giants, had an impressive 2024, seeing stock price increases of 39 percent and 19 percent, respectively. This performance underscores the strength of the sector even amidst economic fluctuations. Despite both stocks seeing periods of strong growth, they have been more sensitive to economic cycles and interest rate increases given their REIT statuses. As interest rates have increased, their dividend yields become less competitive compared to other bond investment alternatives.

## SUPPLY AND DEMAND IMBALANCE CAUSING SIGNIFICANT PRICE INCREASES AND LARGER DATA CENTER BUILDS

US power demand is set to grow significantly in the coming decades. From 2020–2040, demand is projected to increase by 38 percent, from 3,800TWh to 5,300TWh—four times the rate of historical growth. The largest driver of this increase is the data center sector, which is going through an AI revolution and requiring facilities to have significantly more critical IT load and higher cabinet densities than ever before.

In the past, the largest data center facilities typically had between 50–100MW of critical IT load, with rack densities averaging around 5kW per cabinet. Today, wholesale colocation providers are scaling up and building facilities that can handle well beyond 500MW of IT load. By 2027, rack densities are expected to soar to 50kW per cabinet due to the complexity of AI applications. To put this in perspective, ChatGPT power consumption per query is approximately 10x that of a Google search.

We have seen operators quickly adapt to these changes. For example, DataBank has historically been a retail-focused operator with an average facility size of under 10MW across its US footprint. In September, DataBank announced the development of a 480MW data center campus in South Dallas, its third land acquisition in 2024, for a total of more than 750MW of critical IT across the three new sites. In addition, Flexential, which recently raised capital from Morgan Stanley Infrastructure Partners, has also made recent announcements around larger builds with a fifth data center site in Denver totaling 22.5MW of critical IT load. These operators' quick adaptations reflect the broader market shift towards larger, more power-intensive facilities driven by growing demands of hyperscalers.

This supply / demand imbalance has also caused a surge in pricing, with average rental rates in primary markets reaching their highest levels in history at over 170 USD / kW—an increase of ~40 percent from 120 USD / kW in 2021. Prices are expected to continue to increase due to rising construction and equipment costs along with a longer lead time for critical infrastructure.

## BULLISH INVESTMENT SENTIMENT AND CREATIVE FINANCING STRUCTURES EMERGE AS INVESTORS SEEK DATA CENTER EXPOSURE

There have been a number of recent announcements from blue-chip asset managers making commitments to invest in the AI-boom. In September, BlackRock, Global Infrastructure Partners, Microsoft, and MGX launched a new 100 billion USD AI partnership to invest in data centers and support power infrastructure. One month later, KKR and Energy Capital Partners signed a 50 billion USD partnership focused on accelerating data center, power generation, and transmission infrastructure development. Other financial sponsors and infrastructure funds with existing portfolio companies in the utility power sector have sought to partner with data center providers by structuring joint ventures, whereby they offer favorable power terms to the data center operator in exchange for equity exposure in the project. Along the same lines, several technology companies are establishing Power Purchase Agreements (PPAs) with renewable energy producers. In May 2024, Microsoft and Brookfield announced that they signed a global energy framework, whereby Brookfield will plan to deliver over 10.5GW of new renewable energy capacity between 2026 and 2030 in the US and Europe. Most recently, Sam Altman-backed Oklo and DigitalBridge's Switch announced they reached an agreement to deploy 12GW of advanced nuclear power—one of the largest corporate clean power agreements ever signed.

The data center construction market has also seen dramatic change, with a new wave of AI-hyperscalers seeking large builds on an expedited timeline. These builds are being financed with construction loans (typically 60–70 percent loan-to-cost) and with equity from the sponsor. Traditional banks have dominated the construction financing market given their low cost of capital and low-risk nature of these projects with 10–15 year leases and investment-

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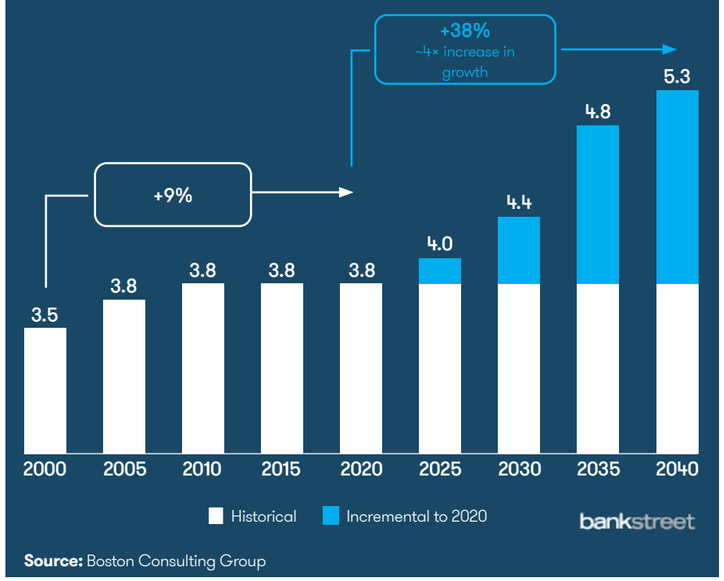
grade anchor tenants. Recently, due to the higher risk associated with AI-hyperscaler projects and their sub-investment grade status, banks have been unable to offer the same leverage or favorable pricing typically provided for hyperscale builds. As such, a new group of private credit and international banks with appetite for higher leverage and returns have been the primary financing sources for AI projects. For instance, Crusoe Energy Systems, a vertically integrated AI infrastructure company, along with Blue Owl Capital and Primary Digital Infrastructure, entered a 3.4 billion USD joint venture for AI data center development in October. Furthermore, Blackstone, Coatue, and Magnetar led a 7.5 billion USD debt financing into Coreweave to support its future build requirements.

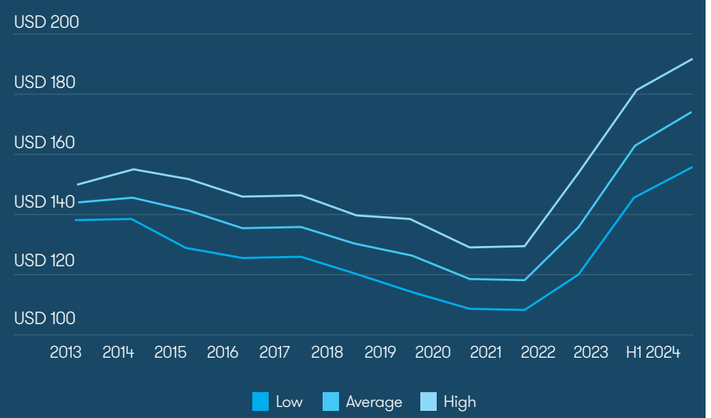
These partnerships underscore the growing recognition of data centers as critical infrastructure for AI's future. Notably, these investments are focusing on not only expanding data center capacity but also addressing the power infrastructure needed to support this explosive growth.

**Figure 3: Estimated US Power Demand (in thousands of TWh)**




**Source:** Boston Consulting Group

**Figure 4: Average Asking Rental Rates in Primary Markets (in USD / kW)**




**Source:** CBRE Research
**Note:** Represents only 250–500kW deployments

## AI WILL MOVE CLOSER TO THE CONSUMER AND PUT A PREMIUM ON CAPACITY AND LATENCY IN EDGE MARKETS

As AI applications move from training to inference, data center capacity in smaller edge markets will become critically important—specifically highly interconnected data centers that can be referred to as "carrier hotels." The large influx of power will also result in a similar demand for both long-haul and metro fiber transport as well as networking within the data center itself. Carrier hotels are poised to see significant growth as AI applications drive demand for faster data exchange. Over the past decade, Internet Exchange (IX) deployments have surged by 600 percent, which reflects the growing need for high-performance interconnection.

Latency and location for these applications have been critical for optimal performance for the end user. We are still in the early innings of data migration from Tier 1 to Tier 2 / Tier 3 markets as most data is still peered in prominent Tier 1 carrier hotels, although over time the majority of that peering is expected to occur locally. Companies with highly connected facilities across the US, such as Netrality, Cologix, Equinix, and Digital Realty, should benefit from these developments and could potentially look to acquire the limited number of independent carrier hotels available in smaller markets.

With demand for power, capacity, and seamless connectivity on the rise, this sector is positioned for unprecedented growth in the coming years.

The AI revolution is not just reshaping industries—it's creating a tremendous opportunity for data center operators and investors to lead the charge in innovation. With demand for power, capacity, and seamless connectivity on the rise, this sector is positioned for unprecedented growth in the coming years. It's a truly pivotal moment for both operators and investors involved in the space to seize the potential of this rapidly evolving market.

**ABOUT THE AUTHOR**
**Ross Widham** has over ten years of experience in investment banking and advising clients in the data center, tech-enabled services, broadband, and wireless sectors. During his career at Bank Street, he has executed transactions across several continents, including North America, Europe, Asia, and Africa.

Notable transactions on which Widham has advised include Argo Infrastructure's majority recap of TierPoint; the sale of Quintillion to Grain Management; the minority equity investment in GeoLinks by JLC Infrastructure; the sale of Tonaquint Data Centers to DIF Capital Partners; the sale of INAP's colocation and network businesses to Evocative and Unitas Global, respectively; the two billion EUR sale of ETC Group to Cinven; the sale of Involta to The Carlyle Group; the sale of DataGryd to Cordiant Digital Infrastructure; the 343 million USD take private of Alaska Communications by ATN International and Freedom 3 Capital; the sale of Matrix Data Center to SBA Communications; the sale of 365 Data Centers to Stonecourt Capital; the investment by Beech Tree Private Equity in Performanta; the sale of JAX NAP to SBA Communications; the sale of mindSHIFT to Ricoh; the merger of HOSTING and Hostway; the sale of CMC Networks to The Carlyle Group; and the sale of Liquid Web to Madison Dearborn Partners.

Widham has a BA in Finance from The George Washington University in Washington, DC.