

The U.S. economy's increasing reliance on technology has placed data centers at the core of its digital evolution. Data centers are like the vital organs of the digital economy, processing and storing the information that powers everything from online transactions to AI computations.

Supporting them is a vast network of fiber optic cables and transmission lines, functioning as the circulatory system that transports data globally, much like veins and arteries carry nutrients and oxygen through the body. Together, these "digital organs" and their "circulatory system" form the backbone of modern connectivity, ensuring the seamless flow of information that sustains the increasingly digital-dependent global economy.

Data centers are facing unprecedented demand, as our RESEARCH 🔭 demonstrates, propelled by two primary tailwinds:

The adoption of cloud computing remains robust, and cloud computing revenues by the largest providers<sup>1</sup> demonstrate annual growth rates of over 27% since 2016. Generative AI has accelerated this trend, requiring immense computational power and storage capacity to train and deploy advanced models. The immediate demand from generative AI is substantial, with strong visibility over the next three to four years. However, the longer-term growth trajectory remains less certain, contingent on advancements in technology, adoption rates, and evolving use cases.

In 2023 alone, data center absorption surpassed 6,000 MW, marking a 31% increase in the sector's total capacity—a remarkable milestone that underscores its explosive growth trajectory. **In 2024, absorption neared 7,000 MW**. This is a substantial increase compared to just over 1,000 MW of leasing as recently as 2018.

Leading tech companies are driving this momentum, as the opportunity in artificial intelligence drives significant capital expenditures to expand their digital infrastructure. The magnitude of the spend is breathtaking; in 2024, hyperscaler capital expenditures hit \$261 billion, up 51% YoY,<sup>2</sup> and are projected to accelerate further based on forward guidance from Amazon, Microsoft, and Alphabet.<sup>3</sup>

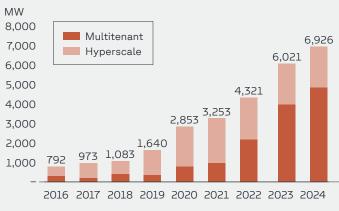
Despite the strong demand, the industry faces critical supply constraints. The rapid growth in demand is putting pressure on power grids, particularly in key markets like Northern Virginia. Companies are having to be more strategic in their site selection and development plans to ensure access to sufficient power. A shortage of suitable locations, supply chain disruptions, and power infrastructure limitations have hindered development. Vacancy rates in the sector hit a historic low of 1.7% nationally in Q4 2024, and hyperscale rents in key markets like Northern Virginia are achieving double-digit annual increases. Addressing the 47 GW of incremental power generation capacity needed to meet projected demand through 2030 remains a pressing challenge, with utilities and governments scrambling to upgrade power grids and increase resilience.

Data center development aligns with Affinius Capital's investment philosophy of identifying sectors where technology is driving outsized demand for real estate.

- 2. "Cloud Capex Tracker: Robust Spending Intensity
- Continues." Morgan Stanley Research, 05 Nov. 2024

3. Based on Q4 2024 earnings call projections.

## U.S. DATA CENTER ABSORPTION



FFINIUS

Source: datacenterHawk, Affinius Capital Research

Together with our affiliate Corscale, we operate as a vertically integrated platform, enabling us to control the entire development process, from design and construction to leasing and management. What makes this approach work is our ability to combine proprietary designs with "powered shells" customized to meet hyperscale tenant needs. This flexibility isn't just a technical feature—it's a strategic advantage. By aligning more closely with tenant requirements, we've strengthened partnerships with industry leaders, unlocking a wealth of opportunities for our investors and solidifying our position as a trusted partner in this dynamic, fast-growing market.

<sup>1.</sup> Amazon, Microsoft, and Alphabet.





MARK FITZGERALD, CFA, CAIA Head of North American Research mark.fitzgerald

@affiniuscapital.com



WILL MCINTOSH, PH.D Global Head of Research will.mcintosh @affiniuscapital.com

## **Important Disclosures**

Affinius Capital® is the brand that applies to it and its advisory subsidiaries including Affinius Capital Advisors LLC and Affinius Capital Management LLC. The information contained in this report is being provided to you by Affinius Capital (together with its affiliates, "Affinius") for information purposes only and is not, and may not, be relied on in any manner as, legal, tax or investment advice. The information contained herein does not constitute an offer to sell or a solicitation of an offer to buy an interest in any investment vehicle sponsored by Affinius and any such offer will only be made pursuant to a confidential private placement memorandum and/or the Partnership's subscription documents, which will be furnished to qualified investors in connection with such offering and will be subject to the terms and conditions contained therein. The information in this report is only as current as the date indicated, and may be superseded by subsequent market events or for other reasons. Affinius Capital assumes no obligation to update the information herein. Investment in a Partnership will involve significant risks, including risk of loss of the entire investment.

Investments and Market Risk. Investments involve significant risks, including risk of loss of the entire investment. Prospective investors should consult their own legal, tax and financial advisors as to the consequences of an investment. Leveraged investments may present additional risks to the investor, including, capital structure risk. Dependence on key personnel may result in operational risk. An investment sponsored by Affinius Capital is intended to be a long-term investment.

Third-Party Data. Certain information contained in this report has been obtained from published and non-published sources. Recipients should understand that any such information may not have been independently verified. Except where otherwise indicated herein, the information provided herein is based on matters as they exist as of the date of preparation and not as of any future date and will not be updated or otherwise revised to reflect information that subsequently becomes available, or circumstances existing or changes occurring after the date hereof.

The opinions and recommendations herein do not take into account the individual circumstances or objectives of any investor and are not intended as recommendations of particular investments or strategies to particular investors. No determination has been made regarding the suitability of any investments or strategies for particular investors. Portions of this report may reflect our opinions and beliefs regarding general market activity and potential impacts of current market conditions. Such opinions and beliefs are subjective, do not represent a complete assessment of the market and cannot be independently verified.



9830 Colonnade Blvd., Suite 600 San Antonio, Texas 78230 USA

affiniuscapital.com