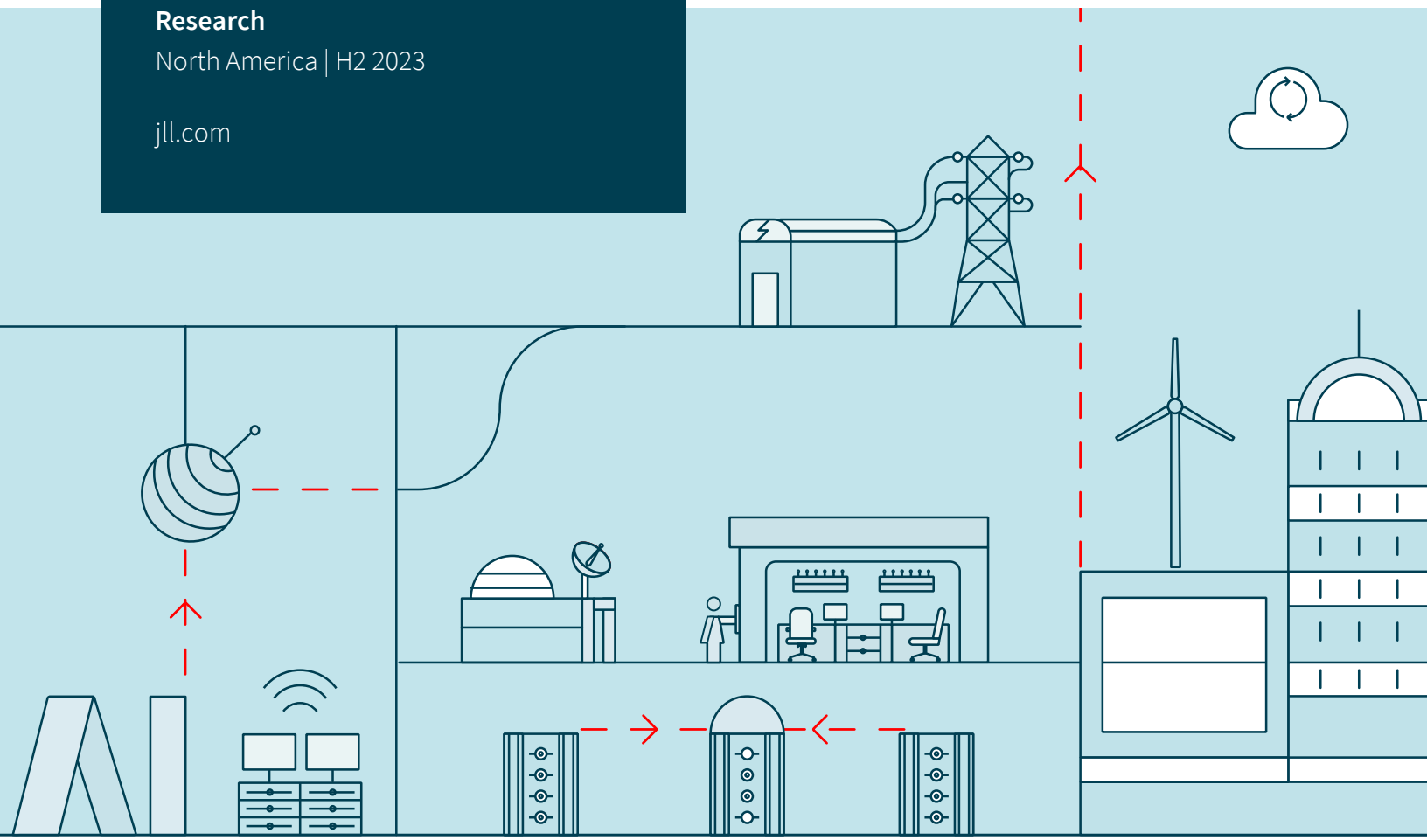
Research
North America | H2 2023

jll.com

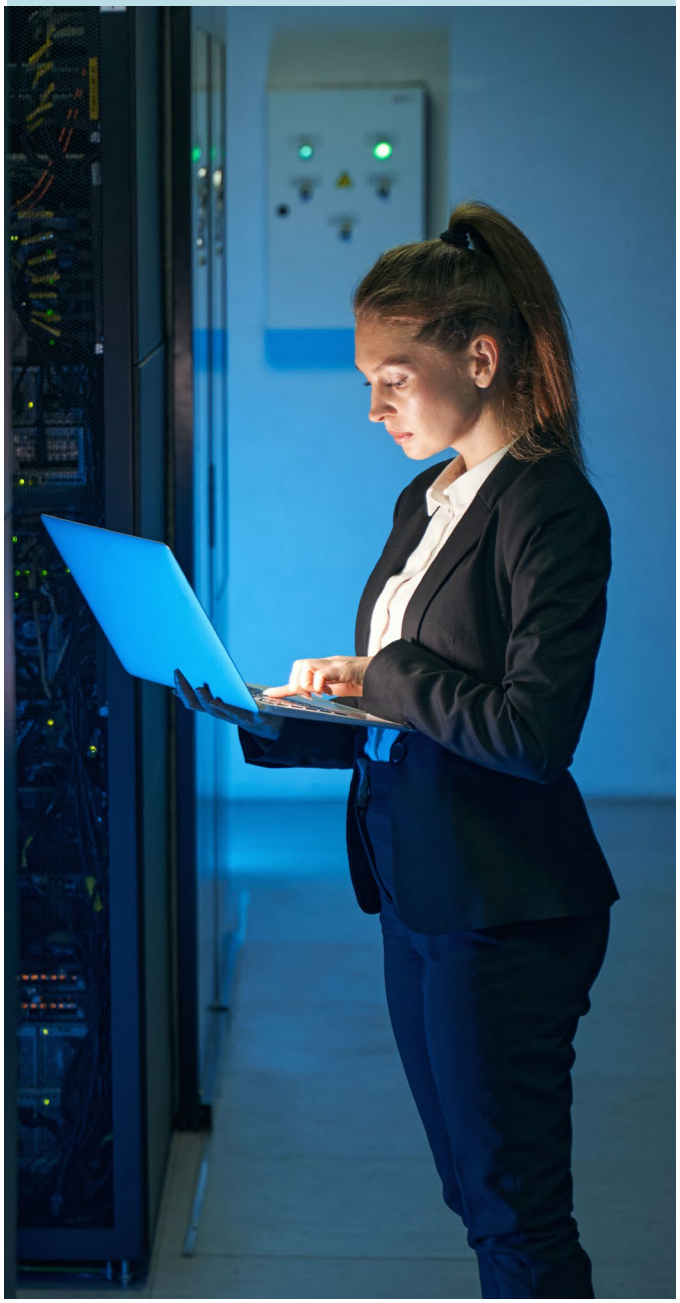


North America Data Center Report

The quest for power moves development into new frontiers

JLL SEE A BRIGHTER WAY

Introduction



What's not going to change in the next 10 years? Data being foundationally important to our society—how we live, work and relax.

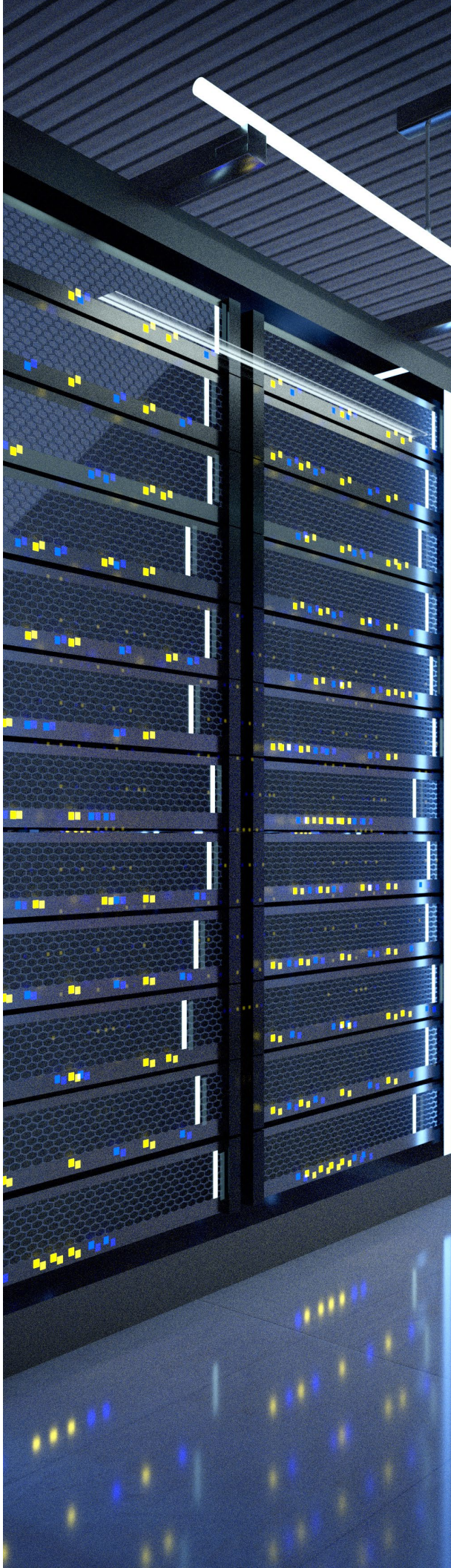
Data centers are the bricks that hold our modern society together, supporting all the other property types. When we are in our living space or offices, at a retailer or at the doctor's office, we are also connecting remotely to data stored in "the cloud" but physically housed in a data center (or more than one) somewhere in the world.

And we are accelerating the volume of data we create. Today 96% of teens say they use the internet "every day," with 46% reporting they use it almost constantly, according to Pew Research. In 2022, 333.2 billion emails were sent per day—almost 43 emails per person on earth. Thirty-four million videos are posted on TikTok daily and over 1.5 billion active users are on the platform. Even though data feels like it's in the air we breathe, it occupies physical space on servers, processers, hard drives and other electronic materials.

Add to this artificial intelligence and large language models (LLM) like ChatGPT. On top of traditional demand, LLMs went viral this year. In January 2023, ChatGPT had just over 100 million monthly users two months post-launch. By November, it had over 100 million active users *weekly*. Training of ChatGPT-3 consumed over 1,287 MWh of power. With hundreds of millions of daily ChatGPT queries, the LLM uses about as much power as 33,000 households.

Contents

Is there any stopping this growth of data and in turn increasing demand for data center capacity? 2023 was yet another strong year for demand, but limited supply shifted the balance of power even further to data center providers. Power is the key hurdle, impacting all of the fundamentals:



01

Demand and availability

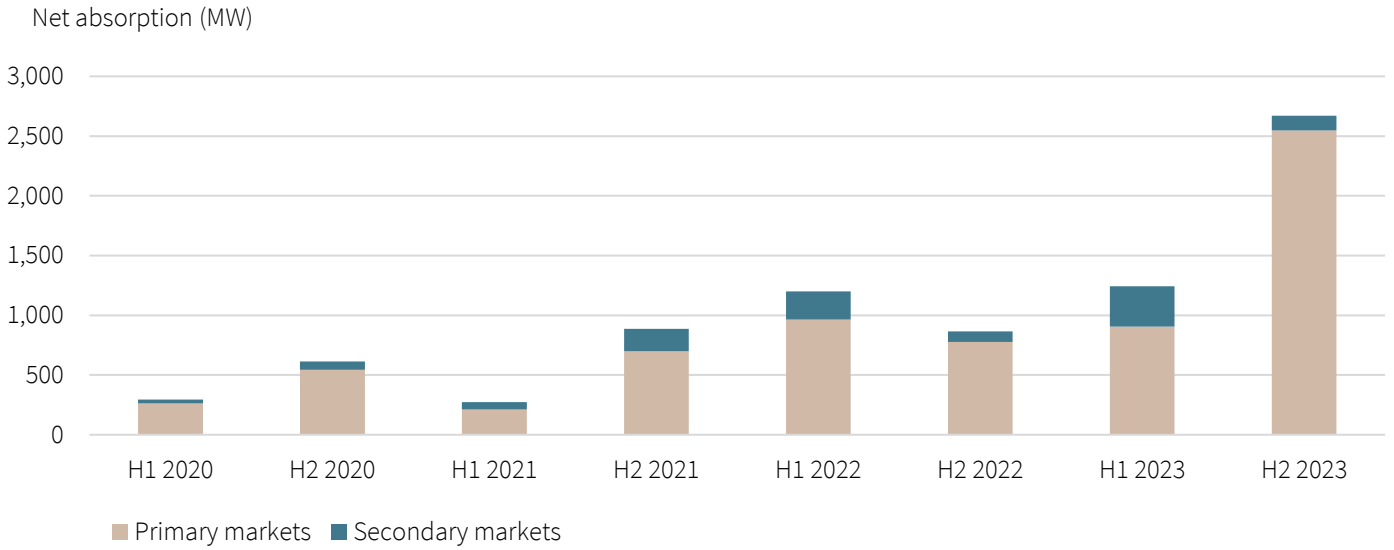
Leasing activity primarily in projects under development as power timelines race to keep up with demand

As is happening across the globe, data center demand, measured in megawatts of power leased by users, continues to accelerate in the Americas. In H2 2023, the primary North American data center markets saw 3.4 GW of transactions signed, bringing the full-year total to a record of 4.3 GW. Secondary markets added 124 MW of absorption in H2 2023 and 554 MW for the year.

In 2023, Northern Virginia, the largest data center market, led all markets with 1.6 GW of transaction volume with deliveries anticipated in the next few years based on power availability. Of this total, 581 MW was in energized product, 188 MW in powered shell, and an additional 884 MW was reservations for space not yet powered. Second was Phoenix with 784 MW of new capacity signed. The Northwest led all secondary markets, with 258 MW absorbed, with the Hillsboro, Oregon submarket accounting for 62% of the total.

Secondary markets have been growing in share of leasing activity over the last two to three years, as these markets can be more cost-effective and have shorter power-delivery timelines. However, in H2 2023, overwhelming leasing in Northern Virginia and Phoenix for product still under construction or proposed propelled primary markets to a total three times that of H1 2023.

Due to record demand in Northern Virginia, secondary markets declined significantly in share of overall demand



Source: JLL Research; Includes markets with complete data from 2020-2023

What's driving demand?

New demand from **Generative AI** requires tremendous amounts of power, with some up to 300-500 MW. New York and New Jersey saw significant AI deployments in H2 2023, with over 15 MW preleased in Orangeburg, NY and over 35 MW deployed for AI in New Jersey. The proximity to financial services firms and the network of AI talent have driven demand in those markets.

Cloud and hyperscale demand continues to dominate in the larger markets, making it more difficult for smaller enterprise users to find colocation space and power to meet their needs. While cloud usage continues to grow, some enterprise users are evaluating the shift from enterprise to cloud due to rising costs, latency and information security concerns, moving toward a "distributed cloud" environment or outsourcing enterprise data center operations.

Proximity to interconnection points is driving site selection for data center demand, but these edge deployments tend to be smaller. In Los Angeles, connectivity to One Wilshire, which provides access to overseas cables and telecommunications antennas, is key and drives activity at connected data centers. Completion of the Topaz cable connecting Vancouver to Japan—the first fiber connection between Canada and Japan—is spurring new interest.

Data center demand shows no sign of abating, but power availability and delivery timelines continue to dampen absorption. Users must plan further ahead with their IT strategy and commit to space and power on accelerated timelines to find capacity to fit their requirements. For primary markets, most of the net leasing in H2 2023 occurred in under-construction or planned product, rather than existing inventory. Preleasing will continue to accelerate, as construction and power delivery timelines are not likely to decelerate over the next 12 months.

02

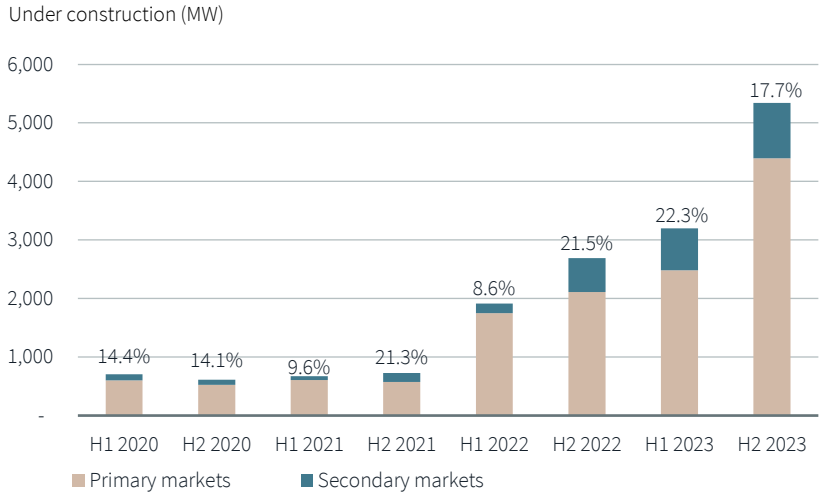
Construction races to keep up with demand

Data center capacity under construction in primary and secondary markets exceeds 5.3GW, enough energy to power all the households in the San Francisco metro area for one year.

Because of power delivery timelines, most of the capacity coming online in 2024 is already preleased. Significant amounts of unleased capacity are two-plus years out in most primary markets. Secondary markets continue to compose almost 20% of capacity under construction.

Rising demand and limited capacity pushed increased construction in secondary markets

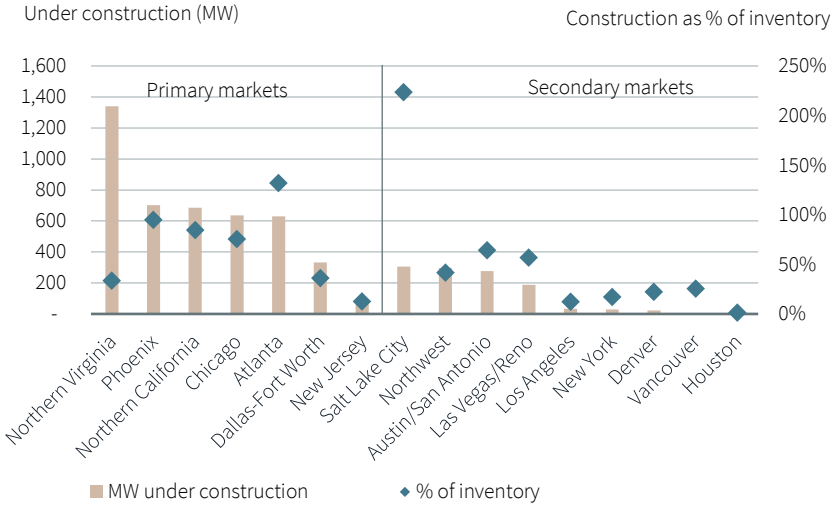
Data labels show percent of construction in secondary markets



Source: JLL Research; Includes markets with complete data from 2020-2023

Almost all markets are seeing an uptick in construction in response to accelerating demand. Salt Lake City is experiencing the fastest acceleration in construction, with more than twice as much capacity under construction as is currently existing. Low power and gas costs, combined with growing importance as a technology hub, are driving increased interest from users and developers.

Atlanta and Salt Lake City will multiply capacity with current construction pipeline



Source: JLL Research

Upgrade and expand

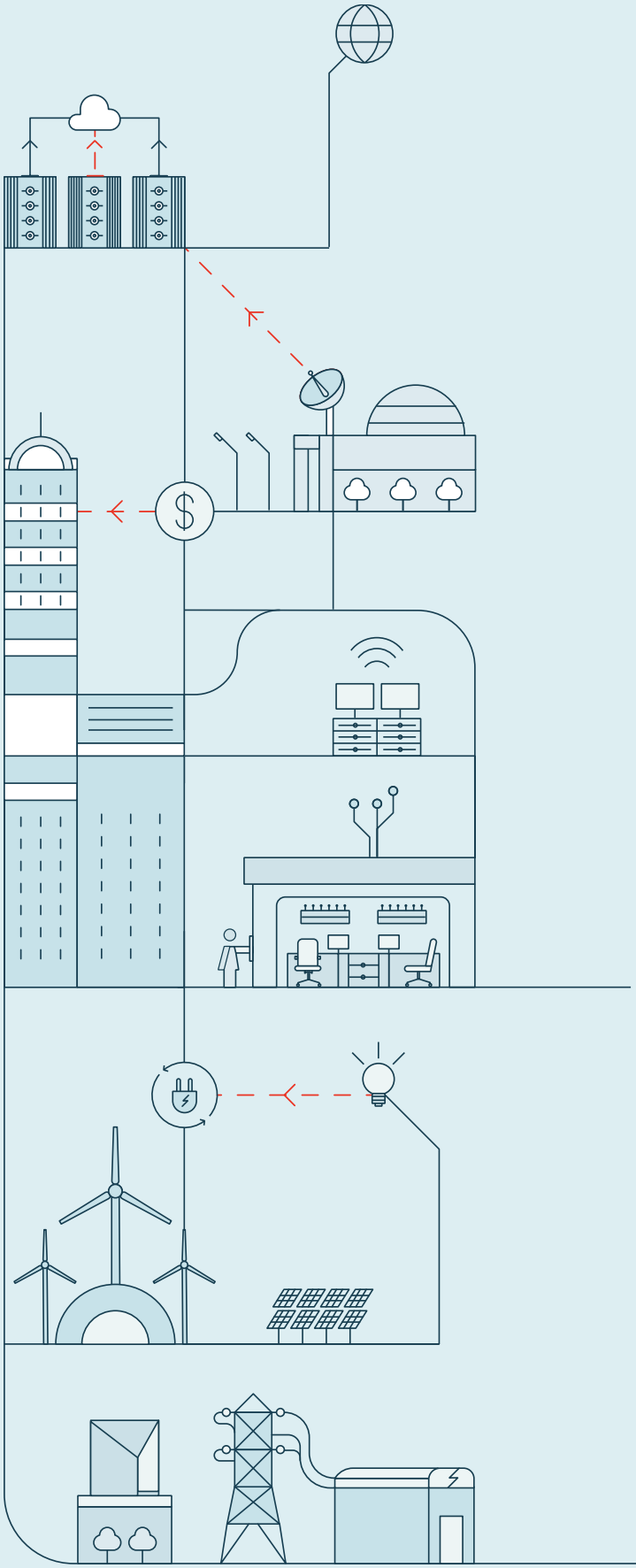
Ground-up construction is just a portion of new data center capacity. Existing data centers are being expanded both horizontally and vertically. Upgrades in existing power infrastructure or onsite power generation can also add capacity—making data centers denser in MW per square foot.

Developers and enterprises are realizing their existing Basis of Design (BoD) does not support AI's voracious power demands, which can be 2-4 times denser per cabinet than traditional enterprise deployments. Furthermore, once cabinet density exceeds approximately 50 kW per cabinet, traditional air-cooling technologies are no longer effective, ushering in an alternative method such as liquid cooling and greater change to design and operations.

Enterprises cannot run their AI applications on-premises and as such are turning to colocation providers, who are rapidly upgrading their infrastructure to meet this demand. Hyperscalers are also increasing their data center footprint with AI-ready data centers to sell that service to end users. Many of these designs use GPUs (graphics processing units) that are more efficient for handling AI computing.

Investor attention is increasingly focused on upgrades needed to support the burgeoning growth of AI. Developments targeting AI are much larger in capacity, with some ranging from 300 to 500 MW. With such dense computations necessary for AI, the focus is on power, and users and developers chasing AI capacity are moving into more remote areas, evaluating secondary or tertiary markets. New AI-focused data centers do not require backup power or as much redundancy as traditional enterprise data centers and can occupy a smaller physical footprint but require significantly more power.

Data center design spotlight



Data center campuses

While data center campuses have been around for decades, in the past five years, deep-pocketed investors are using this strategy to enable gradual building of capacity, make construction more efficient and deploy funding over time. Data center campus announcements now commonly exceed 100 MW.

Multistory data centers

As availability of developable data center land grows tight in some markets, data center providers are turning to multistory data centers. This trend is growing in primary data center markets with land constraints. In Dallas-Fort Worth, DataBank is building a 40 MW three-story data center after securing additional power next to a current 13.5 MW data center. In Northern Virginia, Aligned Data Centers is developing a 72 MW four-story data center positioned as a build-to-suit project for a hyperscale customer. In 2023, Cologix announced the full preleasing of a 120 MW three-story data center.

Microgrids

In response to limited power availability from the public grid, data center operators are exploring microgrids, small-scale localized power systems that can integrate renewable energy and provide resiliency from disruptions. Biofuel-based backup power and small nuclear reactors are two of the energy sources that operators are exploring for data center use.

03

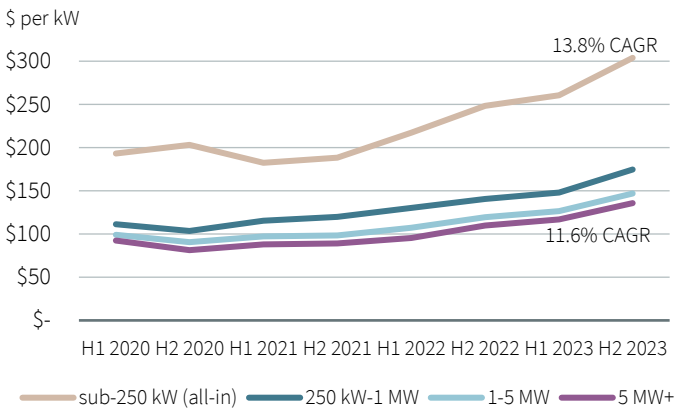
Cost of operation rises due to growing rent and power costs

Rental rates rose fastest for small, near-term requirements

Due to strong demand, rates nationally have risen 5% for small requirements under 250 kw and 11% for large requirements of 5 MW plus from H1 2023 to H2 2023. Prices rose highest in markets with rapidly diminishing availability—Phoenix saw rates rise 17% to 30% (depending on capacity tranche) and in Northern California rates rose 21% to 23%. Rapid inflation also pushed annual rent escalations to increase to 4% to 5% or tied to CPI in some cases, but given that inflation is slowing, escalations have returned to a more typical 3%.

Near-term pricing has increased more dramatically given scarcity of readily available space, especially for capacity over 1 MW. Rates are lower for precommitments of future product coming online in 2025 or 2026.

Rental rates in primary markets have risen fastest for small requirements as space became more constrained



Source: JLL Research

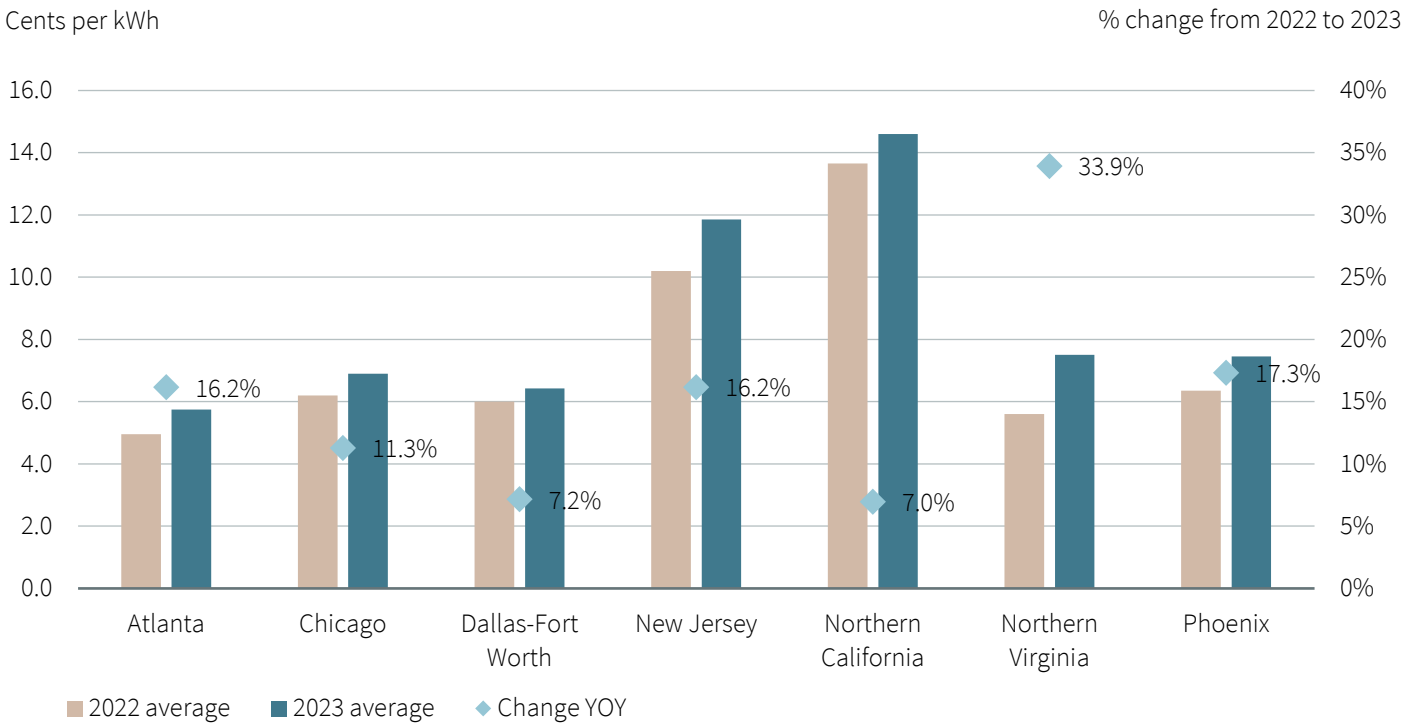
The rental rate discount for larger users of data centers is significant—on average rates were 18% lower for requirements above 5 MW than for requirements under 250 kW.

The rate of rent growth will likely ease in some markets by the end of 2024 or early 2025 as new capacity is added and supply chain bottlenecks continue to abate. However, with power constraints and increasing demand, landlords have power to raise rates, and in tight markets, rent could rise an additional 10% over the next year. Rising rates in this sector will continue to draw interest from investors, while users must properly assess their capacity needs to secure needed capacity in advance for optimal pricing.

Power rates increase as infrastructure investment increases

Average power rates increased in all the tracked primary and secondary data center markets from 2022 to 2023. Primary markets saw the greatest increase, at 15.6% on average compared with 9.0% in secondary markets. Growing pressure is being placed on electric delivery companies in these growing primary markets, not only from data centers but also electric vehicles, buildings seeking further electrification to move away from fossil fuel use, manufacturers and general population growth. To add and upgrade generation and transmission infrastructure, electric delivery companies need more funding, which often leads to rising utility rates passed on to the end user.

Power rates increased in all primary markets from 2022 to 2023, with Northern Virginia's rates jumping 34%



Source: JLL Research

In Northern Virginia, the power capacity used by data centers doubled between 2018 and 2022 to 2,767 MW, according to Dominion Energy, the state's electric utility. While historically Dominion satisfied demand, they have struggled in recent years to keep pace with the surge in power needs. Their current forecast projects that capacity will double statewide by 2028 based on customer orders. To address these constraints and meet future demand, major transmission infrastructure is under construction, starting with two 500 kV transmission lines in Northern Virginia to serve the data center market.

After rapid rate growth, electric rates are stabilizing. From H1 2023 to H2, 11 out of 17 markets tracked saw an increase, while in 4 markets rates fell. Power rates are expected to remain stable in most markets in 2024.

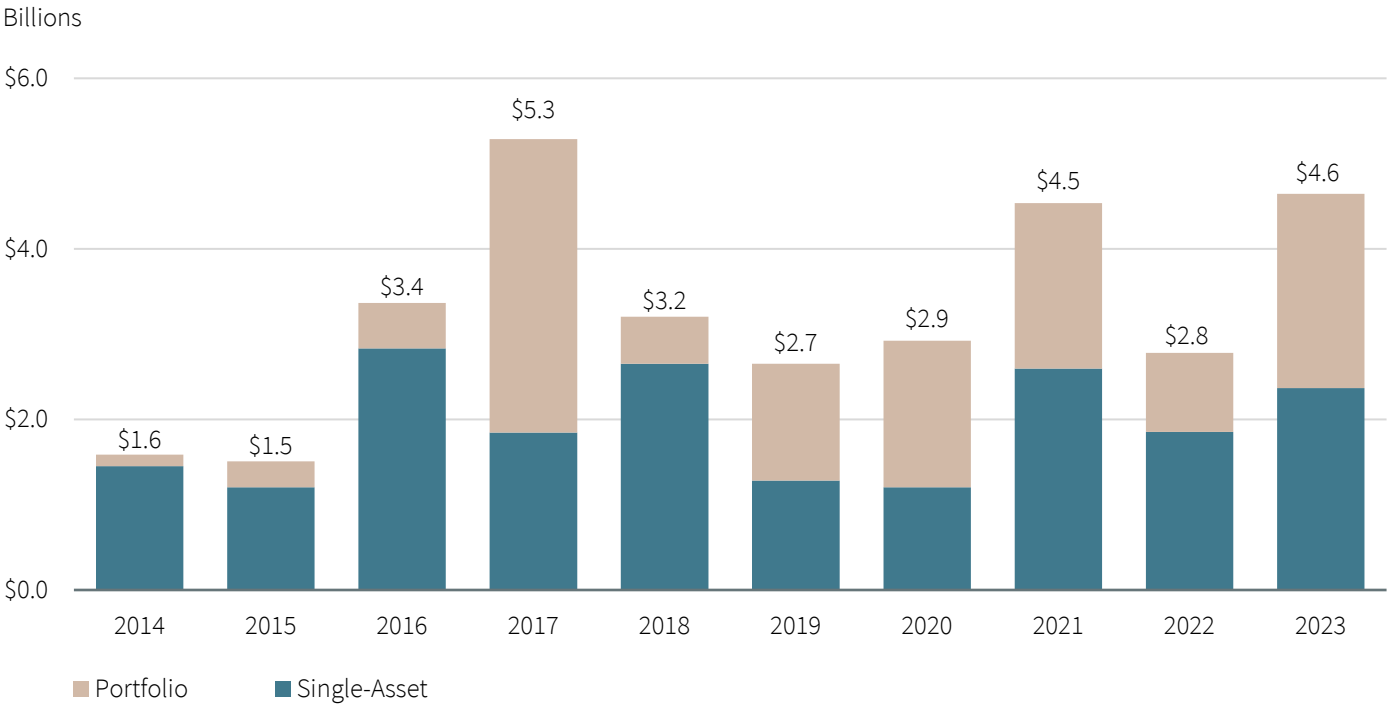
04

Capital Markets : Financing steady, transactions tempered

Transactions

Transaction volume in single-asset and portfolio sales for 2023 was $4.6 billion, up 67% from 2022's total. Individual property cap-rate based deals have slowed due to the pricing gap between buyer and seller expectations, but as we start to see interest rate stabilization, activity will pick up in 2024. Financing activity for data centers remains steady. M&A activity with North American exposure totaled over $16 billion in 2023 and, while slower than 2022, which saw headline investments from large equity firms, still shows strong appetite for the asset class.

North America data center transaction volume



Source: JLL Research; transactions above $5.0 million; excludes land/development deals

Cap rates and development yields

Value-add and development deals remain most attractive as development yields are ranging from 8.0% to 8.5% for powered shell and 8.75% to 9.25% for turnkey. There have been very few core product transactions in the past year due to the bid-ask spread, but based on relevant datapoints cap rates remain in the 6.0%-6.5% range.

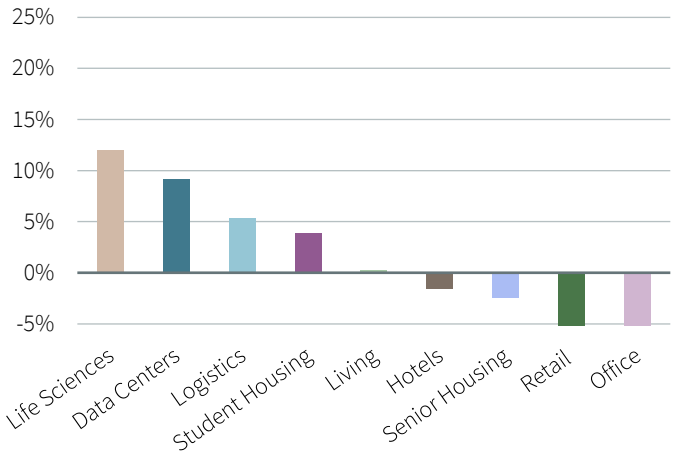
Lender environment

The 10-year Treasury has dropped ±100 basis points from a high of 5.02%. In addition to a drop of rates, which we have started to see, transaction activity is expected to increase as rates hit stabilization. Data centers are attracting a variety of new lenders including life companies, banks, debt fund and CMBS/SASB as lenders are looking to deploy their pent-up infrastructure-related funds. Development capital remains the most active need in the market due to high volume of preleasing commitments, with staged deliveries over the next 18-24 months. There has also been a surge in land/predevelopment loan requests in the market due to construction lead times and increased capital requirements.

EBITDA multiples

In the trailing 12 months, EBITDA multiples for data center trades have averaged 26.5x. The asset aggregation model remains attractive with infrastructure fund takeouts.

Transaction volume compound annual growth rate 2013 to 2023



Source: JLL Research; transactions above $5.0 million; excludes land/development and entity-level deals

Opportunity abounds, but expertise is needed

Given uncertainty of occupancy for office product, slowdown in the logistics sector and a decline in rental rate growth for living, alternative investment segments such as data centers are experiencing increasing interest. Data centers are seeing increasing investor allocations—with the sector having a 9% CAGR in transactions since 2013—the highest of any sector other than life sciences. Deep-pocketed investors are seeing an opportunity in the data center sector, raising large funds for investment. Companies with backing from these funds are expanding rapidly but do not always have the framework for people and processes to run these data centers. These companies are turning to facilities and property management experts with a deep bench of engineers trained for critical environments. Data centers are a unique asset class, requiring specific skills to operate at their best, and with labor shortages for trained engineers, investors seeking to capitalize on this opportunity will need to partner with seasoned operators.

05

Market insights

Definitions

Total inventory

Multitenant data center square footage and power that is leased (absorption), shell space for future development, turnkey/conditioned and available today (vacant) or currently being developed into turnkey/conditioned (under construction) all under one roof

Planned

Development that has been announced and is in the process of entitlements and design

Total vacant

Turnkey/fully conditioned data center space available for lease

Under construction

Data center space that has broken ground and has entitlements

Absorption

Amount of total leasing volume (in MW) across built and planned data center capacity (less any power no longer occupied) in between stated measurement periods

Multitenant data centers

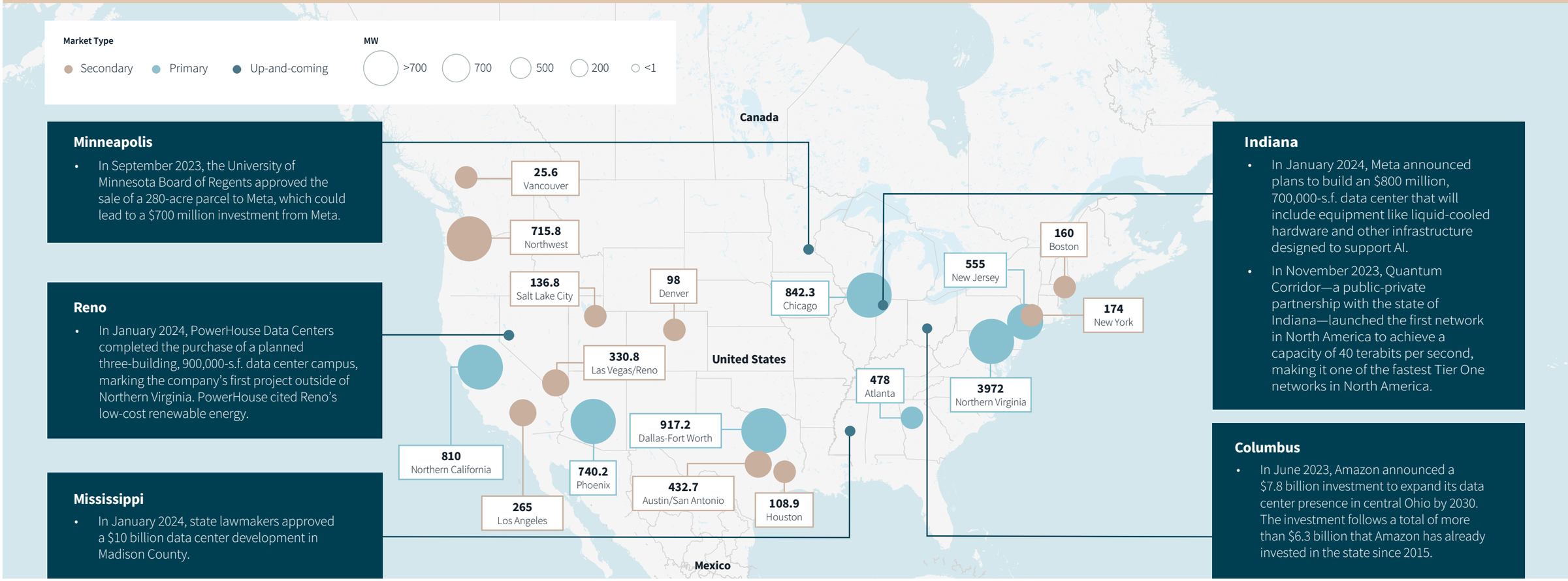
Facilities where an owner sells space to multiple tenants

Hyperscale data centers

Data centers with ability to scale from hundreds to thousands of servers owned and operated by one entity

Emerging markets: Data center growth is rapidly expanding from core markets in search of power

These are just a few of the tertiary markets seeing new hyperscale and colocation activity



Minneapolis

- In September 2023, the University of Minnesota Board of Regents approved the sale of a 280-acre parcel to Meta, which could lead to a $700 million investment from Meta.

Reno

- In January 2024, PowerHouse Data Centers completed the purchase of a planned three-building, 900,000-s.f. data center campus, marking the company's first project outside of Northern Virginia. PowerHouse cited Reno's low-cost renewable energy.

Mississippi

- In January 2024, state lawmakers approved a $10 billion data center development in Madison County.

Indiana

- In January 2024, Meta announced plans to build an $800 million, 700,000-s.f. data center that will include equipment like liquid-cooled hardware and other infrastructure designed to support AI.
- In November 2023, Quantum Corridor—a public-private partnership with the state of Indiana—launched the first network in North America to achieve a capacity of 40 terabits per second, making it one of the fastest Tier One networks in North America.

Columbus

- In June 2023, Amazon announced a $7.8 billion investment to expand its data center presence in central Ohio by 2030. The investment follows a total of more than $6.3 billion that Amazon has already invested in the state since 2015.

Latin America and South America

Increasingly, foreign investors and users are expanding into Latin and South American markets. Brazil has the largest data center market in South America, with over 700 MW in the three major cities: Campinas, Barueri and Rio de Janeiro. Mexico is also building out its data center capacity, with Querétaro as its largest market. As new fiber is added connecting the region to the U.S., interest in the region will continue to grow.

In November 2023

Google announced it was proceeding with plans to build a data center in Uruguay, its second in Latin America.

In December 2023

Oracle announced the opening of its second cloud region in Chile, and its first cloud region in Bogota, Colombia, and signed an agreement with a colocation provider in Barueri, Brazil.

In January 2024

Amazon announced plans to build its first data center campus in Chile, representing a $205 million investment.

Where next?

Wherever there is enough power. As capacity becomes limited in major markets, developers will seek stranded power, especially for AI uses for which latency is less of a concern. New tertiary markets will open up or outposts focused on reusing power capacity developed for other uses.

Market insights North America

Atlanta | Data Centers | H2 2023

Hyperscalers monopolize demand, validating the Atlanta market

Market Overview

Supply

Colocation providers are working feverishly to secure land sites to build new product; future supply that is planned for the next three to five years is being preleased.

Demand

Demand continues to be unyielding. Hyperscalers are continuing the trend to prelease from colocation providers at a record pace, more than quadrupling the first half of 2023; enterprise users have scooped up small pockets of available space and power.

Market Trends

Data center investors, developers and users have barraged the market, tying up land sites hoping to secure power for future development to support the expected wave of AI demand. Large sites outside of the metro are being scrutinized.

Outlook

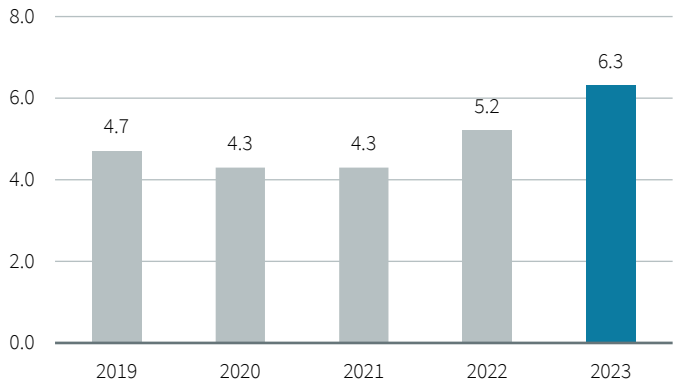
For Users

- Large-scale hyperscale demand is fueling future colocation projects
- Small-scale enterprise users have very few colocation choices
- Lease rates are increasing as supply is decreasing

For Providers

- Large data center sites in the metro area are difficult to find
- AI-related needs represent a new layer of significant power demand
- Utility providers are scrutinizing needs for large MW loads

Average power rate

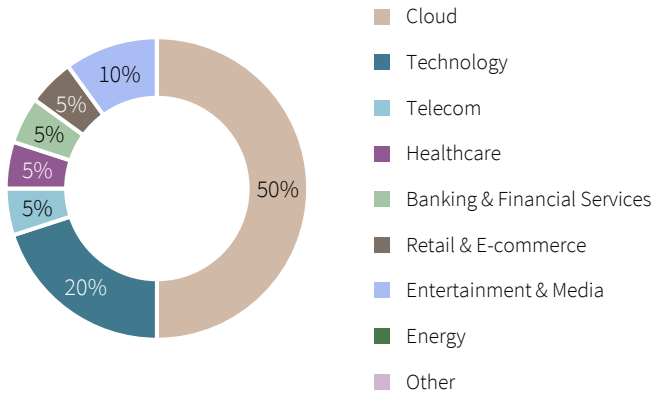


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	3,103,917	478.0
Total vacant	104,100	18.0
Under construction	1,758,280	630.0
Planned	5,304,860	750.8

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	120.0	568.0	688.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$150	$170
250 kW-1 MW	$115	$160
1-5 MW	$120	$135
5 MW plus	$115	$135

User demand by industry



Contact

Wendy McArthur
wendy.mcarthur@jll.com

Mike Dolan
mike.dolan@jll.com

Leigh Martin
leigh.martin@jll.com

Austin/San Antonio | Data Centers | H2 2023

Austin developments progressing well, with new supply just around the corner

Market Overview

Supply

Large blocks of capacity are coming online in Austin in the first quarter of 2025, and upcoming campus builds are making good headway. Larger availabilities in San Antonio have been committed to federal users as well as the usual hyperscalers.

Demand

Austin continues to garner interest from both enterprise and hyperscale users as new developments are under construction. San Antonio's federal requirements are growing in size.

Market Trends

Operators are looking outside of Austin Energy territory and purchasing well-powered land in areas serviced by Oncor. San Antonio continues to serve larger federal and smaller enterprise requirements.

Outlook

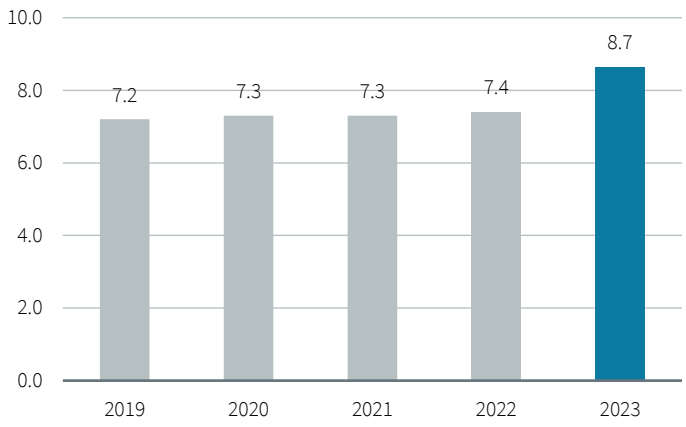
For Users

- Colocation lease rates continue to rise
- Preleasing is essential to secure upcoming capacity
- New operators building outside AES territory bring advanced colocation offerings

For Providers

- Land pricing is gradually escalating
- AI continues to be a driver
- Be on the lookout for new market entrants

Average power rate

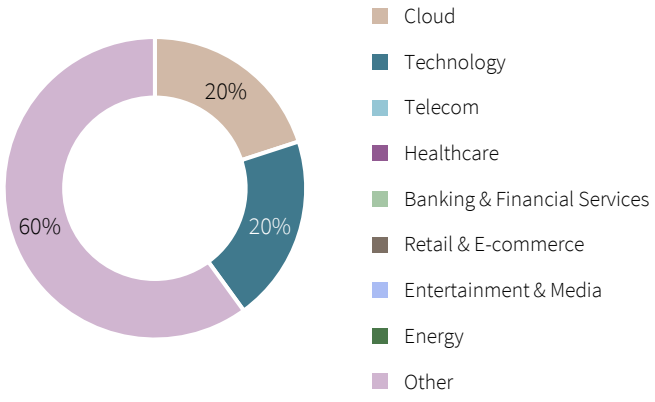


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	4,017,689	432.7
Total vacant	2,900	3.7
Under construction	2,483,000	277.7
Planned	5,240,000	608.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	10.4	18.0	28.4

Rental rates ($)	Low	High
(All-in) sub-250 kW	$205	$255
250 kW-1 MW	$105	$130
1-5 MW	$100	$120
5 MW plus	-	-

User demand by industry



Contact

Curt Holcomb
curt.holcomb@jll.com

Yuma Morris
yuma.morris@jll.com

Landry Shive
landry.shive@jll.com

Boston | Data Centers | H2 2023

Steady increase in small deals and renewals breathing some life into the market

Market Overview

Supply

- Space is available in all submarkets including City, 128, and 495
- New network builds allowing more facilities to compete for network intensive requirements
- Power costs have finally moderated

Demand

- Renewal percentages have increased as move to cloud or other markets has reduced
- Network and technology firms driving a number of small-scale (25-50 kW) edge requirements

Market Trends

- Data center operators increasingly see network as the critical factor and major differentiator and are investing to equalize their facilities with competitors
- Additional cable landing connecting Lynn, MA, with France and the UK promises greater edge growth

Outlook

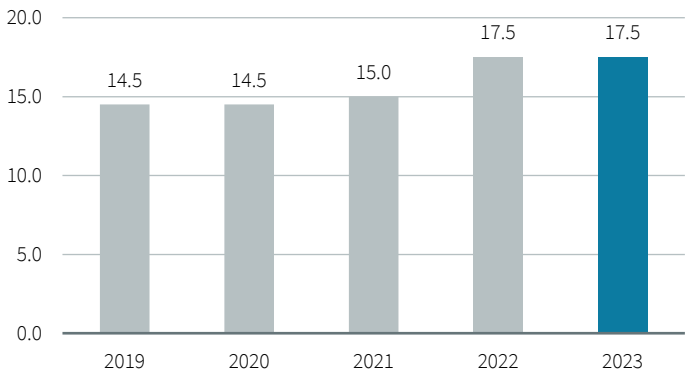
For Users

- Power prices have finally stabilized
- Space pricing remains fairly stable with slight upward trend
- Connectivity options increase at many facilities with continued Towardex deployment

For Providers

- Occupancy increasing at most facilities
- Less pressure to control energy costs with utility cost stabilizing
- Promise of more edge deals with new international cable

Average power rate

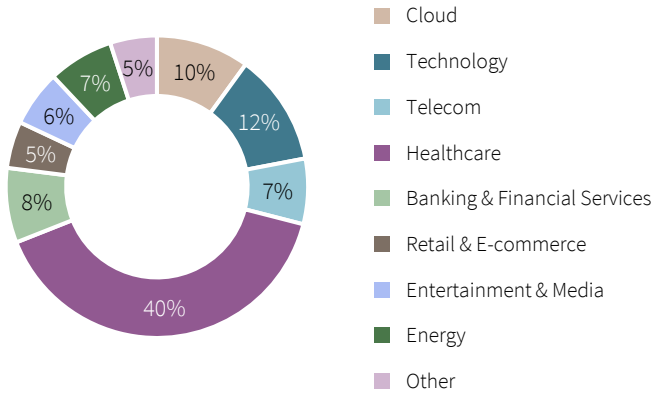


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	1,200,000	160.0
Total vacant	210,000	22.0
Under construction	-	-
Planned	-	-

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	2.0	3.0	5.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$225	$325
250 kW-1 MW	$115	$150
1-5 MW	$110	$135
5 MW plus	$105	$125

User demand by industry



Contact

Gabe Cole
gabe.cole@jll.com

Chicago | Data Centers | H2 2023

Unprecedented demand but not without challenges

Market Overview

Supply

Chicago is very tight on capacity due to unprecedented leasing, significant power constraints and limited available land for opportunities for new development in core submarkets. Projects including T5, Prime, NTT, CyrusOne, CloudHQ, Aligned and Edged Energy will deliver in 2025 and 2026; however, most are expected to be fully preleased when they become available.

Demand

Significant demand for large-scale campuses with near-term power delivery in 2024 or 2025 is at an all-time high across the country. New Generative AI requirements are looking for 300+ MW campuses. Their location-agnostic parameters are pushing the geographic boundaries of where data centers have typically been willing to go.

Market Trends

Chicago is seeing strong absorption in early 2024 across existing and planned data centers. New projects in unforeseen areas will emerge as a play for AI requirements. We will face continued headwinds due to power constraints, difficulty building in core areas and labor costs. Other markets with power and more plentiful land pose a major threat to take business.

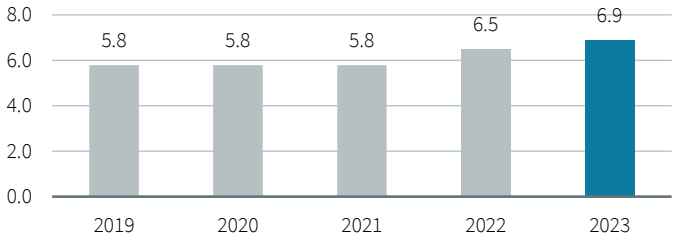
Outlook

- **For Users**
- Hyperscale users have several options for large-scale 100 MW+ campuses
- Enterprise users will have difficulty finding capacity
- New submarkets are emerging as options to consider

For Providers

- Power constraints will drive development to new areas
- Most new developments are under exclusivity
- Land options exist but must be willing to expand to new areas

Average power rate

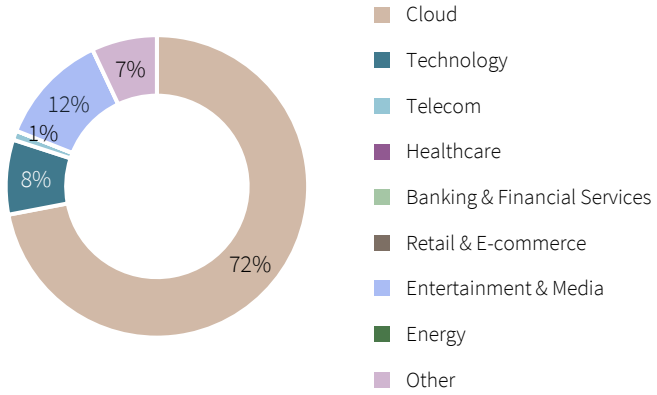


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	5,049,361	842.3
Total vacant	405,227	74.4
Under construction	2,288,039	635.0
Planned	2,030,456	611.8

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	88.5	297.2	385.7

Rental rates ($)	Low	High
(All-in) sub-250 kW	$220	$350
250 kW-1 MW	$135	$145
1-5 MW	$135	$155
5 MW plus	$128	$140

User demand by industry



Contact

Andy Cvengros
andy.cvengros@jll.com

Matt Carolan
matt.carolan@jll.com

Carter Madden
carter.madden@jll.com

Sean Reynolds
sean.reynolds@jll.com

Angela Steinberg
angela.steinberg@jll.com

Jack Dempsey
jack.dempsey@jll.com

Columbus | Data Centers | H2 2023

Place your chips on the table!

Market Overview

Supply

With nearly every operator looking to get into the market, future supply is difficult to project. The interest in the market is stretching the utility thin. They have effectively paused power requests until the grid can be fully audited. Though previously committed, power for existing sites has been reduced. We expect supply to be constrained for the next 24-36 months.

Demand

Some hyperscalers have turned their focus to other nearby markets showing greater promise like Atlanta, Chicago and Dallas. Others continue to double down and drive for large-scale growth. Demand has expanded out of New Albany to other areas, including Petaskala and Sunbury with their ability to support large power and water.

Market Trends

The market is seeing an insatiable demand for land as hyperscale growth signals have shown a need for exponential growth in Columbus, OH. Driven by power limitations in other markets, plentiful cheap land and a strong power story, Columbus is poised to be one of the fastest-growing markets in the country.

Outlook

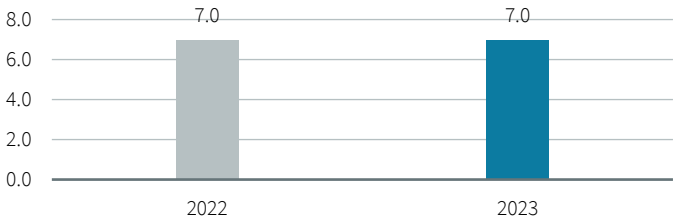
For Users

- Large-scale power will continue to be problematic for the foreseeable future
- Limited smaller colocation product available, with little in the works
- Likely to become a competitive market between users

For Providers

- Land values have increased 3-4x for sites that have a pathway to power
- Power and water can be had in nearby submarkets
- Land is becoming very limited in key focus areas

Average power rate



Rental rates ($)	Low	High
5 MW plus	$128	$140

Contact

Brian Marsh
brian.marsh@jll.com

Joe Davis
joe.davis@jll.com

Dan Wendorf
dan.wendrorf@jll.com

Josh Weithman
josh.weithman@jll.com

Dallas-Fort Worth | Data Centers | H2 2023

Substantial developments planned in South Dallas county as providers seek to expand their presence in the market

Market Overview

Supply

Given the scarcity of supply, securing suitable data center space in the region has become a significant challenge for businesses, leading to a competitive landscape among providers and potentially driving up the cost of data center services.

Demand

Dallas-Fort Worth has witnessed a considerable surge in data center demand, attracting numerous providers who are acquiring land with the intention of developing large-scale campuses. Enterprise demand has remained steady, with new campus builds targeting a mix of enterprise and wholesale hyperscale customers.

Market Trends

Large blocks of available capacity are becoming increasingly scarce in the current market. To ensure they secure the space they need, users are actively preleasing capacity at upcoming builds. The primary utility company, Oncor, has received power study requests adding up to multiple gigawatts of power capacity.

Outlook

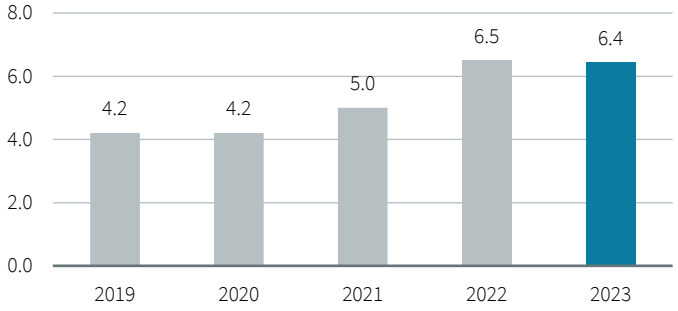
For Users

- Pricing for colocation space continues to rise
- Look to prelease capacity
- Becoming more difficult to secure larger pockets of capacity

For Providers

- Land pricing is climbing; look to secure sites sooner rather than later
- Deployment densities continue to rise
- Increased competition bound to impact pricing

Average power rate

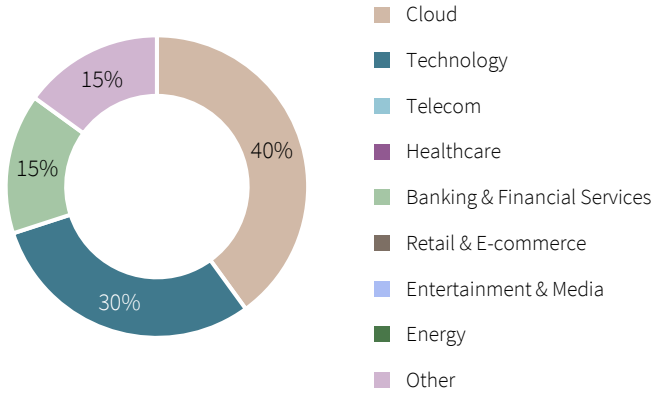


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	5,697,969	917.2
Total vacant	157,820	66.9
Under construction	826,000	331.9
Planned	2,647,000	2,160.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	116.1	477.0	593.1

Rental rates ($)	Low	High
(All-in) sub-250 kW	$220	$270
250 kW-1 MW	$120	$145
1-5 MW	$110	$130
5 MW plus	$95	$105

User demand by industry



Contact

Curt Holcomb
curt.holcomb@jll.com

Yuma Morris
yuma.morris@jll.com

Landry Shive
landry.shive@jll.com

Denver | Data Centers | H2 2023

New Inventory coming to Denver and Colorado Springs

Market Overview

Supply

Denver and Colorado Springs will see a rise in supply as providers continue to expand their power capabilities on existing sites along with new developments, which we will see come online in the next couple years.

Demand

The Denver/Colorado Springs market shows a great potential for growth in colocation demand due to incoming supply and the high concentration of technology and AI customers in the market. The robust fiber network, affordable power and diverse and reliable power grid are some of the reasons that customers continue to be interested in this market.

Market Trends

With new capacity being brought into Colorado Springs, we expect to see more development happen in this market in 2024 and beyond.

Outlook

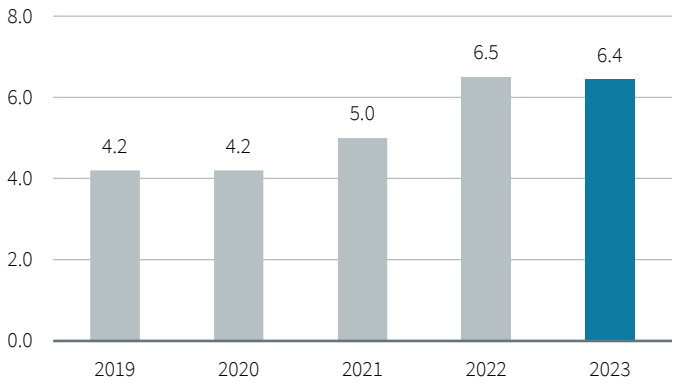
For Users

- Providers are planning for more growth
- Rental rates are rising nationwide
- Plan for capacity early; continued growth often requires greater capacity needs

For Providers

- Work with the state to promote data centers
- The rise of AI will make Colorado a popular market
- Promote renewable energy solutions

Average power rate

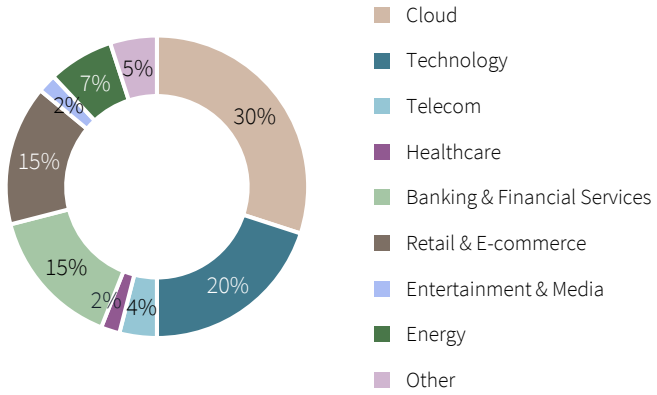


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	1,107,985	98.0
Total vacant	131,330	23.2
Under construction	193,273	22.0
Planned	1,798,800	301.4

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	9.7	0.0	9.7

Rental rates ($)	Low	High
(All-in) sub-250 kW	$240	$300
250 kW-1 MW	$135	$155
1-5 MW	$110	$135
5 MW plus	$95	$110

User demand by industry



Contact

Mark Bauer
mark.bauer@jll.com

Clark Bauer
clark.bauer@jll.com

Houston | Data Centers | H2 2023

Houston remains relatively flat, continues to serve local requirements with a few new entrant exceptions

Market Overview

Supply

A handful of operators continue to control the market and have sufficient capacity available to sell. New supply coming to the market is through upgrades in existing power infrastructure as opposed to net new ground-up developments.

Demand

Steady demand from local data center users, but higher growth is expected in other Texas markets. There are initial indications of new interest in Houston due to the availablilty of supply compared to both Texas and national markets.

Market Trends

Though Houston is a historically flat market with regard to absorption, the lack of supply nationally has led data center users to consider secondary and tertiary markets to meet their demand, positioning Houston to absorb new data center centers users outside of their usual customer base.

Outlook

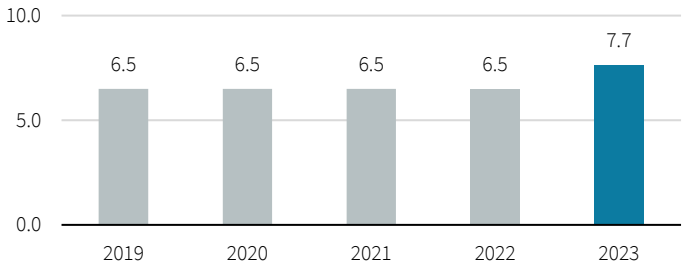
For Users

- Available inventory and reasonable rental rates make Houston an attractive market
- More users will flock to Houston, causing an eventual increase in rental rates
- Opportunity to secure blocks of power while still available

For Providers

- Opportunity to upgrade existing infrastructure to capture new opportunities
- Utility rate increase makes power story less attractive
- Potential to capture new logo clients

Average power rate

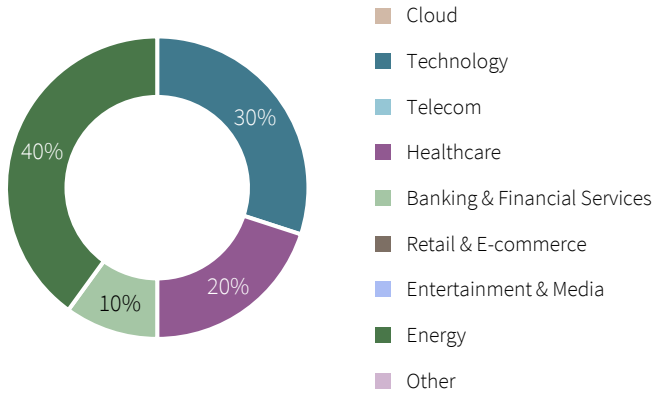


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	877,040	108.9
Total vacant	48,000	17.8
Under construction	5,000	1.5
Planned	65,000	91.5

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	16.0	5.1	21.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$240	$300
250 kW-1 MW	$135	$155
1-5 MW	$110	$135
5 MW plus	$95	$110

User demand by industry



Contact

Curt Holcomb
curt.holcomb@jll.com

Landry Shive
landry.shive@jll.com

Yuma Morris
yuma.morris@jll.com

Las Vegas/Reno | Data Centers | H2 2023

Opportunities for data center developments gain traction

Market Overview

Supply

Vacant supply is low, consistent with the national trend. Preleasing capacity remains the norm even in an emerging market. Multiple providers continue to expand upon their current footprint in these markets as customers continue to show interest, with new logos coming to the state.

Demand

The demand for the Nevada submarkets of Vegas and Reno is now starting to pick up more steam for providers as power availability and relatively low land costs remain a constant for this market.

Market Trends

The Las Vegas market has expanded outward from the central areas as the utility expands outward. Reno has become more popular for providers as costs to build from both a land and a power perspective are lower than that of Las Vegas and has a strong network connectivity to Silicon Valley.

Outlook

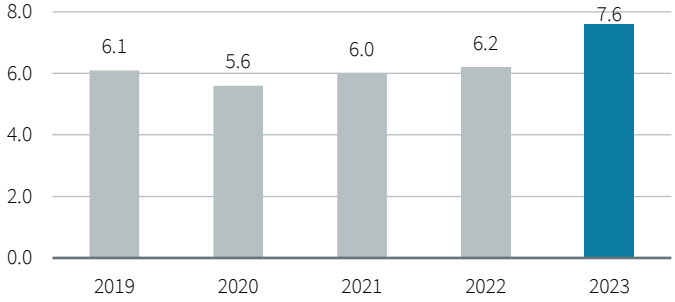
For Users

- Plan for capacity early; continued growth often requires greater capacity needs
- Vegas continues to be a strong market for new colocation providers
- Providers are continuing to bring new expansion opportunities

For Providers

- Secure further expansion sites for continued growth
- Reno is continuing to grow and gain popularity, second to Las Vegas
- Plan for power delivery in two to three years

Average power rate

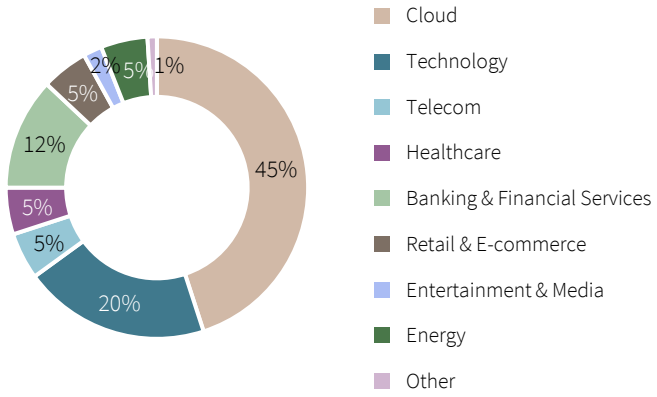


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	3,716,140	330.8
Total vacant	123,000	13.6
Under construction	918,040	188.0
Planned	750,000	108.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	45.0	0.0	45.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$200	$300
250 kW-1 MW	$125	$155
1-5 MW	$100	$135
5 MW plus	$95	$110

User demand by industry



Contact

Mark Bauer
mark.bauer@jll.com

Clark Bauer
clark.bauer@jll.com

Los Angeles | Data Centers | H2 2023

Unprecedented demand attracts new developments and expansion to Southern California

Market Overview

Supply

Lack of quality turnkey product available in the marker has created an influx of new data center development in Southern California.

Demand

Increased demand driven by AI and hyperscale has absorbed all significant large blocks of space in the market.

Market Trends

The velocity doesn't appear to be slowing and will continue to gain momentum as the new product comes online.

Outlook

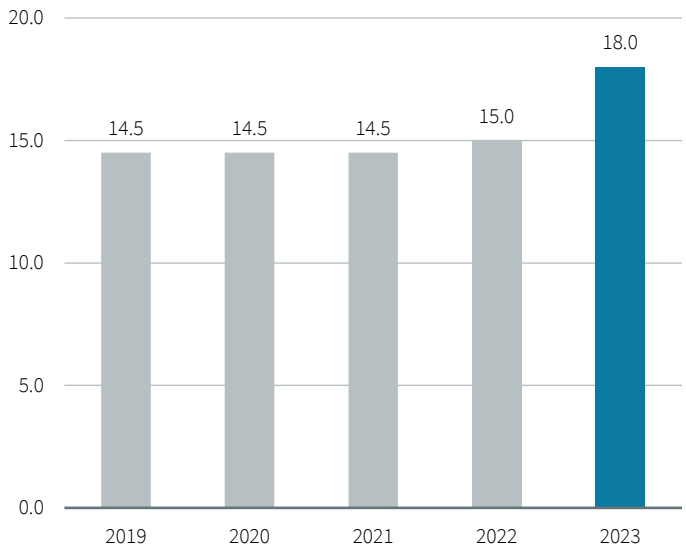
For Users

- New quality product coming to market
- Rates will continue to rise to keep up with other markets
- Limited quality inventory remains in small pockets

For Providers

- Race to the power
- Creating state-of-the-art facilities to keep up with high-density demand
- Connectivity to One Wilshire is key

Average power rate

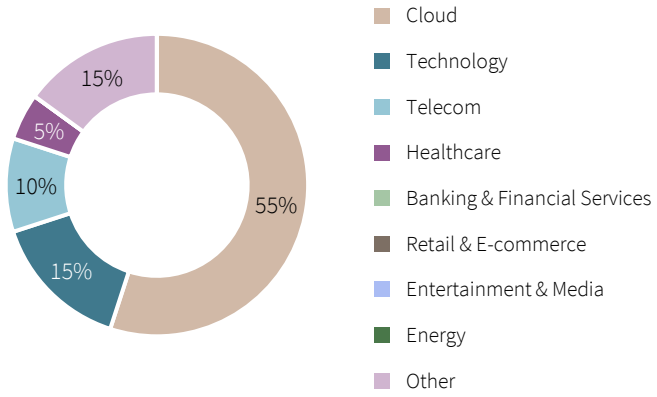


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	2,500,000	265.0
Total vacant	500,000	18.0
Under construction	250,000	33.0
Planned	650,000	30.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	5.0	4.0	9.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$250	$320
250 kW-1 MW	$120	$200
1-5 MW	$120	$140
5 MW plus	$115	$130

User demand by industry



Contact

Darren Eades
darren.eades@jll.com

New Jersey | Data Centers | H2 2023

Record year with 60 MW leased, including a few 10 MW+ AI and financial services prelease transactions

Market Overview

Supply

2023 ended with 10 MW of available capacity, with three locations that can support 1 MW+ deployments. Digital Realty, Equinix, Coresite and Iron Mountain have planned to add 145 MW the in next 18-36 months. 70 MW are under construction to be available in 9-12 months. Land acquisition interest has also resurfaced.

Demand

AI deployments lead with over 35 MW+ with two 10 MW+ preleases. Financial services continued to be strong, with several sizable 2 MW+ deals. Life sciences and research users also took over 10 MW. 2024 looks to be strong with over 20 MWs of proposals.

Market Trends

The New Jersey market has recently become popular for AI with close proximity to financial, network and internet exchanges. Requirements are still averaging 12-15 kW and 45 kW a rack for the latest Nvidia H100 planned GPU rollout for AI.

Outlook

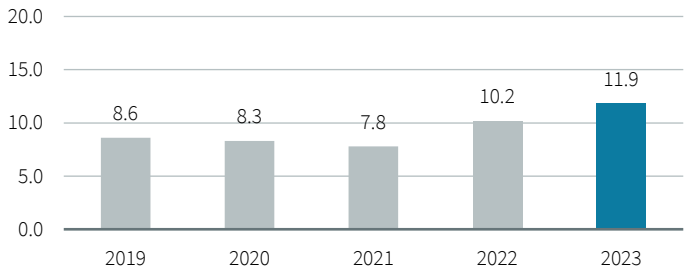
For Users

- AI and enterprise—speed to execution and meet credit requirements
- 2023 rental rates increased 10%-18% YOY; expect 8%-15% in 2024
- Expansion/ROFO space is a challenge, so plan upfront for future needs

For Providers

- Plan for higher rack densities and support liquid cooling requirements
- Nuclear SMRs and onsite power generation are being introduced
- Expect land repurposing for data center use to emerge in 2024

Average power rate

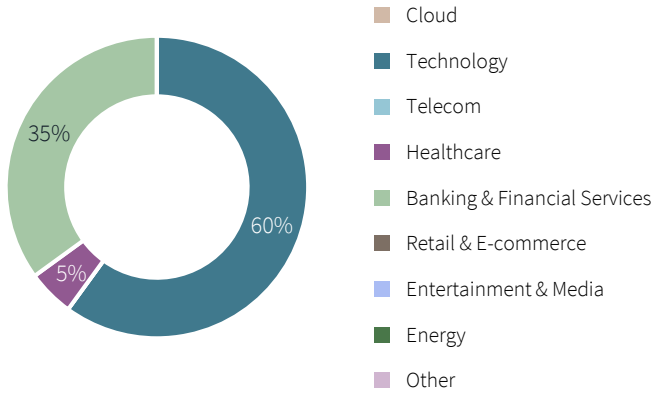


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	4,650,000	555.0
Total vacant	65,000	10.0
Under construction	335,000	70.0
Planned	850,000	145.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	3.5	56.0	59.5

Rental rates ($)	Low	High
(All-in) sub-250 kW	$300	$725
250 kW-1 MW	$150	$350
1-5 MW	$135	$250
5 MW plus	$130	$210

User demand by industry



Contact

Jason Bell
jason.bell@jll.com

Thomas Reilly
thomas.reilly@jll.com

New York | Data Centers | H2 2023

AI and financial services selected Orangeburg in 2023 with over 20 MWs leased

Market Overview

Supply

In Orangeburg, the strong demand for AI has resulted in preleases of over 15 MW, while the financial sector has secured 5 MW. This positive trend has allowed both 1547 and Databank to plan for future capacity of over 60 MW. Meanwhile, New York City still faces limitations, with only 2 MW of available capacity.

Demand

With limited capacity in Northern NJ, Databank and 1547 saw a new surge of demand due to AI and financial services client overflow and are in discussions for preleasing the next wave of 60 MW in 2024/2025.

Market Trends

As part of the State of New York Climate Plan, $55 billion will be allocated to support more than 145 green energy projects statewide. The goal is to achieve 70% renewable energy by 2030 and zero emissions by 2024. This presents a favorable opportunity for greenfield and scalable data center development upstate.

Outlook

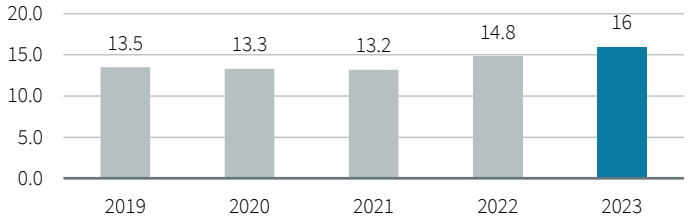
For Users

- Rockland County Sales Tax Abatement Incentive has provided substantial savings
- Orangeburg provides competitive alternative to Northern NJ from TCO perspective
- Speed to execution and quality credit are key factors in recent Tri-State deals.

For Providers

- 66% of the state's 2030 green energy programs are in progress
- New York climate plan includes solar, wind and hydro sources to support 70% of the load
- Pennsylvania and Connecticut developers are exploring nuclear greenfield developments.

Average power rate

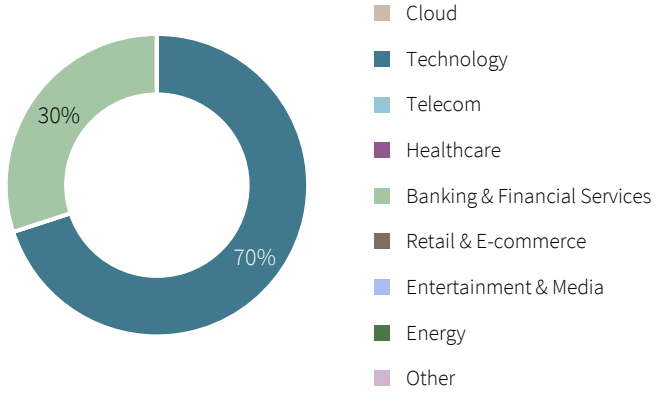


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	1,200,000	174.0
Total vacant	20,500	5.0
Under construction	185,000	30.0
Planned	405,000	65.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	3.6	21.0	24.6

Rental rates ($)	Low	High
(All-in) sub-250 kW	$300	$725
250 kW-1 MW	$150	$350
1-5 MW	$135	$250
5 MW plus	$130	$210

User demand by industry



Contact

Jason Bell
jason.bell@jll.com

James Quinn
james.quinn@jll.com

Gary Youm
gary.youm@jll.com

Northern California | Data Centers | H2 2023

Despite issues with power delivery, NorCal continues to see strong demand

Market Overview

Supply

Available space and power continues to contract, with vacancy falling well below 5%. Expect low vacancy to persist as preleasing occurs earlier in the development timeline. Landlords continue to experience difficulties and delays in procuring power, which slows the delivery of new supply. These delays are forcing operators and users to consider submarkets beyond Santa Clara.

Demand

Market demand remains strong, largely driven by hyperscale and AI. Despite limited supply and high cost of occupancy, NorCal saw nearly every space in the development pipeline with access to power prelease. End users are looking further into the future to secure access to space and power.

Market Trends

Interest from investors, operators and end users remains strong in Santa Clara. As power delivery timelines in Santa Clara lengthen, groups are looking to new submarkets—Sacramento, East Bay, Sunnyvale, etc.—for quicker access to power.

Outlook

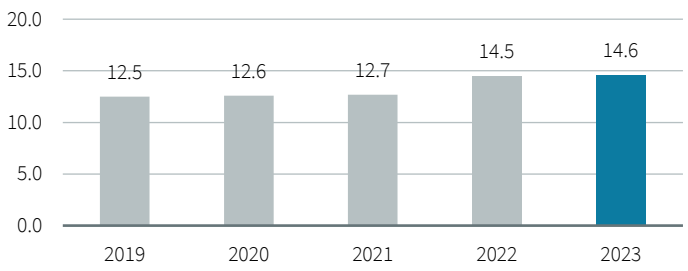
For Users

- Low vacancy and rising construction costs will result in increased rental rates
- Scarcity of new product is driving competition between users
- Supply chain issues will continue to be a challenge

For Providers

- Need to be realistic about timeline for procuring power
- Need to be mindful of development costs
- Need to expand to new submarkets to secure development pipeline

Average power rate

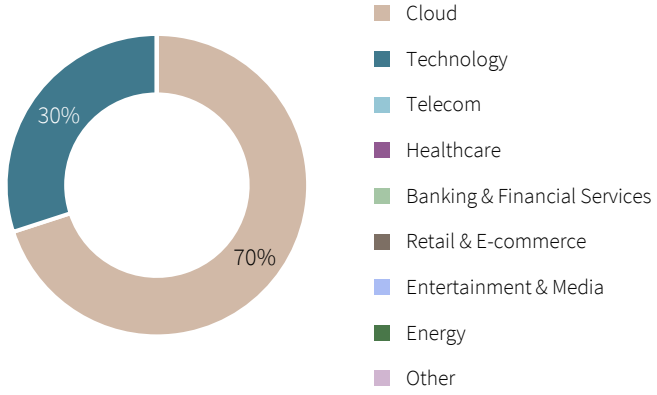


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	8,269,959	810.0
Total vacant	195,314	26.0
Under construction	4,068,256	686.0
Planned	4,123,194	609.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	127.5	45.5	173.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$250	$450
250 kW-1 MW	$175	$225
1-5 MW	$170	$200
5 MW plus	$170	$200

User demand by industry



Contact

Patrick Murdock
patrick.murdock@jll.com

Northern Virginia | Data Centers | H2 2023

Northern Virginia experiences 4th straight year of record demand, with 581 MW of absorption

Market Overview

Supply

1,877 MW of multitenant data center inventory, and 2,095 MW of single-tenant inventory were delivered in 2023. 1,339 MW under construction, of which 168 MW are available.

Demand

Northern Virginia experienced 581 MW of net absorption in energized product in 2023.
This represents a new high-water mark.

Market Trends

With few leasable options remaining, vacancy remains below 2%, causing a continual rise in rents. As land becomes more scarce, hyperscalers are turning to alternative counties in Northern Virginia.

Outlook

For Users

- Lack of available options over 1 MW
- Rental rates continue to increase
- Enterprise users must act quickly to secure space and power

For Providers

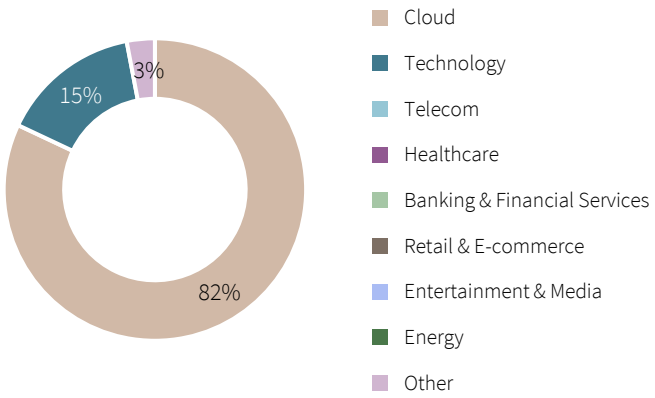
- Favorable market conditions are expected to continue
- Availabilities over 1 MW are in record demand
- Sites of scale in Loudoun and Prince William are trading at a premium

Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	50,994,563 (Gross)	3,972.0
Total vacant	167,000 (Raised Floor)	40.0
Under construction	13,390,000 (Gross)	1,339.0
Planned	58,560,000 (Gross)	5,856.0

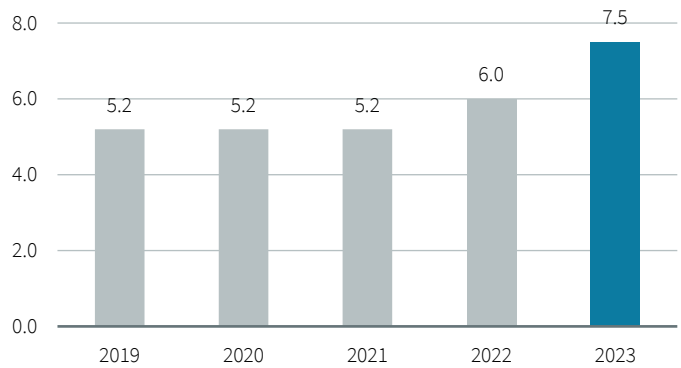
Demand	H1 2023	H2 2023	2023 Total
Net absorption in energized product (MW)	184.0	397.0	581.0
Net absorption in powered shell (MW)	72.0	116.0	188.0
Preleasing/reservations (MW)			884.0
Total Net Leasing (MW)			1,653.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$200	$300
250 kW-1 MW	$125	$200
1-5 MW	$115	$135
5 MW plus	$110	$125

User demand by industry



Average power rate



Contact

Alexander Berets
alexander.berets@jll.com

Jeff Groh
jeff.groh@jll.com

Matt Gallagher
matthew.gallagher@jll.com

Usha Kasali
usha.kasali@jll.com

Northwest | Data Centers | H2 2023

Absorption in the Northwest peaked in 2023, increasing 21% YOY, due to large end user demand, despite supply limitations

Market Overview

Supply

Within the Hillsboro, Seattle and Central WA submarkets, there is a lack of supply of available land for new development. Additionally, the availability of new power commitments in these submarkets is extremely restricted. The amount of planned capacity decreased 26% YOY, but new supply is being developed in Central WA and outside of the Hillsboro submarket in Oregon.

Demand

Demand has continued to increase due to the rapid expansion of regional-specific requirements, which has resulted in a higher demand for turnkey colocation product in the market. Annual absorption continues to increase, with the majority of transactions exceeding 20 MW, and demand is expected to remain strong for the foreseeable future. In 2023 Hillsboro accounted for only 63% of total absorption in the Northwest, a sharp decline from 83% in 2022 and 93% in 2021.

Market Trends

Market rent growth has accelerated due to the evolving supply-and-demand dynamics. The vacancy rate in the market continues to decrease, reaching all-time lows. Central WA has started to experience increased demand, with new projects beginning construction. Most new product is targeting large enterprise or hyperscale users, with limited product available for requirements less than 15 MW.

Outlook

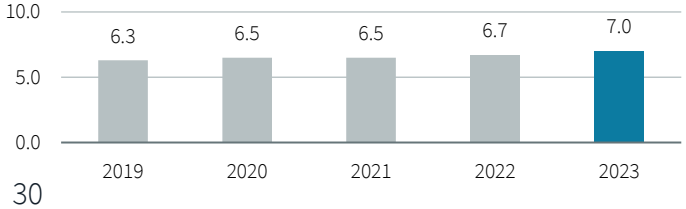
For Users

- Rental rates and utility costs are expected to continue to rise in a supply-constrained environment
- Seattle is one of the last remaining submarkets with availability for users less than 1 MW in size
- Significant competition for available product between tenants

For Providers

- Rising land prices and land scarcity continue to slow development
- The market is seeing more fully preleased or single-tenant BTS developments
- The pipeline of planned developments is shrinking, and power delivery is extending construction timelines

Average power rate

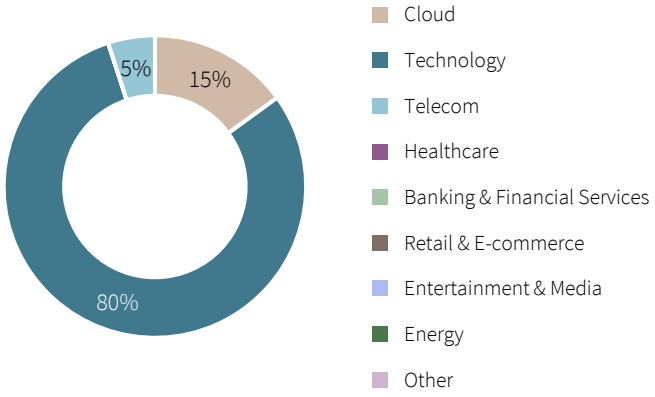


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	4,431,058	715.8
Total vacant	167,723	25.3
Under construction	1,683,489	298.0
Planned	906,180	163.6

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW) All	185.9	72.1	258.0
Net absorption Hillsboro (MW)	126.0	33.0	159.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$200	$250
250 kW-1 MW	$120	$150
1-5 MW	$120	$140
5 MW plus	$105	$125

User demand by industry



Contact

Conan Lee
conan.lee@jll.com

Dan Mabry
dan.mabry@jll.com

Phoenix | Data Centers | H2 2023

Market absorption skyrocketed in the second half of 2023

Market Overview

Supply

Minimal vacant capacity was a consistent trend throughout 2023, and this is expected to continue as requirement requests get larger, driven largely by AI. Established providers in the market work to develop new campuses as quickly as possible for new users and expansion of existing clients.

Demand

Demand continues to grow in the Phoenix market. The rise in absorption in the last several years has brought Phoenix to the top of mind as users search for capacity.

Market Trends

Preleasing remains the trend in the Phoenix market; users and operators must plan ahead to accommodate the exorbitant demand that is not expected to lighten in the coming years. Power generation is the key factor for growth in Phoenix as providers continue to expand and new providers enter the market.

Outlook

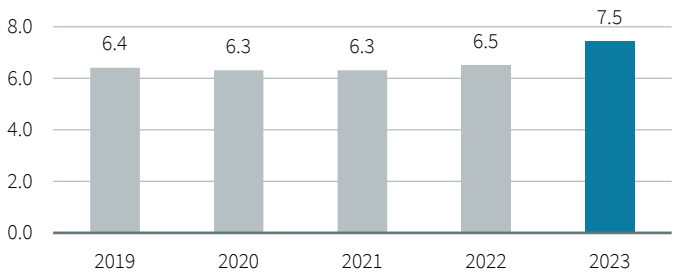
For Users

- Plan for capacity early; continued growth often requires greater capacity needs
- Pricing is gradually rising due to low vacancy rate
- Finding vacant space is not going to get easier

For Providers

- The market is expanding outward, with new clusters to emerge in the market
- Continue to work with utility providers with generation alternatives
- Keep on educating your surrounding communities about data centers

Average power rate

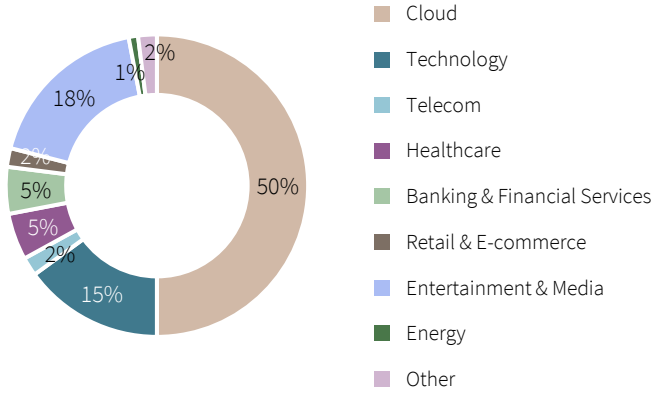


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	6,926,558	740.2
Total vacant	156,556	24.5
Under construction	2,803,943	703.0
Planned	2,773,746	634.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	194.5	589.5	784.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$300	$350
250 kW-1 MW	$150	$250
1-5 MW	$120	$145
5 MW plus	$110	$130

User demand by industry



Contact

Mark Bauer
mark.bauer@jll.com

Clark Bauer
clark.bauer@jll.com

Salt Lake City | Data Centers | H2 2023

Developments remain consistent as SLC develops as a secondary market

Market Overview

Supply

Established operators expand to the region with new buildings and campuses. Operators seek to acquire land as data center clusters begin to emerge. Power cost is a key driver to market opportunity as it remains low among growing pricing in other regions.

Demand

Demand begins to increase as users search for capacity outside of primary markets. Like other markets, demand is high and anything vacant is being claimed as it becomes available.

Market Trends

With the region growing as a technology hub, they maintain having some of the lowest national power and gas costs. These factors highly contribute to popularity gaining in the Salt Lake City region for all data center types.

Outlook

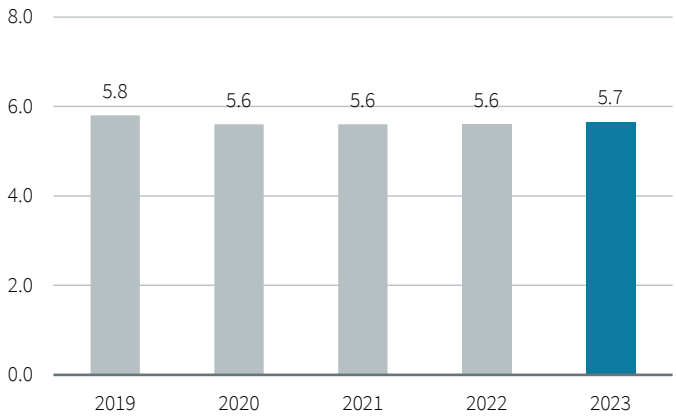
For Users

- Plan for capacity early, continued growth often requires greater capacity needs
- Power rates are increasing nationwide
- Supply is coming

For Providers

- More clusters are forming with hyperscale growth
- Customers will come here as supply in primary markets dwindles
- New clusters are forming; be the early entrant

Average power rate

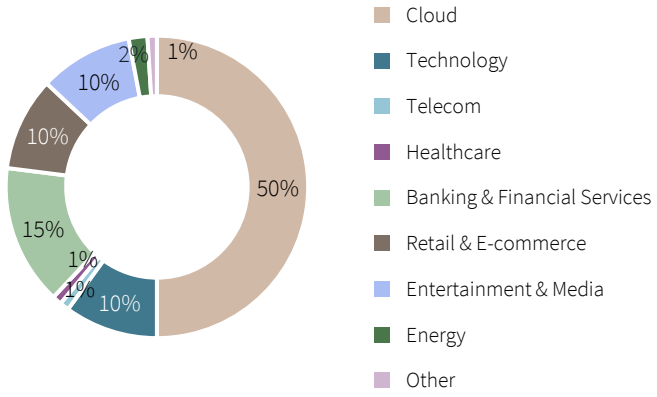


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	1,366,634	136.8
Total vacant	7,200	10.1
Under construction	1,000,000	306.0
Planned	1,563,000	113.0

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	114.0	0.0	114.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	$275	$325
250 kW-1 MW	$130	$155
1-5 MW	$115	$130
5 MW plus	$100	$115

User demand by industry



Contact

Mark Bauer
mark.bauer@jll.com

Clark Bauer
clark.bauer@jll.com

Vancouver | Data Centers | H2 2023

Vancouver is poised for significant growth in 2024, with under-construction and planned capacity equal to 80% of the existing inventory and strong absorption in 2023 relative to size

Market Overview

Supply

The pipeline of new supply in Vancouver remains strong, with major expansions of CBD connectivity-focused assets in anticipation of enhanced connective to Seattle and APAC. Vacancy in the market decreased to less than 7% with only 1.8 MW available. Availability of power from the local utility is diminishing, and new qualified site development options are becoming more scare.

Demand

Demand remained strong in 2023 due to requirements from content delivery companies, cloud operators, gaming companies and telecommunication corporations. Additionally, Canadian data sovereignty is a key reason for deployments in the Vancouver market. Significant leasing is expected to occur in 2024.

Market Trends

With the recent completion of a major subsea cable, green initiatives from the local utility and the proximity to Seattle, the Vancouver market is anticipated to grow significantly over the next several years. Retail deployments based on all-in rent schedules are common in the local market. Powered shell and turnkey colocation product is available for prelease.

Outlook

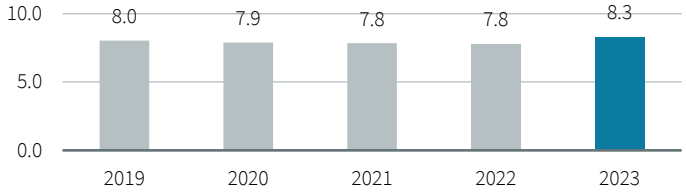
For Users

- Colocation supply in the Vancouver market is diminishing rapidly
- The strength of telecommunications infrastructure is increasing and driving demand
- There are limited large-scale power options for users

For Providers

- High-density cabinets are becoming a more common trend in the market
- Limited supply of greenfield sites, with retrofit and redevelopment sites more common
- Consider joint ventures or multi-use assets to take advantage of FAR or shared infrastructure

Average power rate

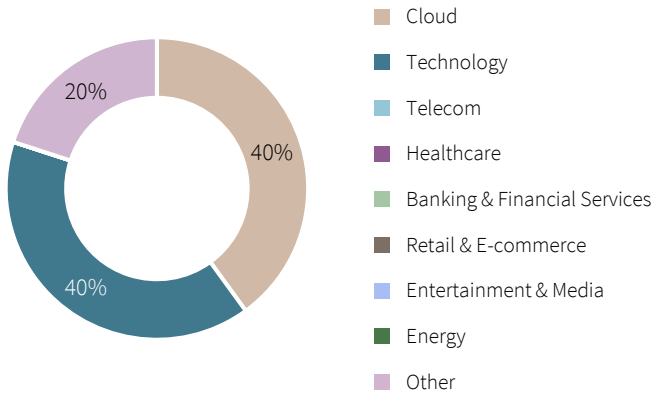


Supply	Square feet (s.f.)	Megawatts (MW)
Total inventory	188,502	25.6
Total vacant	13,984	1.8
Under construction	34,802	6.5
Planned	51,231	14.2

Demand	H1 2023	H2 2023	2023 Total
Net absorption (MW)	1.9	1.2	3.1

Rental rates ($)	Low	High
(All-in) sub-250 kW	$350	$450
250 kW-1 MW	$300	$350
1-5 MW	$250	$350
5 MW plus	-	-

User demand by industry



Contact

Conan Lee
conan.lee@jll.com

Dan Mabry
dan.mabry@jll.com

Market insights Brazil

Barueri, Brazil | Data Centers | H2 2023

Expanding market with few players

Market Overview

Supply

The supply in Barueri should grow 29% in the next few years with 64 MW under construction.

Scala delivered a new building expansion of 6 MW in the region.

Equinix is expanding their site in Santana de Parnaíba with 14 MW and started the construction of two data centers on 33.42 acres.

Demand

Due to its proximity to São Paulo, demand in Barueri is driven by credit card operators, financial services and edge computing. Google and Oracle closed deals with colocation operators in the region.

Market Trends

Due to high price of the land in the region, providers are retrofitting existing buildings to expand their operations. There are real estate developers ready to construct data centers (powered shell) in the next year both for colocation operation or final users.

Outlook

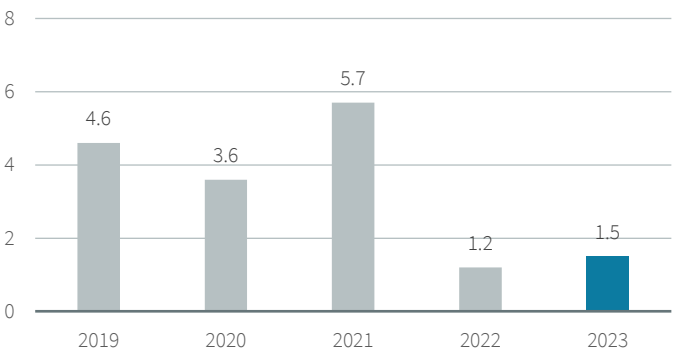
For Users

- Three main colocation providers dominate the region, but new players are entering the market
- There will be quality colocation, new product and powered shell available in the next 12 months or less, both for colocation operation and for final users.

For Providers

- The main constraints for new operations are the shortage and high price of large plots of land
- Providers can expand by growing existing operations and retrofitting logistics buildings

Average power rate



Supply	Megawatts (MW)
Total inventory	221.0
Under construction	64.0
Planned	38.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	-	-
250 kW-1 MW	$150	$220
1-5 MW	$130	$160
5 MW plus	$100	$150

Contact

Pedro Candreva
T +55 11 99904 1014
pedro.candreva@jll.com

Ricardo Hirata
T +55 11 95076 9620
ricardo.hirata@jll.com

Bruno Porto
T +55 11 97352 3389
bruno.porto@jll.com

Campinas, Brazil | Data Centers | H2 2023

Increasing demand for new development

Market Overview

Supply

Colocation operators continue to invest in the Campinas market. CloudHQ announced the development of three 48 MW buildings for 2024, Ascenty delivered 31 MW in the past year and has announced 87 MW for 2024, and ADA Infrastructure is a new player in the data center market with 40 MW under construction for 2024 and is also expanding its operations to Europe and the Americas.

Demand

Demand is growing as technology companies expand their data center operations and new users from Europe and North America start new developments, which will increase inventory by 70%.

Market Trends

Campinas continues to attract large-scale data center users, operators and hyperscalers. AWS delivered two data centers in the region, and Microsoft is in the process of development in Sumaré.

Outlook

For Users

- Leverage competition for new contracts
- Quality colocations and new product will be available in the next 12 months or less
- Expect new providers to enter the market

For Providers

- Competition for land is increasing but the market still has good opportunities
- The main constraints for new operations are related to energy availability, especially in the Campinas metro region

Supply	Megawatts (MW)
Total inventory	410.0
Under construction	285.0
Planned	320.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	-	-
250 kW-1 MW	$150	$220
1-5 MW	$130	$160
5 MW plus	$100	$150

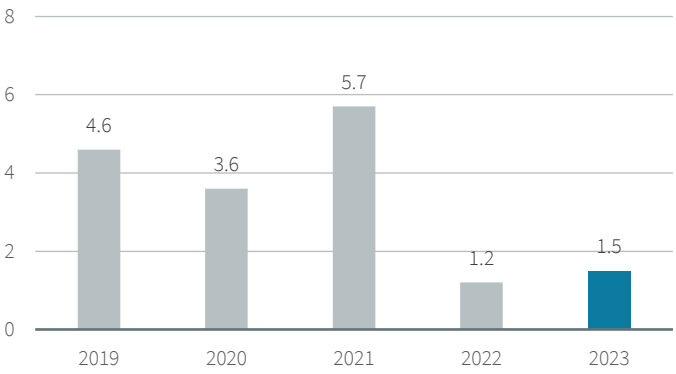
Contact

Pedro Candreva
T +55 11 99904 1014
pedro.candreva@jll.com

Ricardo Hirata
T +55 11 95076 9620
ricardo.hirata@jll.com

Bruno Porto
T +55 11 97352 3389
bruno.porto@jll.com

Average power rate



Rio de Janeiro, Brazil | Data Centers | H2 2023

2023 marks the beginning of Rio de Janeiro's data center expansion

Market Overview

Supply

Two new providers entered the Rio de Janeiro market in 2023. Scala completed its first data center with 13.2 MW and ODATA with 24 MW, both in the municipality of São João do Meriti. The 2023 stock grew by 115% compared to the previous year. Significant new deliveries are expected for 2024 and 2025.

Demand

Via Dutra is the spotlight of the data center market in Rio, with the highest concentration of power demands in the state.

Market Trends

Rio de Janeiro is consolidating its position as the second main state in Brazil for data centers, attracting all the major players operating in Brazil.

Outlook

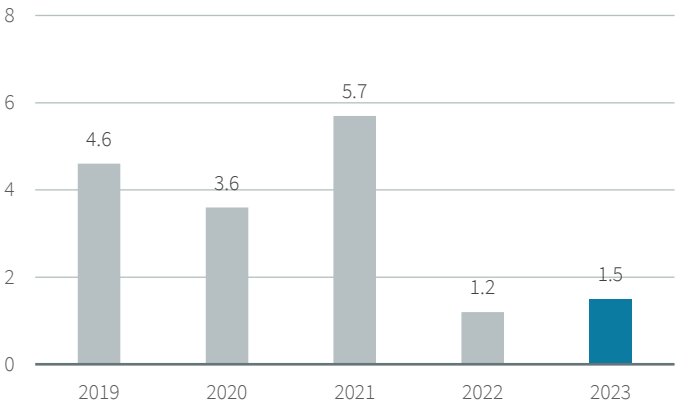
For Users

- All the main providers have a presence in the region, but there are only 10 facilities currently in operation
- In the next few years, there will be numerous new quality colocations and new product available
- Expect new providers to enter the market such as CloudHQ and ADA

For Providers

- Infrastructure and demand for new developments will continue to concentrate in Dutra area
- Rio de Janeiro is a challenging market to find suitable areas due to documentation risks

Average power rate



Supply	Megawatts (MW)
Total inventory	76.0
Under construction	63.0
Planned	40.0

Rental rates ($)	Low	High
(All-in) sub-250 kW	-	-
250 kW-1 MW	$150	$220
1-5 MW	$130	$160
5 MW plus	$100	$150

Contact

Pedro Candreva
T +55 11 99904 1014
pedro.candreva@jll.com

Ricardo Hirata
T +55 11 95076 9620
ricardo.hirata@jll.com

Bruno Porto
T +55 11 97352 3389
bruno.porto@jll.com

Research authors

Kari Beets
kari.beets@jll.com

Michael Hartnett
michael.hartnett@jll.com

Americas Work Dynamics

Matt Landek
matt.landek@jll.com

Americas Data Center Leadership Council

Andy Cvengros
andy.cvengros@jll.com

Jeff Groh
jeff.groh@jll.com

Mark Bauer
mark.bauer@jll.com

Conan Lee
conan.lee @jll.com

Curt Holcomb
curt.holcomb@jll.com

Wendy McArthur
wendy.mcarthur@jll.com

James Quinn
james.quinn@jll.com

Americas Capital Markets

Carl Beardsley
carl.beardsley@jll.com

About JLL

For over 200 years, JLL (NYSE: JLL), a leading global commercial real estate and investment management company, has helped clients buy, build, occupy, manage and invest in a variety of commercial, industrial, hotel, residential and retail properties. A Fortune 500® company with annual revenue of $20.8 billion and operations in over 80 countries around the world, our more than 106,000 employees bring the power of a global platform combined with local expertise. Driven by our purpose to shape the future of real estate for a better world, we help our clients, people and communities SEE A BRIGHTER WAY℠. JLL is the brand name, and a registered trademark, of Jones Lang LaSalle Incorporated. For further information, visit jll.com.

Research at JLL

JLL's research team delivers intelligence, analysis and insight through market leading reports and services that illuminate today's commercial real estate dynamics and identify tomorrow's challenges and opportunities. Our more than 550 global research professionals track and analyze economic and property trends and forecast future conditions in over 60 countries, producing unrivalled local and global perspectives. Our research and expertise, fueled by real-time information and innovative thinking around the world, creates a competitive advantage for our clients and drives successful strategies and optimal real estate decisions.