

Intelligent Investment

2024 Global Data Center Investor Intentions Survey

REPORT

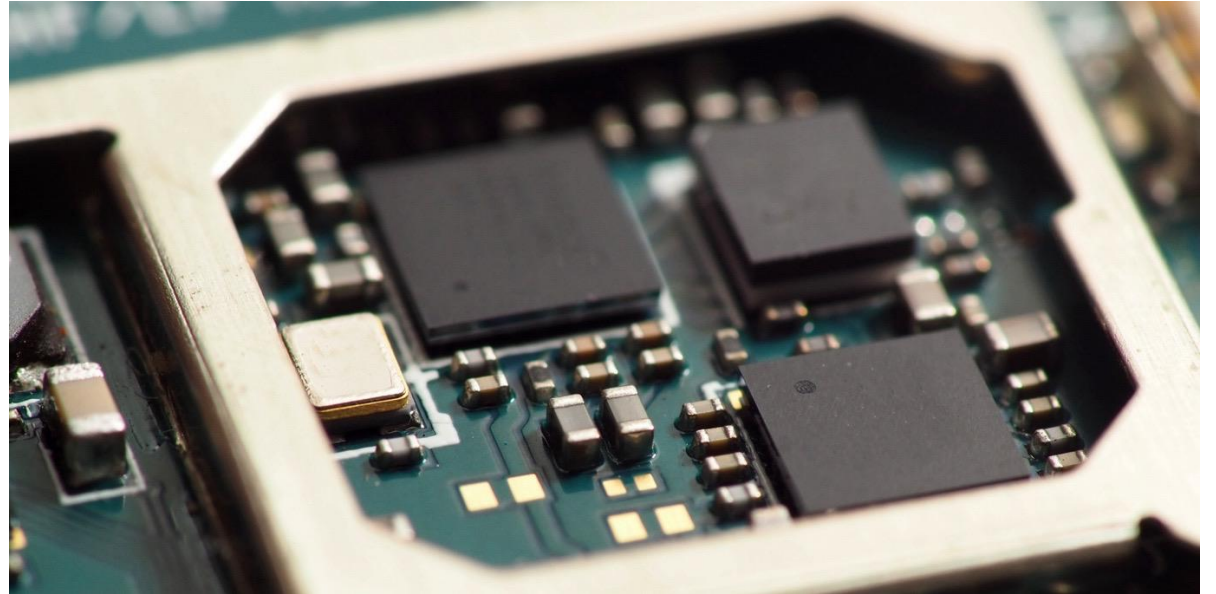
Market Review
& Outlook

CBRE RESEARCH
JUNE 2024



Contents

- 03 **Global Data Center Market Overview**
- 06 **Regional Market Overviews**
 - 07 North America
 - 10 Europe
 - 13 Asia-Pacific
 - 16 Latin America
- 19 **Investor Intentions Survey Results**



01

Global Data Center Market Overview

The data center sector's momentum is continuing this year, fueled by institutional investment and strong underlying fundamentals. The reliance on data center facilities and digital infrastructure for business, commerce and communication grows daily. These services power new-age technologies such as artificial intelligence (AI), streaming services, digital applications, internet-of-things and e-commerce platforms.

In 2023, the global data center market had record absorption, driven by cloud computing, artificial intelligence and machine learning requirements. Simultaneously, power distribution constraints and supply chain delays for transformers, circuit breakers and other electrical components have extended construction project timelines and limited supply availability in many markets. Strong demand, coupled with this limited supply and construction delays, have generally led to fewer vacancies and higher rental growth rates. According to CBRE's [North America Data Center Trends H2 2023](#) report, the average North American data center asking rate increased by 18% year-over-year, the sharpest rise on record.

Data centers continue to benefit from greater investment, particularly from new investors. Ninety-seven percent of respondents to this year's survey, many of whom are the world's largest institutional real estate investors, plan to increase their capital deployment in the data center sector this year. Currently, 38% of respondents have less than 5% of their assets under management invested in data centers. However, only 8% of the respondents expect to have less than 5% of their assets in data centers in five years.



Additionally, 92% of respondents are allocating more than \$100 million to the data center sector, and 44% are allocating more than \$500 million, up from 85% and 32%, respectively, in 2023. Seventeen percent of respondents are allocating more than \$2 billion, up from 6% in 2021 and 8% in 2023.

Currently, investor appetite is strongest in the higher-yielding opportunistic and value-add segments, which have solid market fundamentals. Eighty percent of respondents expressed an interest in investing in these asset types, up from 64% in 2021 and 65% in 2023. High inflation and interest rates have reduced investor interest in core assets, which are favored by 30% of this year's survey respondents, down from 32% in 2023 and 50% in 2021. Similarly, this year, 34% of survey respondents expressed an interest in core-plus assets, down from 58% in 2021. Investors broadly prefer turnkey offerings over powered shell for the second consecutive year. This is a material shift from earlier years, when powered shell was the most desired investment product.

Looking 12 to 24 months ahead, 31% of respondents believe the best opportunity in the data center sector lies in hyperscale build-to-suits. This represents almost no change from last year's survey, but is a significant increase from 22% in 2022 and 17% in 2021. Although each region around the globe faces its own unique set of challenges and opportunities, all are seeing an ongoing institutionalization of the data center asset class and strong industry fundamentals.



02

Regional Market Overviews

North America Overview

Total transaction volume of all North American data center asset sales was \$4.8 billion in 2023, a 29% year-over-year increase, despite a 33% decline in the number of sales transactions. Many would-be sellers remained on the sidelines in 2023 in response to cap rate expansion due to rising interest rates and lending volatility. Overall activity was largely driven by a handful of transactions from a select few REITS to fund development pipelines.

Data center fundamentals remain strong, with record tenant demand, historically low supply and continued positive rental growth. Both equity and debt investors are attracted to the sector's growth trajectory, maintaining their eagerness to transact. In 2023, core returns were most impacted by long-term inflation and interest rate expectations. Consequently, many investors shifted focus to development opportunities, underwriting significant rental growth for the foreseeable future.

Despite several credit market constraints, data centers benefitted from ample debt financing options across traditional commercial real estate lenders, infrastructure funds, project finance, TMT lenders, debt funds, life insurance companies and others. Investors with a low-leverage profile, who favor 35% to 50% loan-to-value, are dominating the market for stabilized assets.

CBRE forecasts stronger capital markets activity in 2024, driven by robust development pipelines, a more stable lending environment and heightened investor interest across the risk spectrum.



\$4.8B

Total transaction volume of all 2023 North American data center asset sales, a 29% year-over-year increase.

Notable 2023 North American Capital Markets Activity

- Transactions announced by Digital Realty drove significant investment activity:
 - \$7 billion joint venture initiated with Blackstone to develop hyperscale data centers in Frankfurt, Paris and Northern Virginia
 - \$1.3 billion sale of its 80% interest in three Northern Virginia data centers to TPG Real Estate
 - \$743 million sale of its 65% interest in two stabilized data centers in Chicago to GI Partners
 - \$275 million sale of its remaining interest in four Cxtera data centers to Brookfield
 - \$200 million sale of its 80% interest in a build-to-suit data center in Northern Virginia to Realty Income
 - Digital Realty sold a \$150 million data center in Texas.
- KDDI closed its \$1 billion acquisition of Allied Properties' data center portfolio in Toronto, including Canada's preeminent carrier hotel.
- Manulife Investment Management (Manulife IM), on behalf of Manulife Infrastructure Fund II and its affiliates, acquired a controlling 70% interest in the global data center platform Serverfarm.
- Brookfield Infrastructure Partners, alongside existing investor Ontario Teachers' Pension Plan, acquired Compass Data Centers for a reported \$5.7 billion.





Transactions announced by Digital Realty drove significant investment activity, including a \$7 billion joint venture with Blackstone to develop hyperscale data centers in Frankfurt, Paris and Northern Virginia.

Europe Overview

Rising inflation, construction costs, the cost of capital and limited fundraising hampered activity in Europe in 2023. Nevertheless, total transaction volume increased by 76% year-over-year, to \$600 million. Growing demand over the last 12 months, particularly from AI, is aiding the sector's fundamentals and fueling significant development. New 100-MW+ construction projects are being routinely announced.

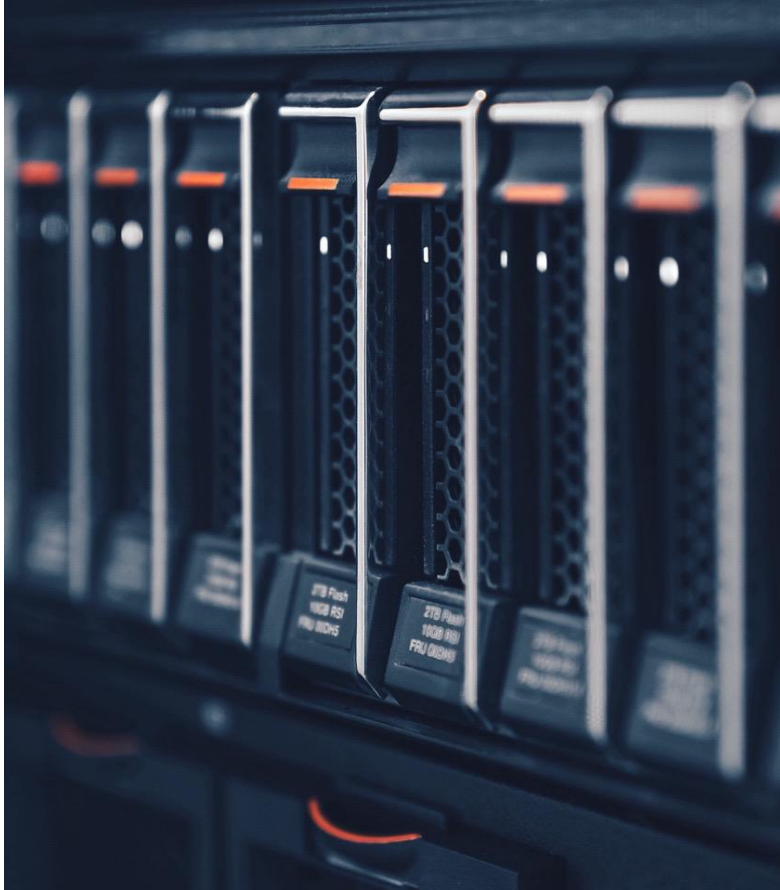
In 2023, there was a slight decrease in the number of bidders involved in sales processes, especially for the largest lot sizes. This was mainly due to higher borrowing costs and a wide bid-ask spread. The number of bidders started increasing later in the year as high-quality assets began hitting the market, a trend that continued into Q1. There is now growing interest from investors seeking to commit significant capital to the European data center market.

CBRE anticipates increased occupier demand for data center assets across Europe in H2, as interest rates are expected to ease. This demand is likely to outpace available supply, increasing pricing. M&A activity will remain high, as new data center platforms seek funding to acquire land, build in multiple markets and leverage continued occupier demand. The Nordic markets will be of particular interest, as operators and hyperscalers shift their focus to affordable, renewable and available power in these northern regions.



\$600M

Total transaction volume of 2023 European data center asset sales, a 76% year-over-year increase.



Notable 2023 Europe Capital Markets Activity

- DigitalBridge sold a 60% stake in six prime European data centers owned by its subsidiary, Vantage Data Centers, to an investor consortium including Infranity and MEAG. The total enterprise value of the assets was \$2.7 billion.
- ICG acquired a portfolio of six data centers, leased to Vodafone across London, from British Land for \$125 million.
- CapitaLand acquired a turnkey data center in North London for \$130 million.
- ICG Capital acquired a turnkey data center in Madrid for \$97 million in a sale-leaseback.
- Principal Asset Management acquired three leased assets in Amsterdam, Frankfurt and Dublin for a total of \$75 million.
- An investment bank sold its newly constructed data center in Madrid for \$30 million.
- Equinix acquired the long leasehold interest in LD8 Harbour Exchange in London’s Docklands, reportedly representing a cap rate of approximately 5%.
- Brookfield Infrastructure acquired pan-European operator Data4 from AXA IM for a rumored \$3.75 billion.
- Australian pension fund AustralianSuper invested \$1.6 billion in Vantage Data Centers in Europe, the Middle East and Africa (Vantage EMEA).
- Digital Transformation Capital Partners (DTCP) became the majority owner of German data center firm Maincubes, along with Art-Invest.
- Ardian Infrastructure acquired Verne Global from Digital9. Verne has significant data center capacity in Iceland, Finland and the UK.
- Proximity Data Centres, a leading edge data center platform in the UK with 10 carrier-neutral facilities, was acquired by nLighten, a digital infrastructure platform of I Squared Capital. The price was reported to be more than \$125 million.
- African Infrastructure Investment Managers (AIIM), a leading African infrastructure private equity manager, invested \$90 million in N+ONE DATACENTERS, a leading African data center operator.



DigitalBridge sold a 60% stake in six prime European data centers owned by its subsidiary, Vantage Data Centers, to an investor consortium including Infranity and MEAG. The total enterprise value of the assets was \$2.7 billion.

Asia-Pacific Overview

Despite a slowdown in the Asia-Pacific market in 2023, the sector continued to attract strong investor interest and a rebound is projected in 2024. The market's total transaction volume in 2023 decreased by 26% year-over-year, to \$1.1 billion. This is also a significant decrease from its all-time high of \$5 billion in 2021. Challenges such as rising interest rates—with Japan as a notable exception—and high inflation limited available investment opportunities. However, the market is expected to revive, particularly in South Korea and Japan, where stabilized assets are likely to attract investors.

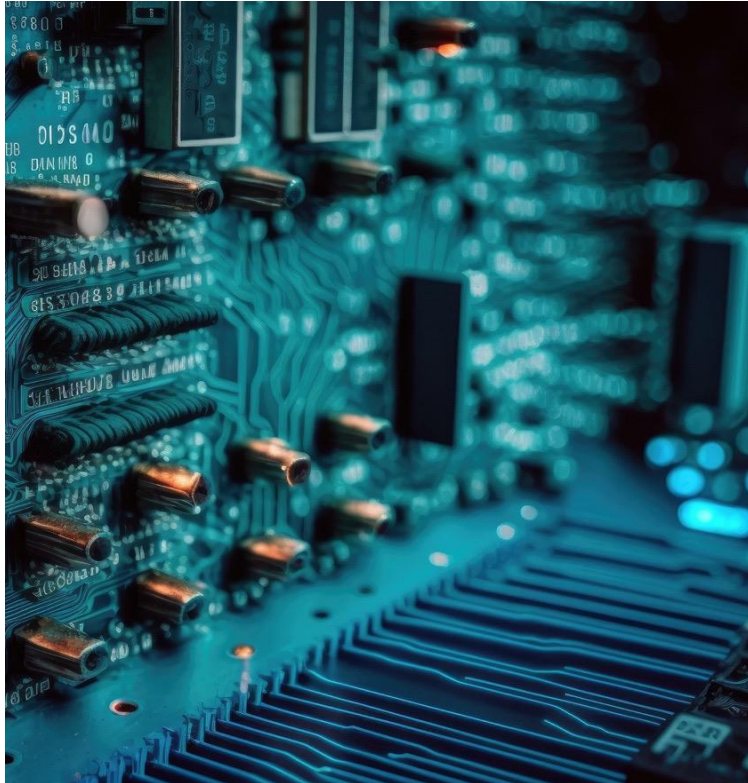
Both established participants and new entrants were active in this market in 2023. Airtrunk, NextDC, Colt and others expanded their footprint, while new corporations such as GLP, with its Ada Infrastructure platform, launched their first projects in Japan. The formation of a \$7 billion, 900-MW joint venture between CyrusOne and Kepco in Japan notably showcased the region's growth potential.

The impact of AI is becoming increasingly evident, driving the demand for larger and more sophisticated data centers. This trend suggests a rise in investment values over the next year. More new entrants are expected in Asia-Pacific due to this demand, particularly because its market is more fragmented than in the U.S. and Europe.



\$1.1B

Total transaction volume
of 2023 Asia-Pacific data
center asset sales.



Notable 2023 Asia-Pacific Capital Markets Activity

- Sekisui House REIT sold a data center for \$517 million in Tokyo.
- Singapore’s Mapletree Industrial Trust purchased a \$370 million data center in Osaka.
- Digital Core REIT plans to acquire a 10% interest in a freehold data center in Osaka from Mitsubishi Corporation for \$50 million
- KKR acquired a 20% stake in Singtel’s regional data center business, valued at \$4 billion
- Seraya closed the fundraising of an \$800 million fund called the Asia Infrastructure Fund for Digital Infrastructure and Energy Transition investments.
- LG CNS and IGIS Asset Management partnered to co-develop data centers.
- Rest committed \$1 billion to Quinbrook for renewable energy production and green data centers.
- Reliance Industries committed to co-invest with Digital Realty and Brookfield Infrastructure on the expansion of a data center joint venture in India.
- CyrusOne and KEPCO formed a \$7 billion partnership in Japan, with plans for a 900-MW portfolio. CyrusOne is a newcomer to Japan.
- Kotak Data Center Fund invested \$73 million in Sify’s data center business.
- ST Telemedia Global Data Centres and Basis Bay formed a joint venture to build data centers in the Malaysian cities of Kuala Lumpur and Cyberjaya.
- Gaw Capital Partners formed a joint venture with Sinar Perdana to build data centers in Indonesia.



CyrusOne and KEPCO formed a \$7 billion partnership in Japan, with plans for a 900-MW portfolio. CyrusOne is a newcomer to Japan.

Latin America Overview

Latin America saw a 55% decrease in investment sales transaction volume last year, from \$2 billion in 2022 to \$900 million in 2023, due to rising interest rates and an increased cost of debt. However, development continued to thrive despite lower investment sales activity. Total inventory in Latin America increased by 16% year-over-year, reaching an operational critical capacity of 757 MW.

Investments in the market were primarily directed towards new development, distributed among its major regions. Countries such as Brazil, Mexico, Colombia and Chile continued to attract large hyperscalers and international investors. Brazil led the growth of new inventory, with an 18% year-over-year increase. Additionally, the country's federal government continued to make significant transmission and distribution investments to enhance its renewable energy supply.

New developers outside of the major hyperscalers are expected to enter this market as demand continues outpacing supply. Activity across leasing operations, build-to-suit development, greenfield, brownfield and sale-leaseback opportunities is expected to increase in 2024.



\$900M

Total transaction volume of 2023 Latin America data center asset sales.

Notable 2023 Latin America Capital Markets Activity

- Ascenty secured \$1 billion in financing to fund its expansion in Brazil.
- Nabiax sold 11 data centers in Brazil, Chile, Mexico, Peru, Argentina and Florida to Actis for \$500 million.
- Kio announced a \$400 million development in Querétaro, Mexico and an acquisition of a 6-MW data center from ZFB in Bogota, Colombia.
- Stone Peak-owned Cirion Technologies plans to develop three new data centers in Santiago, Chile, Lima, Peru and São Paulo, Brazil.
- DigitalBridge-backed Scala Data Centers commercialized the first phase of its 55-MW data center development in Rio de Janeiro, Brazil.
- Equinix opened a data center in Colombia, following its \$45 million investment in the project.
- Odata began operating in Rio de Janeiro, Brazil with a 24-MW capacity, and in Chile with an approximately 80-MW capacity.
- KIO opened its first data center in Colombia, which is 6 MW.
- Oracle opened its first public cloud in Bogotá, Colombia.
- Scala Data Centers opened its new 4.8-MW HyperEdge data center in Porto Alegre with a \$48 million investment.





Ascenty secured \$1 billion in financing to fund its expansion in Brazil.

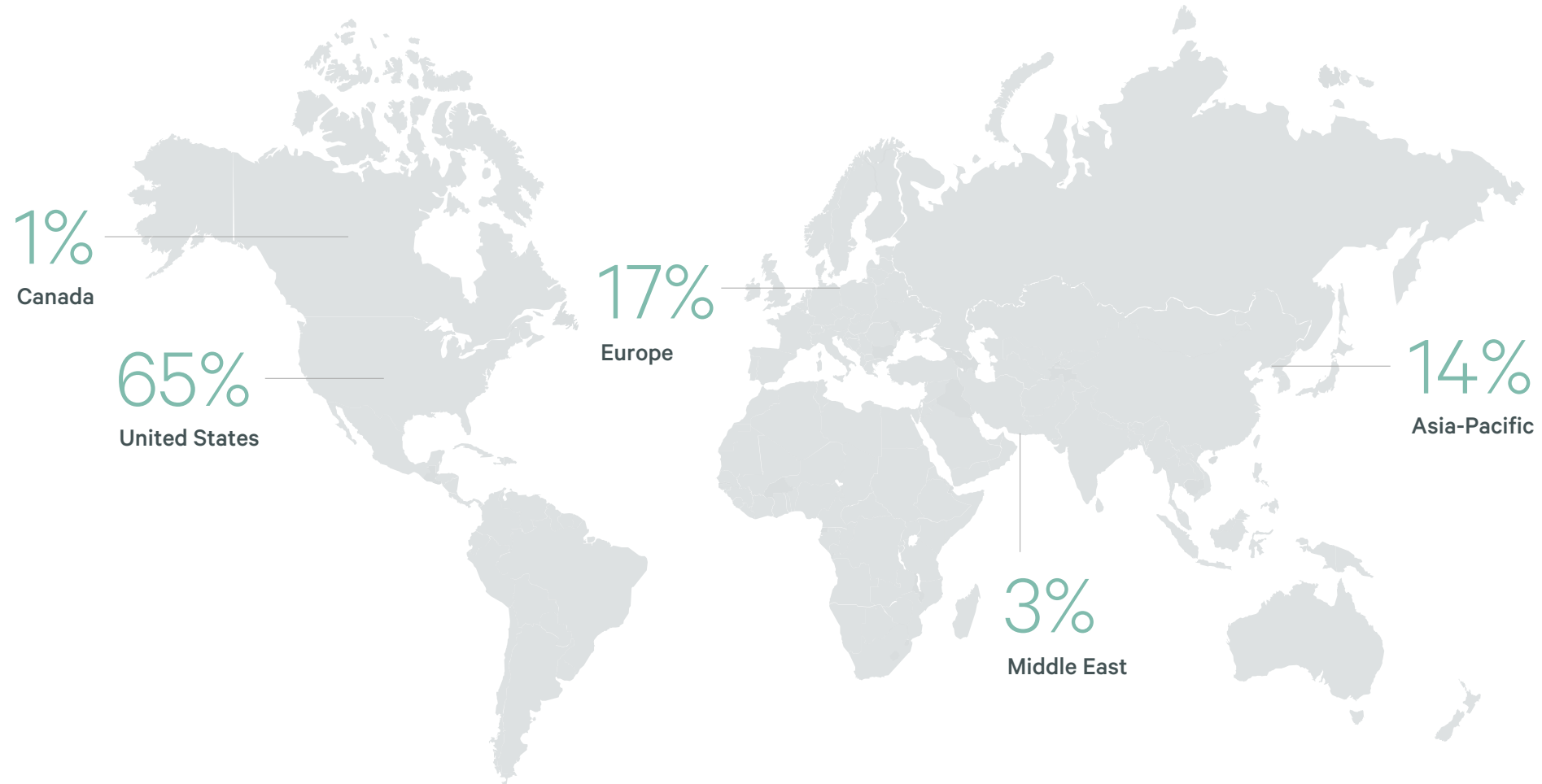
NabiAx sold 11 data centers in Brazil, Chile, Mexico, Peru, Argentina and Florida to Actis for \$500 million.

03

Investor Intentions Survey Results

Most survey respondents are U.S.-based

Figure 1: Where is your organization based?



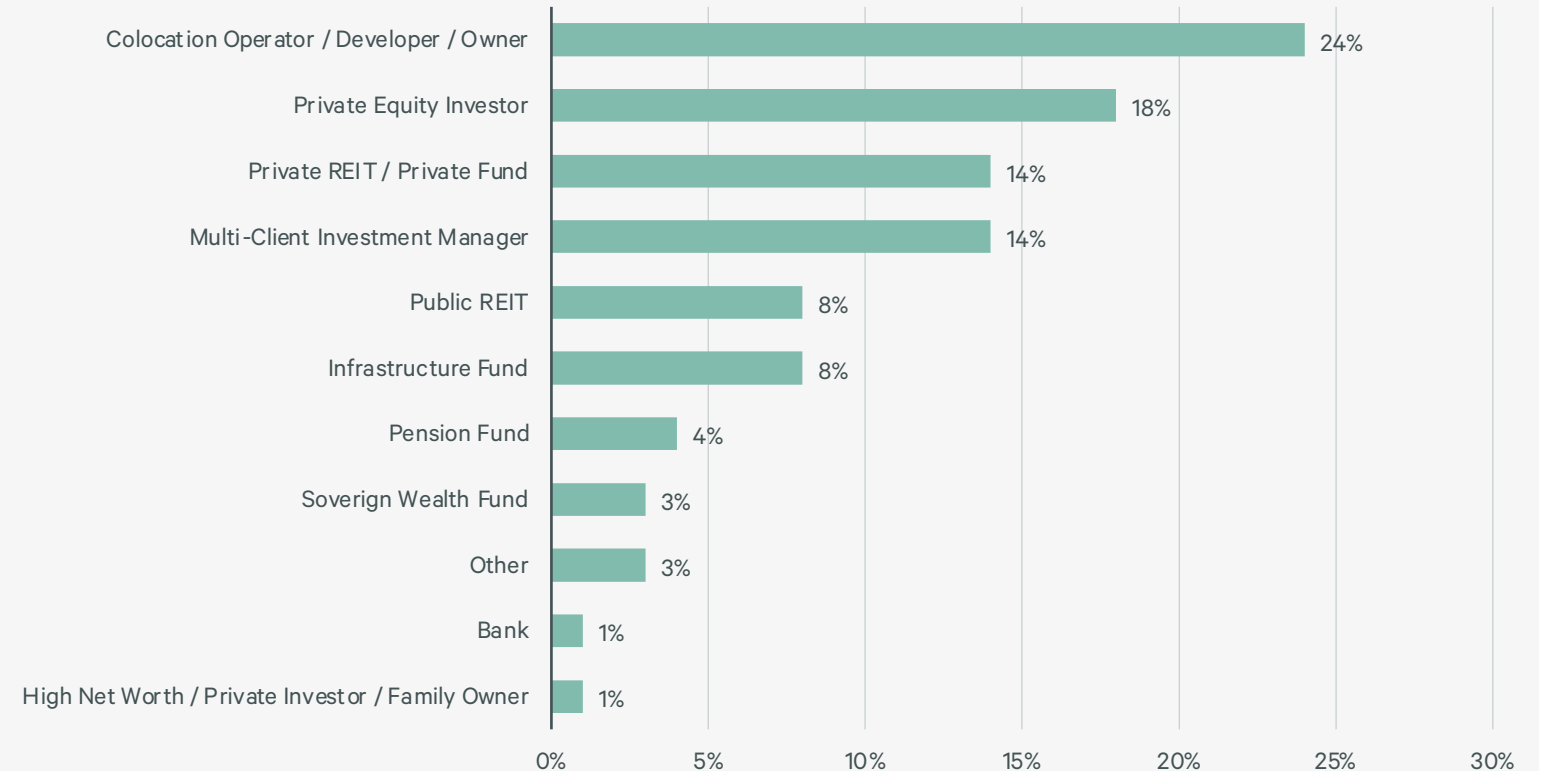
Source: CBRE Global Data Center 2024 Investor Sentiment Survey

Who Took Part in Our Survey

CBRE's 2024 Global Data Center Investor Intentions Survey provides unique insights from professionals within the digital infrastructure industry.

A wide range of investors, developers, investment managers and operators are represented, with nearly one out of four (24%) respondents directly involved in operating, developing or owning a colocation facility. The survey was conducted in early 2024.

Figure 2: Which best describes your organization?

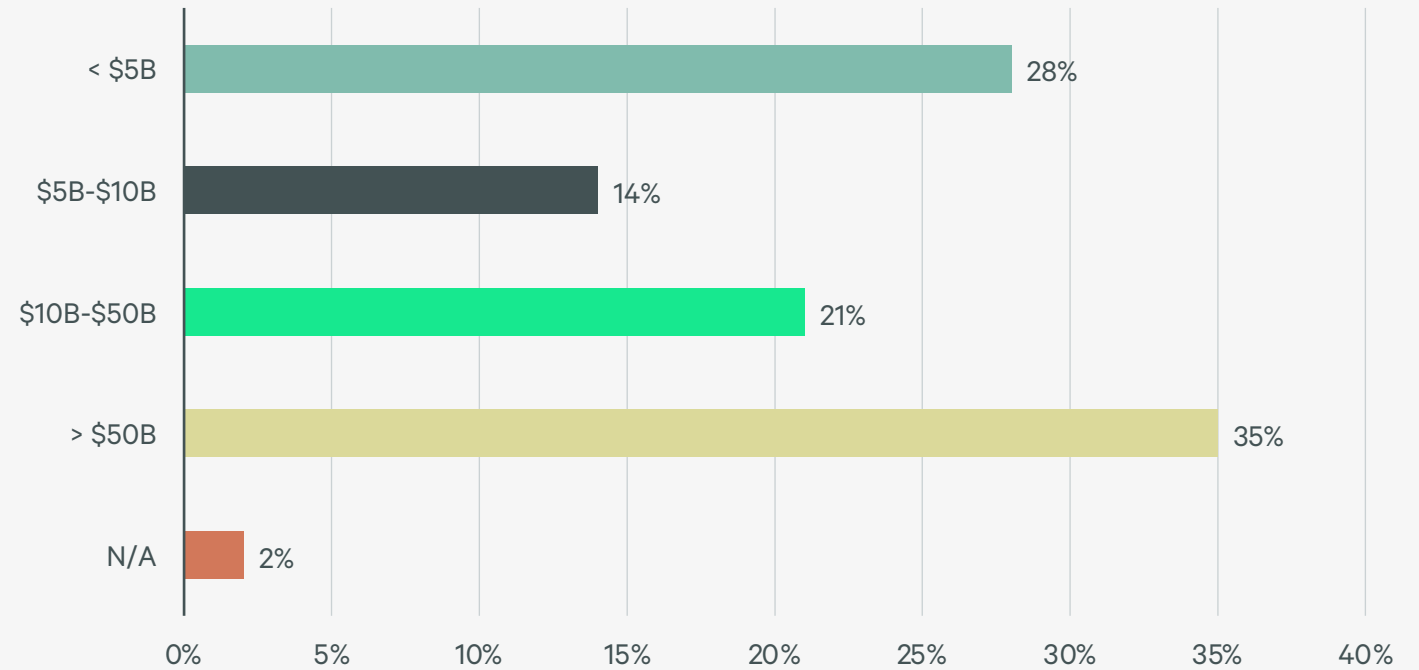


Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Investment Allocation

Thirty-five percent of respondents represent firms of greater than \$50 billion of global real estate assets under management.

Figure 3: What is the approximate value of your organization's global real estate assets under management?



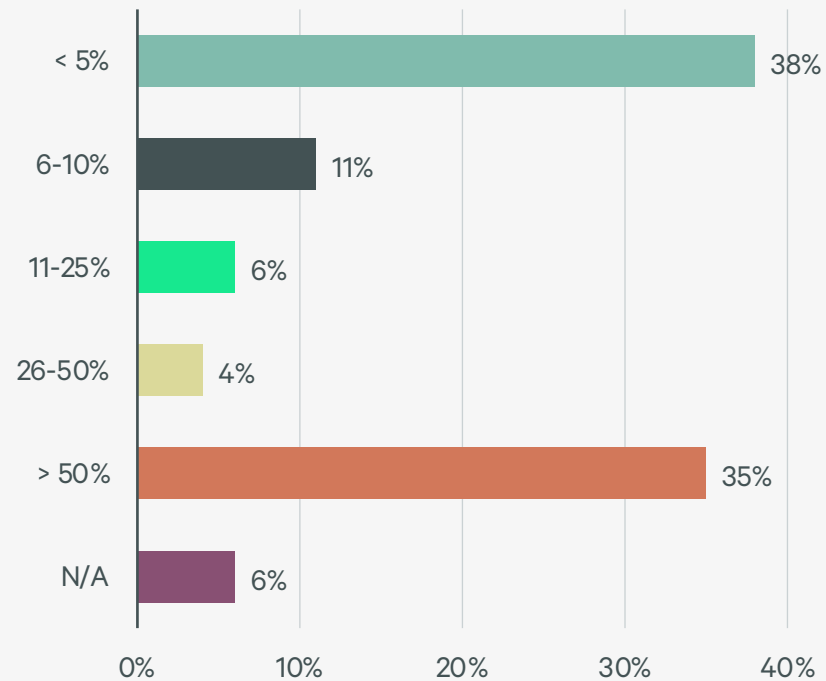
Source: U.S. Investor Intentions Survey, CBRE Research, January 2024.

Investors' Five-Year Plan

Investors intend to materially increase their overall percentage of data center assets under management over the next five years.

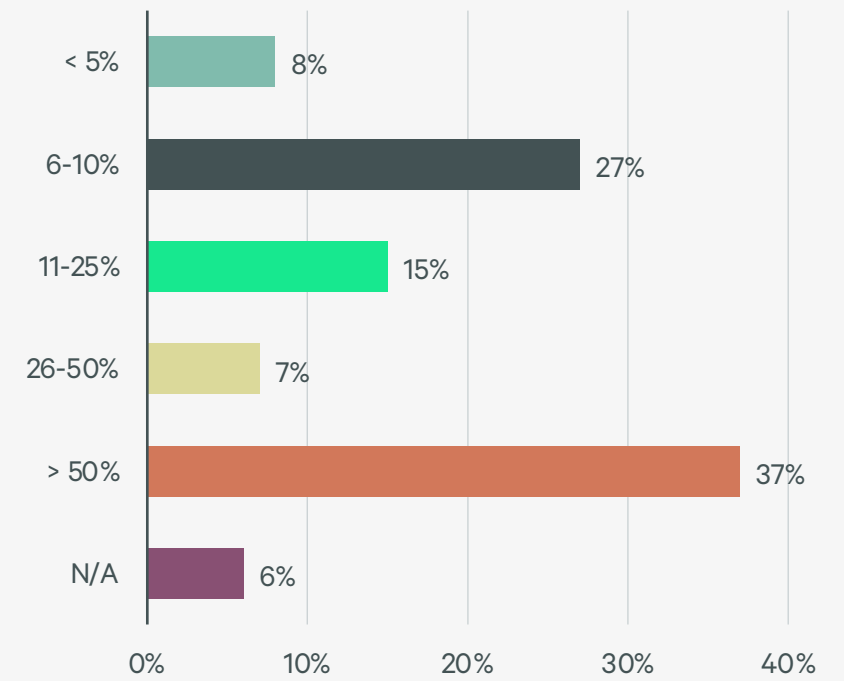
While 38% of respondents currently have less than 5% exposure to data centers (Figure 4), only 8% expect to have less than 5% exposure in five years.

Figure 4: What approximate percentage of your organization's global real estate assets under management are data centers?



Source: U.S. Investor Intentions Survey, CBRE Research, January 2024.

Figure 5: What is your organization's five-year target ratio of data centers as a percentage of real estate assets under management?



Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

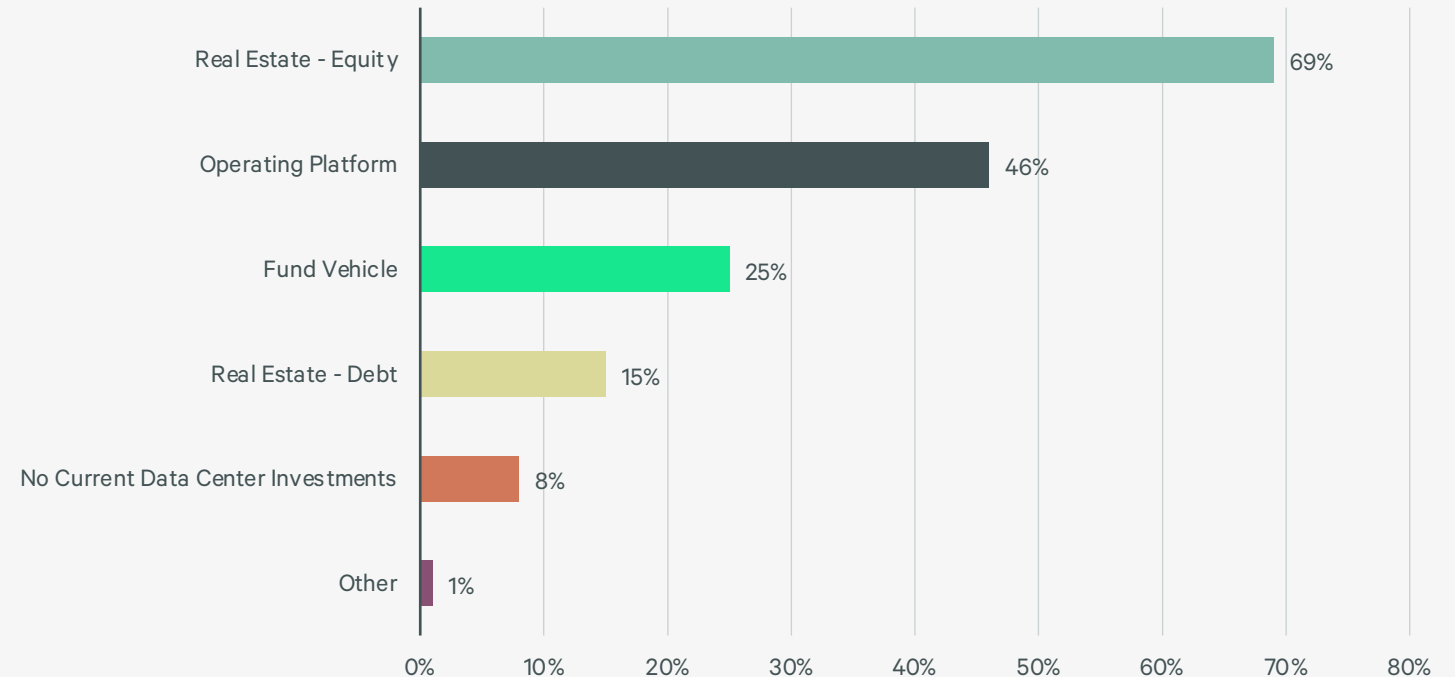
Equity, Operating Platforms are Most Common Investment

Investment allocations among data center investors ranges widely across the capital stack.

Sixty-nine percent of respondents reported investing in equity, while 15% invested in debt. In our 2023 survey, it was 54% and 14%, respectively.

Only 8% of this year's respondents have no current data center investments, down from 16% last year.

Figure 6: How are you currently invested in the data center sector?



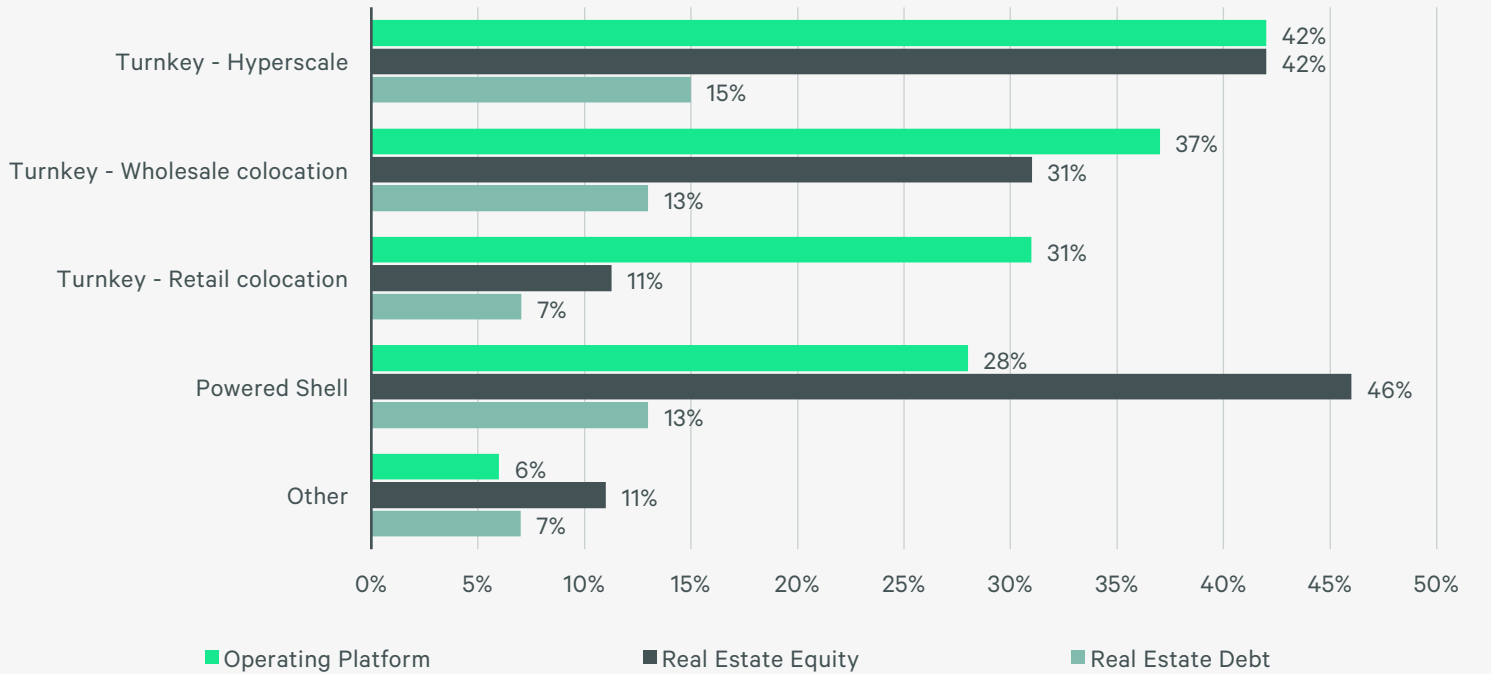
Note: Percentages may not sum to 100% due to multiple answers chosen.
Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Data Center Investment Continues Diversifying Across Segments

Real estate equity investments remain well diversified across powered shell, turnkey – hyperscale and turnkey – wholesale colocation.

However, respondents noted they invest most in turnkey – hyperscale debt (15%), more than double that of retail colocation (7%).

Figure 7: Select which market segment you are invested in, if applicable.



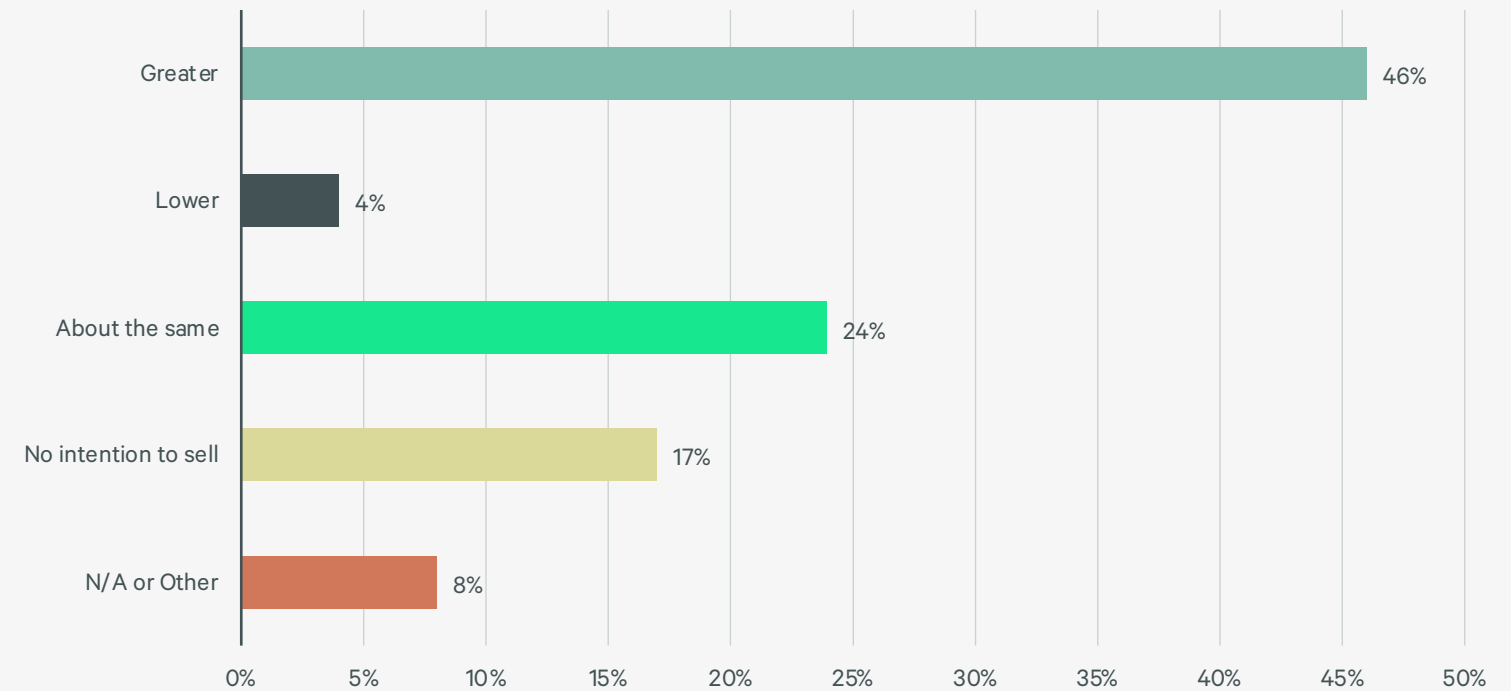
Note: Percentages may not sum to 100% due to multiple answers chosen.
 Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Selling Activity Optimism Rises

Only 4% of respondents anticipate their 2024 asset sales volume will be lower than in 2023. In contrast, 16% of respondents in 2023 anticipated their asset sales volume would be lower that year than in 2022.

These results were reported while U.S. Fed funds rate stood at 5.25% to 5.50%.

Figure 8: Do you anticipate your selling activity in 2024 will be greater, less than or about the same as in 2023?

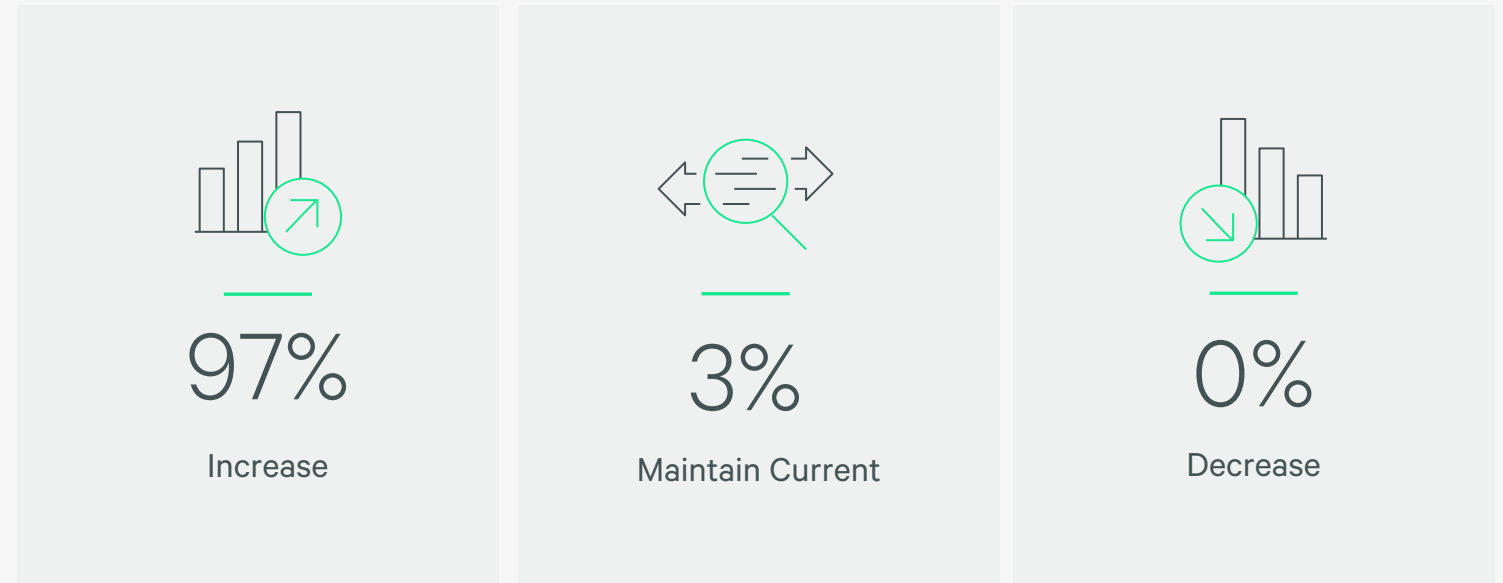


Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Investment Expectations

Ninety-seven percent of respondents plan to increase their investment in the data center sector, up from 89% in 2023.

Figure 9: Are you planning to increase, decrease or maintain your overall investment in the data center sector this year?

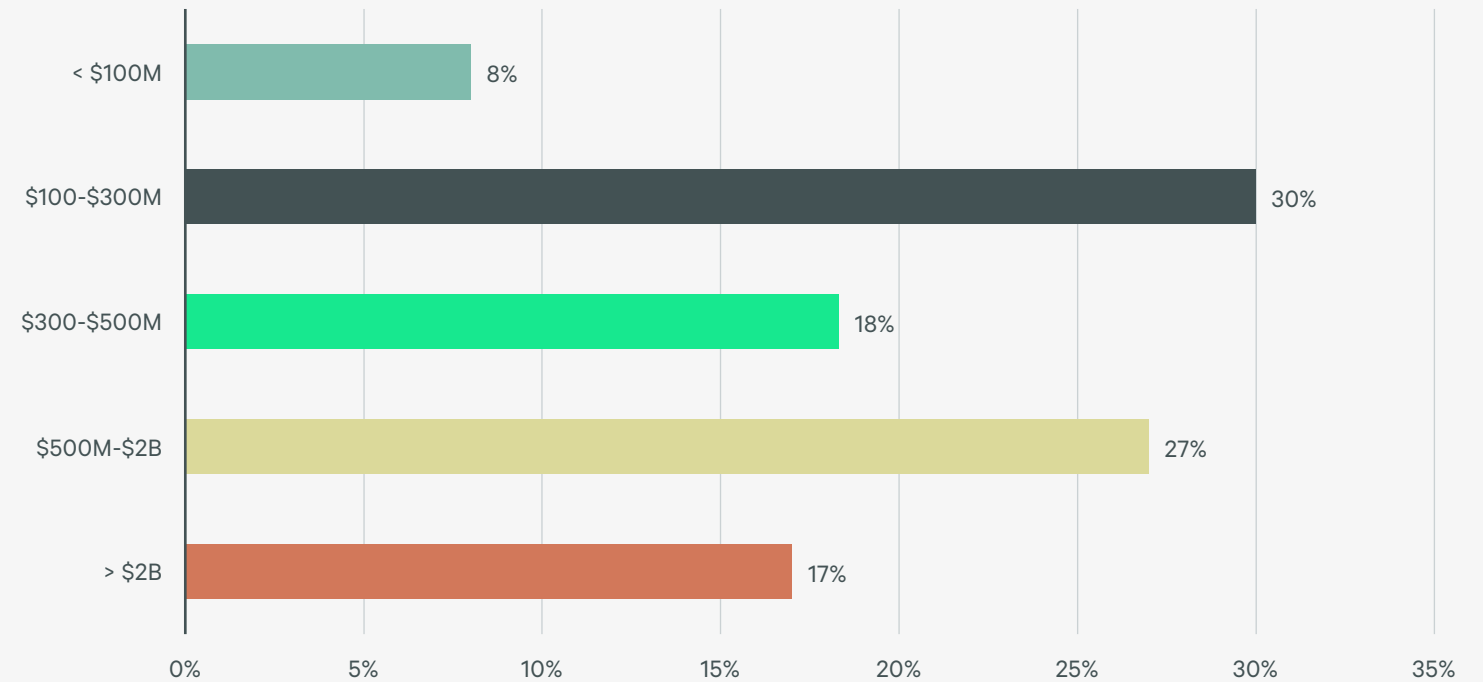


Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Capital Allocations

Ninety-two percent of respondents stated an intention to allocate more than \$100 million of equity to the data center sector this year, up from 85% in 2023. Forty-four percent are allocating more than \$500 million, up from 32% in 2023.

Figure 10: What is your 2024 capital allocation (equity) to the data center sector?



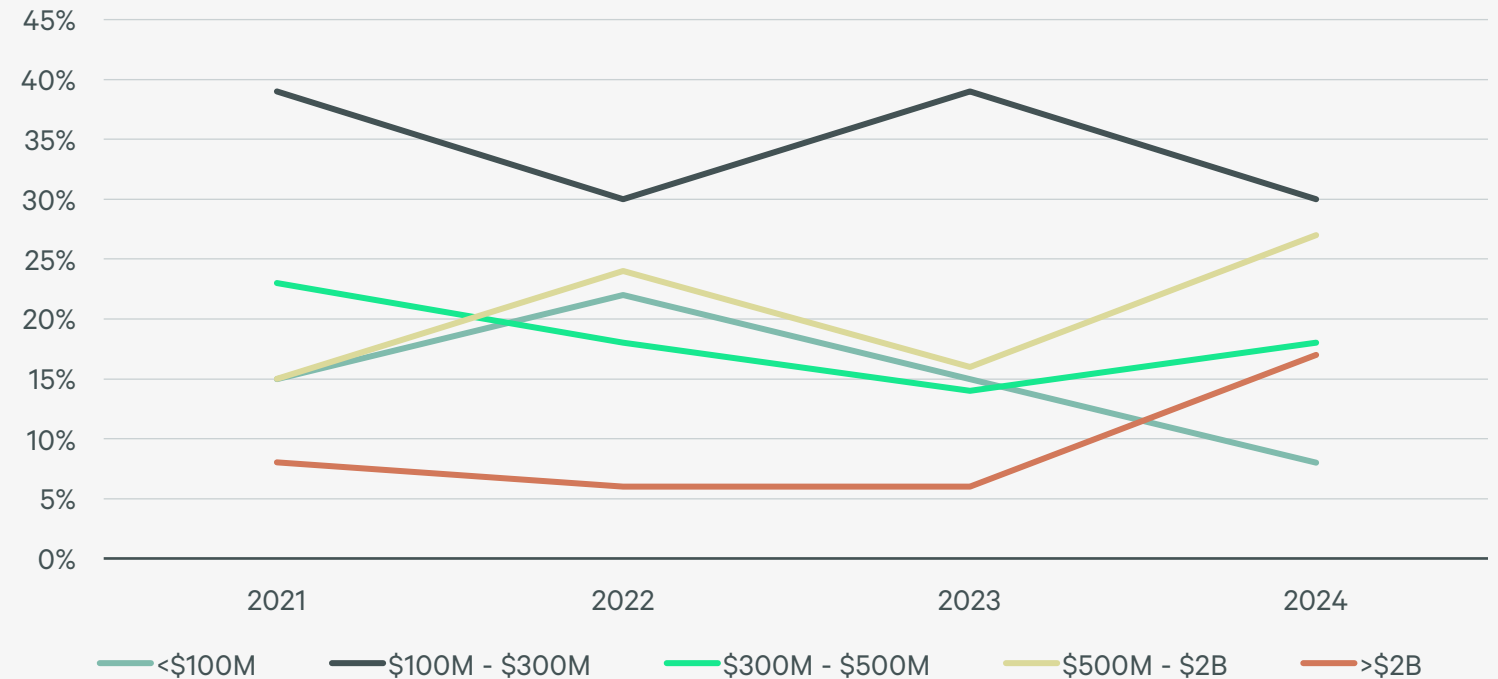
Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Capital Allocation Trends

Seventeen percent of respondents have allocated more than \$2 billion to the data center sector, an increase from the 6% to 8% response range seen from 2021 through 2023.

The three highest tiers of investment (\$300 million to \$500 million, \$500 million to \$2 billion and greater than \$2 billion) all saw an increase in investment in 2024.

Figure 11: What is your 2024 capital allocation (equity) to the data center sector?

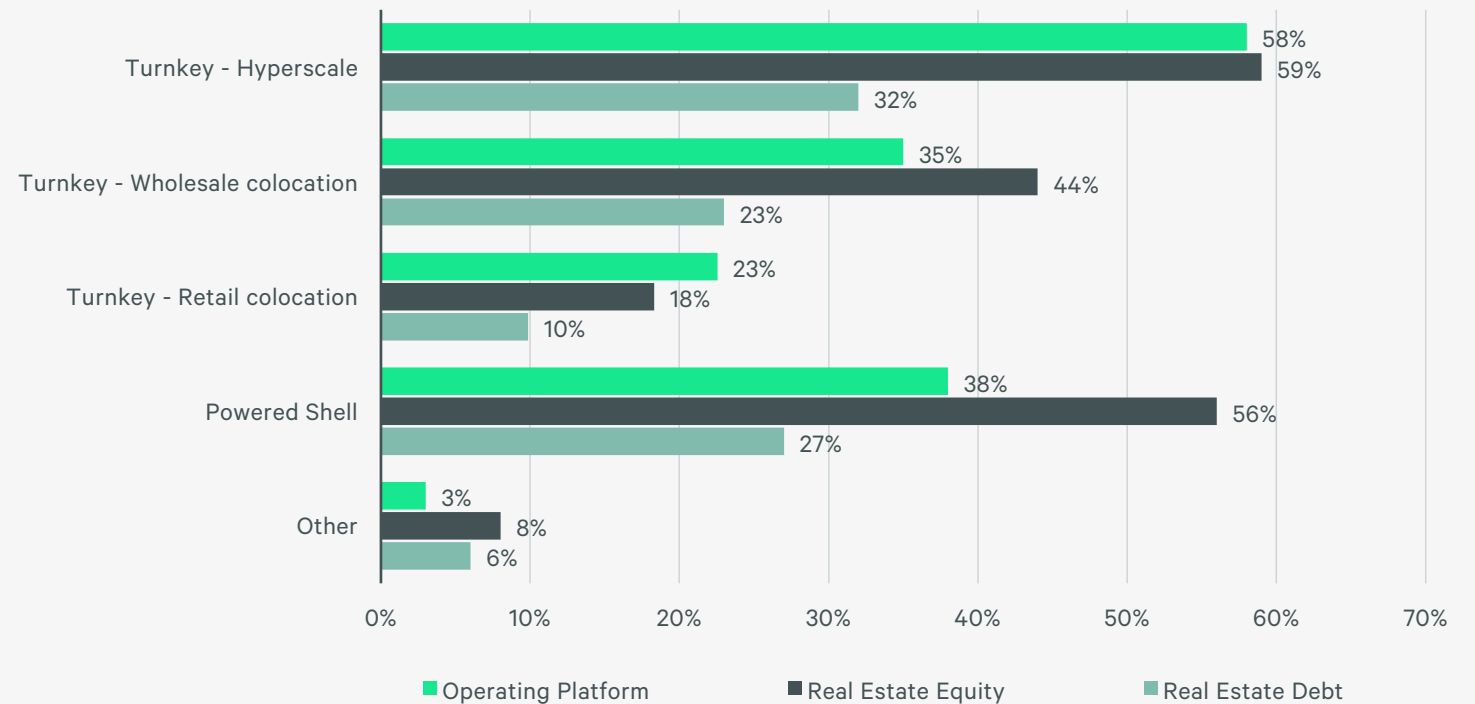


Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

2024 Market Segment Interest

Debt investment interest is rising across all segments. Interest in turnkey – hyperscale projects polled at 32% this year, up from 18% last year. Additionally, turnkey – retail colocation lags all other market segments for a second consecutive year in terms of investor interest.

Figure 12: What segments of the market most interest you for investment this year?

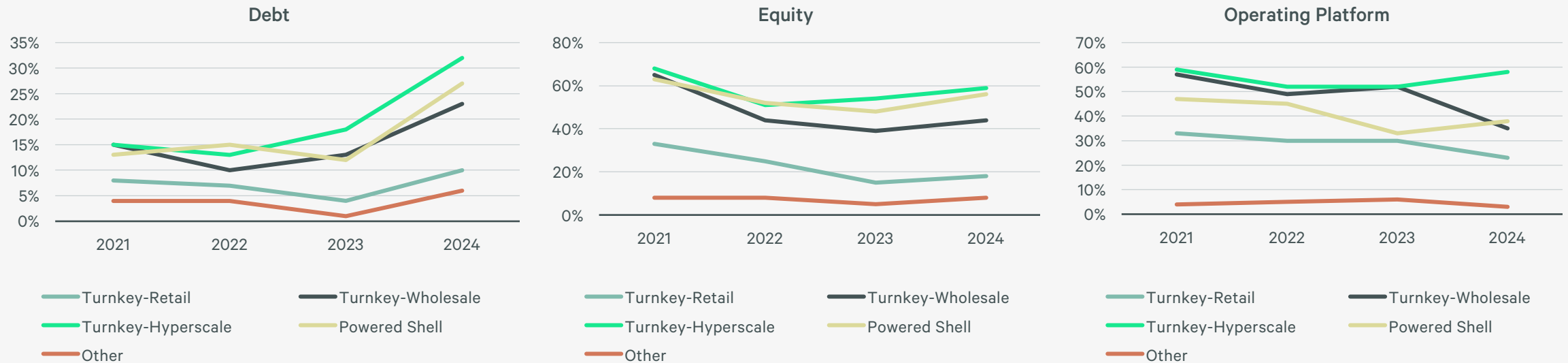


Note: Percentages may not sum to 100% due to multiple answers chosen.
 Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Debt Investment Interest is Rising

Investor interest in debt has risen across all data center sector segments from 2021 to 2024 with 32% of investors interested in turnkey – hyperscale debt, which is greater than all other segments.

Figure 13: What segments of the market most interest you for investment this year?

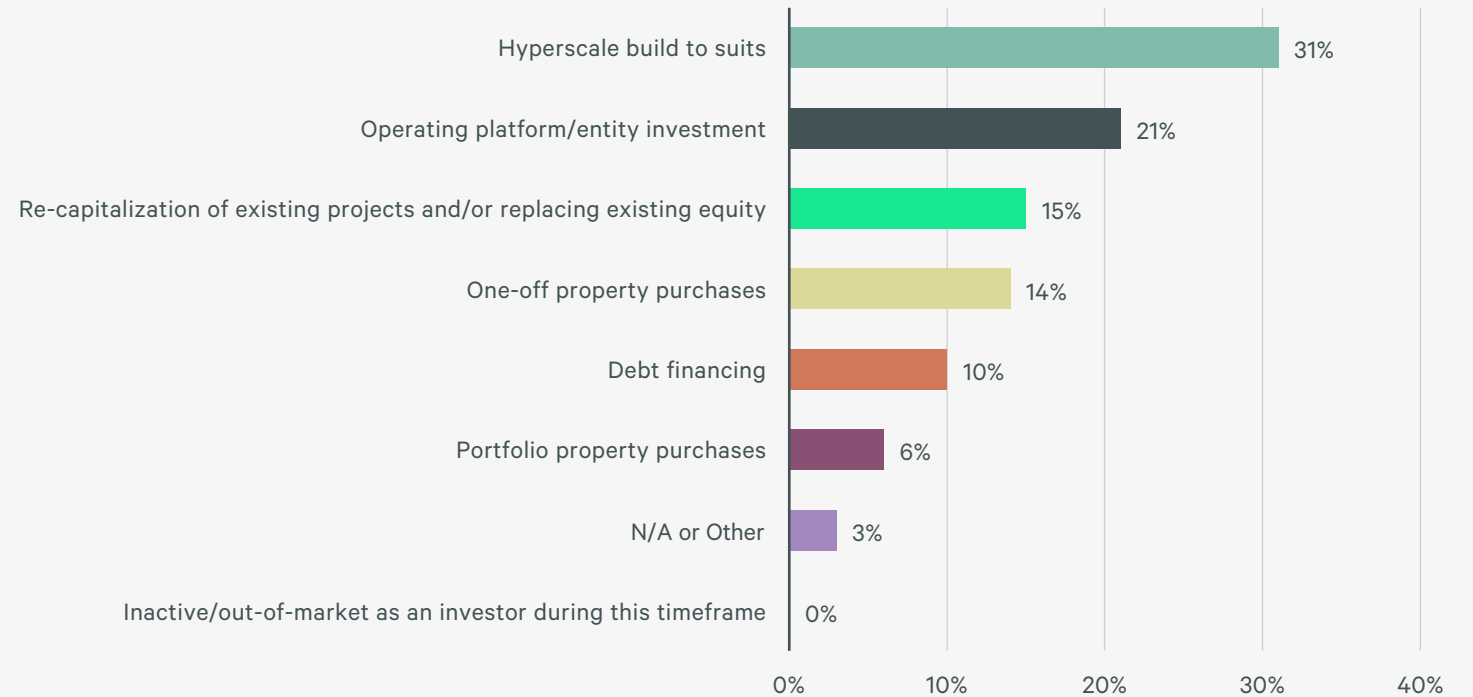


Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Looking Ahead 12 to 24 Months

For the second consecutive year, 31% of respondents see hyperscale build-to-suits as the greatest opportunity for data center investment.

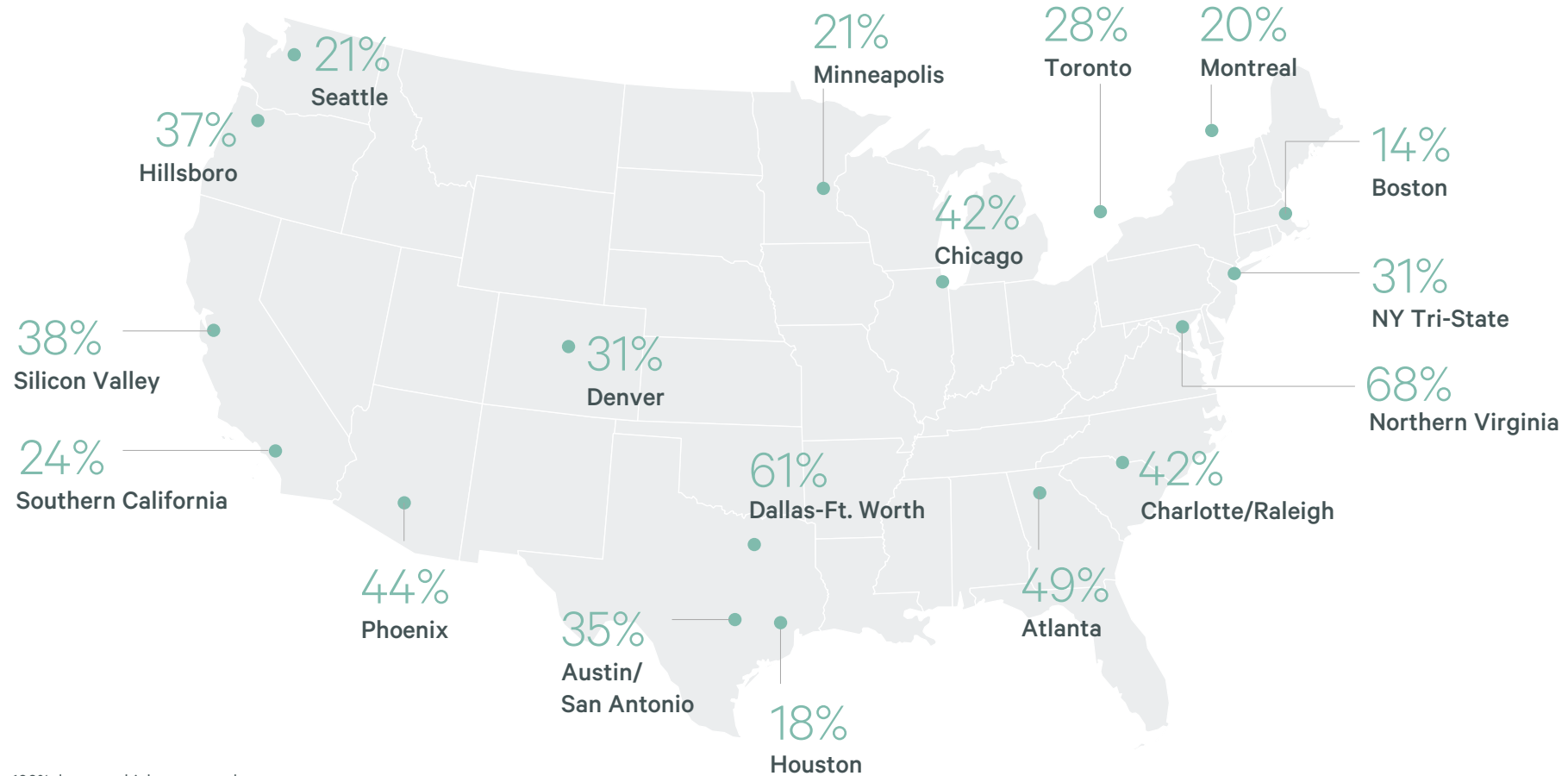
Figure 14: Where do you see the greatest opportunity for data center investment over the next 12 to 24 months?



Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Northern Virginia Most Interesting Market, but Others Close Behind

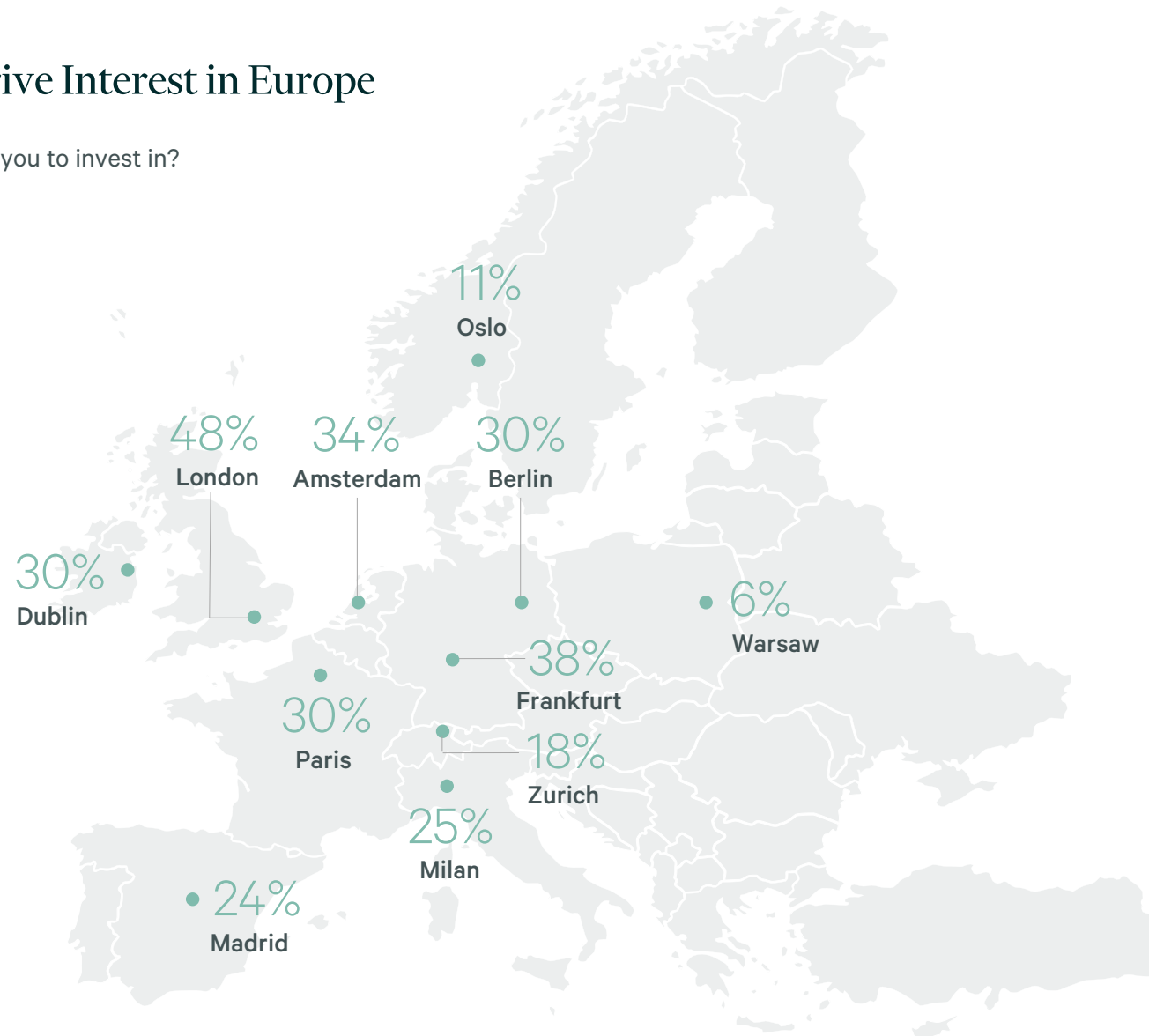
Figure 15: In 2024, which markets most interest you to invest in?



Note: Percentages may not sum to 100% due to multiple answers chosen.
 Source: CBRE Global Data Center 2024 Investor Sentiment Survey

Major Markets Continue to Drive Interest in Europe

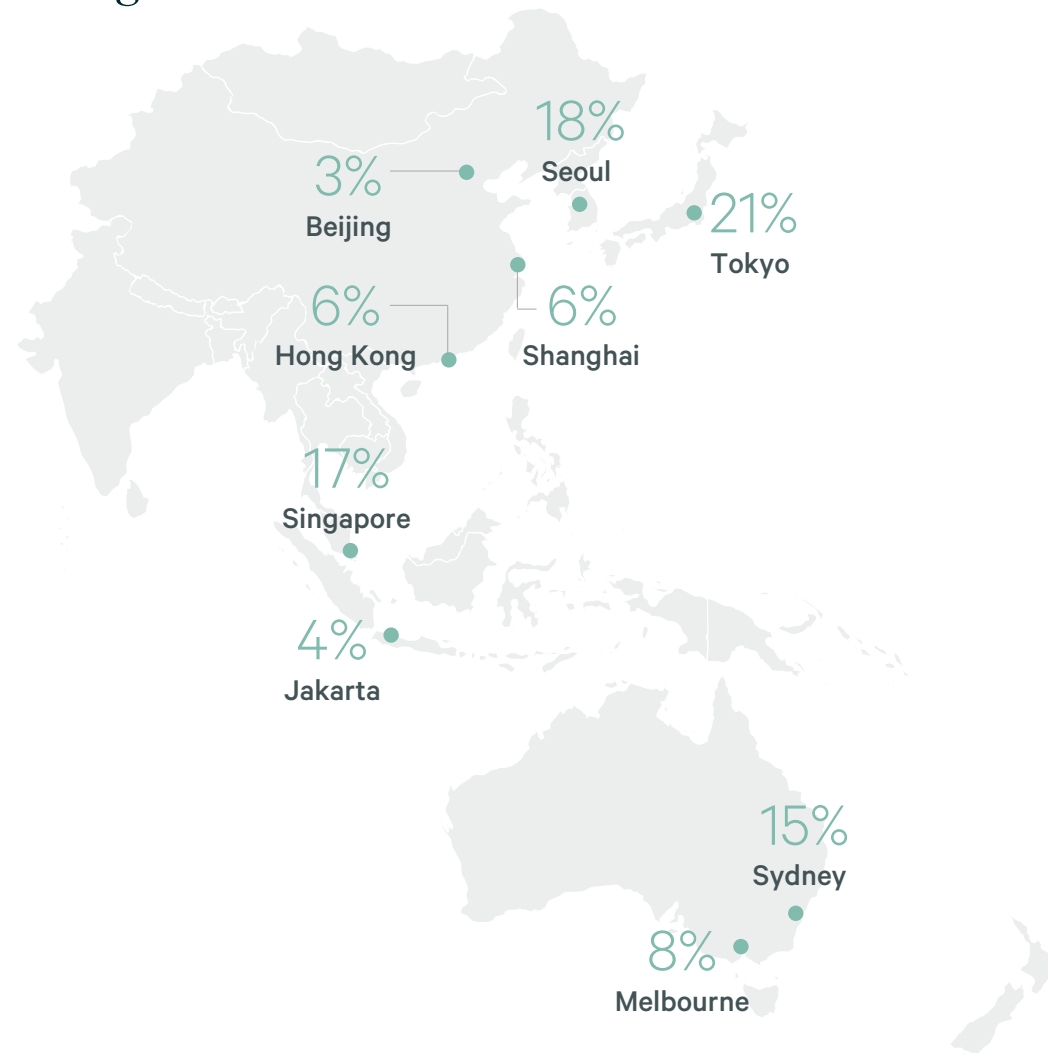
Figure 16: In 2024, which markets most interest you to invest in?



Note: Percentages may not sum to 100% due to multiple answers chosen.
Source: CBRE Global Data Center 2024 Investor Sentiment Survey

Tokyo, Singapore, Seoul, Sydney Driving Investor Demand in Asia-Pacific

Figure 17: In 2024, which markets most interest you to invest in?



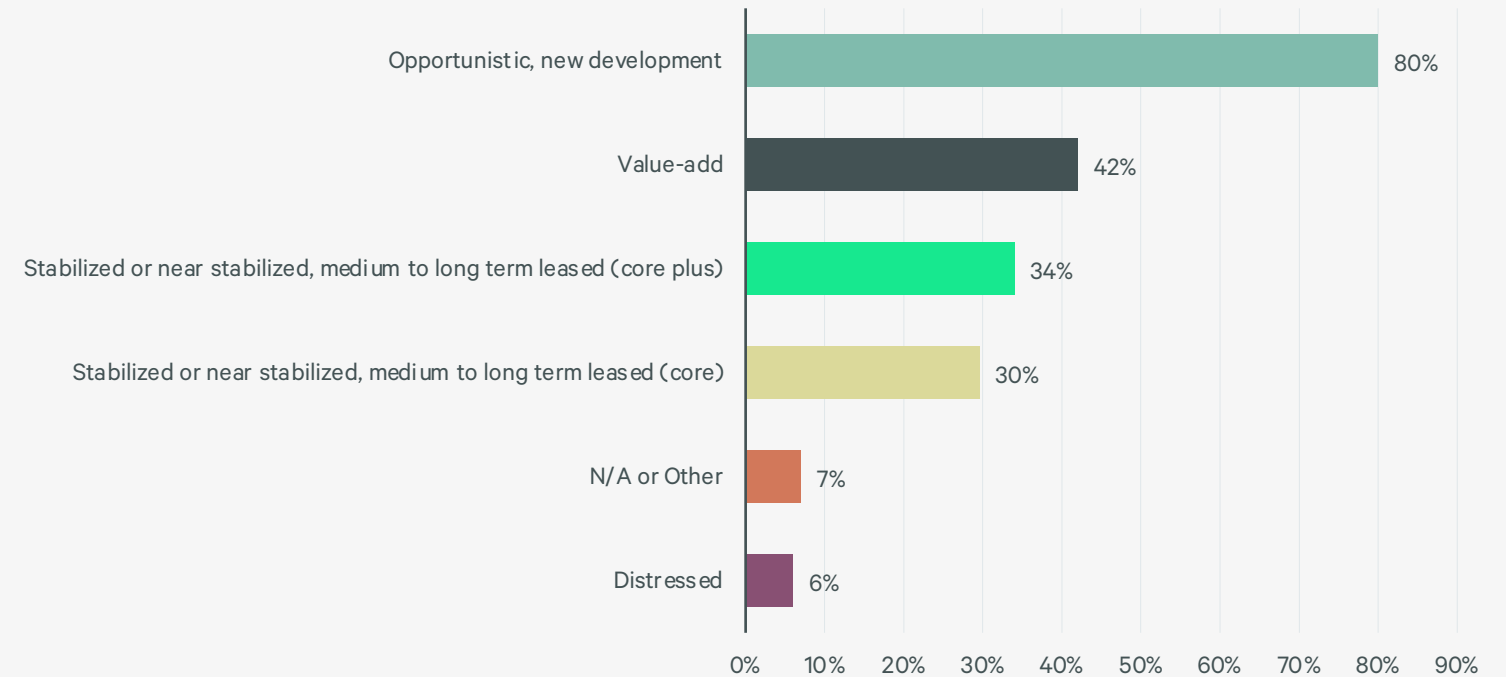
Note: Percentages may not sum to 100% due to multiple answers chosen.
Source: CBRE Global Data Center 2024 Investor Sentiment Survey

New Development Interest Reaches New Heights

Investor interest has significantly shifted from 2022 to 2024. In 2022, at least 40% of respondents expressed interest in opportunistic/new development. This increased to 66% in 2023 and to 80% in 2024.

Value-add project interest remained steady from 2023 (40%) to 2024 (42%).

Figure 18: What is your primary investment strategy for data center asset purchases in 2024?



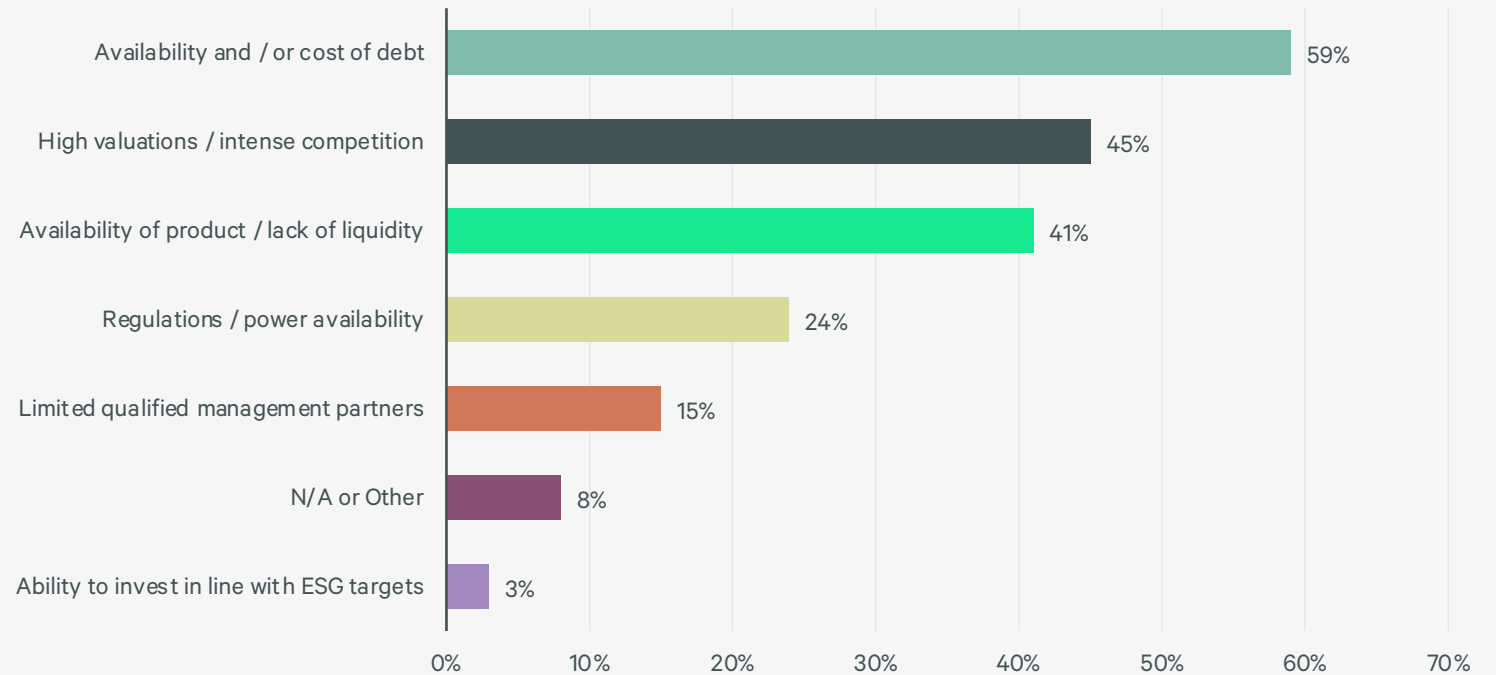
Note: Percentages may not sum to 100% due to multiple answers chosen.
Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Availability/Cost of Debt, Competition Are Top Concerns

Last year, the biggest reported challenge impacting investors' investment strategy was high valuations and intense competition (61%), which is down to 45% in 2024.

This year, 59% of respondents stated the biggest challenge is the availability and/or cost of debt, compared to 40% last year.

Figure 19: What are the greatest challenges to your current data center sector investment strategy?



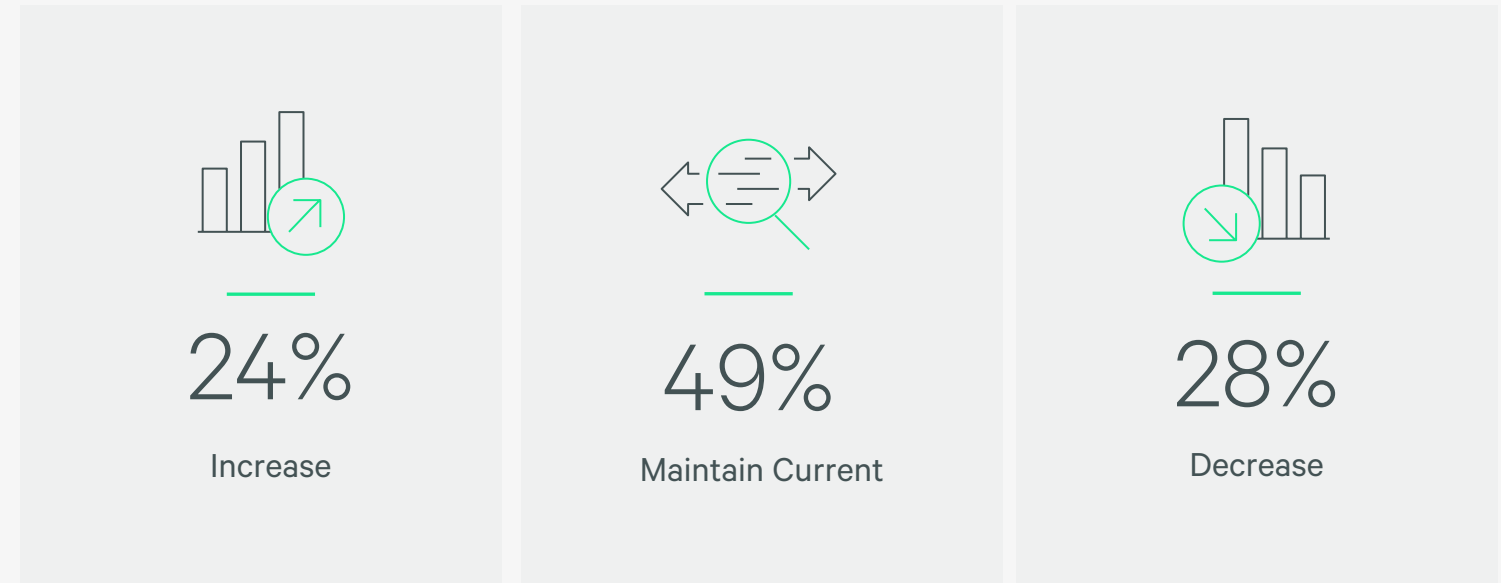
Note: Percentages may not sum to 100% due to multiple answers chosen.
Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Cap Rate Sentiment Improved, Still Mixed

Cap rate sentiment improved, with only 24% of respondents anticipating an increase in yield/cap rates in 2024, down from 42% in 2023.

In 2022, only 12% of respondents anticipated an increase in initial yields/cap rates.

Figure 20: In 2024, do you think investor returns (initial yield/cap rates) will increase, decrease or remain the same?



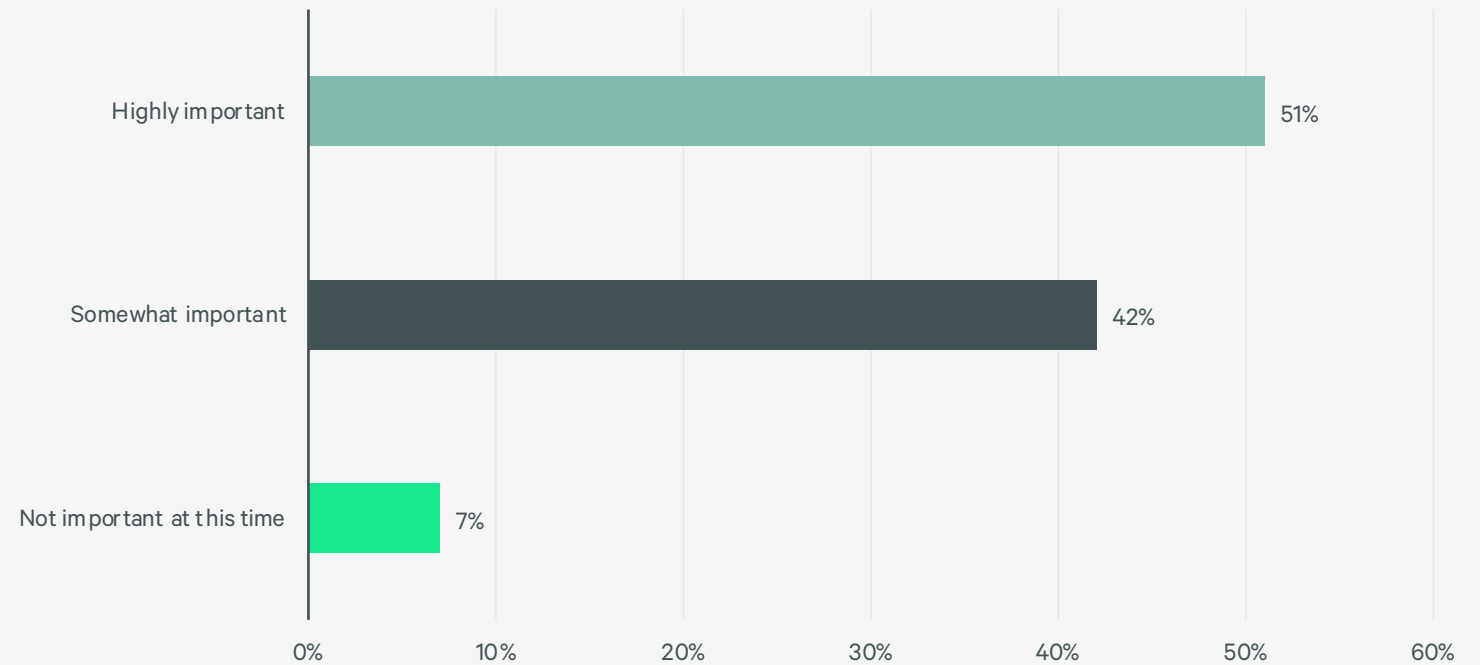
Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

ESG Considerations Rise

Ninety-three percent of respondents believe ESG considerations are at least somewhat important when evaluating their data center strategy, up from 90% in 2023.

Scope 1, 2 and 3 emission goals are top of mind for both operators and occupiers.

Figure 21: How important are Environmental, Social and Governance (ESG) considerations in your overall data center investment strategy?



Source: CBRE Global Data Center 2024 Investor Sentiment Survey.

Contacts

Capital Markets

Kevin Aussef

Americas
President of Investment Properties
kevin.aussef@cbre.com

Advisory

Pat Lynch

Executive Managing Director
Global Head, CBRE Data Center Solutions
pat.lynch@cbre.com

Research

Gordon Dolven

Director of Americas
Data Center Research
gordon.dolven@cbre.com

© Copyright 2024. All rights reserved. This report has been prepared in good faith, based on CBRE's current anecdotal and evidence based views of the commercial real estate market. Although CBRE believes its views reflect market conditions on the date of this presentation, they are subject to significant uncertainties and contingencies, many of which are beyond CBRE's control. In addition, many of CBRE's views are opinion and/or projections based on CBRE's subjective analyses of current market circumstances. Other firms may have different opinions, projections and analyses, and actual market conditions in the future may cause CBRE's current views to later be incorrect. CBRE has no obligation to update its views herein if its opinions, projections, analyses or market circumstances later change.

Nothing in this report should be construed as an indicator of the future performance of CBRE's securities or of the performance of any other company's securities. You should not purchase or sell securities—of CBRE or any other company—based on the views herein. CBRE disclaims all liability for securities purchased or sold based on information herein, and by viewing this report, you waive all claims against CBRE as well as against CBRE's affiliates, officers, directors, employees, agents, advisers and representatives arising out of the accuracy, completeness, adequacy or your use of the information herein.