DATA CENTER Frontier Special Report

New York / New Jersey Data Center Market

Written by Rich Miller

brought to you by

DIGITAL REALTY

This report was prepared by Data Center Frontier, in conjunction with datacenterHawk.

ABOUT DATA CENTER FRONTIER

http://datacenterfrontier.com

Data Center Frontier charts the future of data centers and cloud computing. We write about what's next for the Internet, and the innovations that will take us there. The data center is our prism. We tell the story of the digital economy through the facilities that power the cloud and the people who build them. In writing about data centers and thought leaders, we explain the importance of how and where these facilities are built, how they are powered, and their impact on the Internet and the communities around them.

Data Center Frontier is edited by Rich Miller, the data center industry's most experienced journalist. For more than 15 years, Rich has profiled the key role played by data centers in the Internet revolution.

ABOUT DATACENTERHAWK

http://www.datacenterhawk.com

datacenterHawk is a convenient "one-stop-shop" for IT professionals, consultants, data center operators and investors to find data center and cloud solutions. Our subscription-based service makes the complex process of searching and analyzing colocation and cloud service providers simple and faster than ever. Our online tools help users compare potential data center solutions using real-time capacity information, financial data, and market research; then present the findings in a sharp, easy to understand report.

For non-subscribers, datacenterHawk delivers hard to find information on the top Internet exchanges, cloud computing providers, carrier hotels, and colocation facilities in North America on a per-report basis. With a credit card number, IT professionals can use datacenterHawk to reduce the time it takes to find data center market information down from hours to seconds.

Contents

Introduction

Data center professionals say the New York/New Jersey market has begun to stabilize, as leasing has gradually absorbed vacant space. The region has recently seen new entrants, and some providers are seeing signs of a rebound. Meanwhile, a new sub-market has emerged in Manhattan's northern suburbs.

New York City is one of the world's great business hubs, home to Wall Street and a vibrant regional economy. Technology plays a critical role in the operations of the financial sector and the larger NYC business community, making the Greater New York region one of the nation's major markets for data center space.

The New York/New Jersey region has always been a composite data center market, segmented by geography and business models, with carrier hotels in Manhattan, connected colocation centers in Northern New Jersey, and a cluster of wholesale data centers in Central New Jersey.

New York and New Jersey are contiguous markets, and some data center customers consider the entire region in making decisions about where to deploy data center space for their IT infrastructure.

In recent years, the Greater New York data center market has faced several strong headwinds, including the financial crisis and its chilling effect on spending, and fallout from flood-related outages during Superstorm Sandy.

These events, along with the segmentation of the market along geography and business models, have made Greater New York a challenging market for service providers. Many data center companies see an opportunity in New York and New Jersey, which boasts a critical mass of marquee enterprise customers. But some have struggled to align capacity with demand, making for a competitive environment for the region's wholesale providers.

The economics of power remain a challenge for the region. That's a challenge for New Jersey wholesale providers, with many large customers opting for the cheaper electricity and critical mass found in Northern Virginia.

Cities like New York are expected to be the focus of investment activity around autonomous cars, which could generate as much as $7 trillion of economic activity by some estimates, and generate extraordinary data traffic in major cities.

But looking to the future, there is the potential for new technologies to boost the data center business in the region's population centers. Cities like New York are expected to be the focus of investment activity around autonomous cars, which could generate as much as $7 trillion of economic activity by some estimates, and generate extraordinary data traffic in major cities.

New York and New Jersey are contiguous markets, and some data center customers consider the entire region in making decisions about where to deploy data center space for their IT infrastructure. But each state has unique characteristics in data center inventory, the price of electricity, and incentives and economic development. As a result, this report will view the market in two sections, first exploring the market in New York City and its northern suburbs, and then examining the market in New Jersey.

NEW YORK

Market Overview & Analysis: NEW YORK

America's largest city is a top market for data centers. While New York City's high cost of doing business often deters providers, some companies require a data center located in the city. Almost all data centers in the New York City (NYC) market are concentrated in Manhattan, with the majority of providers in retrofitted high-rise towers.

The New York is home to 600,057 square feet (SF) of commissioned data center space, representing 61 megawatts (MW) of commissioned power, according to market research from DatacenterHawk. Demand for space is solid, with a vacancy rate of 11.6 percent in the second quarter of 2017, and total absorption of 4.1 MW of space during 2016.

It's been five years since Superstorm Sandy brought catastrophic flooding to Lower Manhattan, affecting several data center buildings that lost power when their ground level fuel storage pumps failed. Sandy established new parameters for risk, prompting some companies to move uptown and others to relocate their data centers out of the region.

In the period just before and after hurricane's arrival, the Manhattan market saw several important developments:

- **Sabey Data Centers** acquired and renovated the former Verizon building at 375 Pearl Street. In addition to updating the building for modern data center space, Sabey has retrofitted 15 floors of the building for use as office space.
- **DataGryd** took over a large chunk of space at 60 Hudson Street, and made major infrastructure upgrades at the iconic carrier hotel.
- **Google** acquired the city's other marquee carrier hotel at 111 8th Avenue, but is using it for office space, and reportedly doing no new leasing to data center tenants.

That's a lot of change for a market that had been stable for many years. Despite Sandy and the turbulence in the financial sector, having data center space in Manhattan remains essential for many blue-chip companies and service providers. Manhattan is also seeing demand from international companies.

Users find the NYC data center market attractive for several reasons:

1. **Strategic Location –** Data center users often choose the NYC market because of its strategic proximity to large businesses.
2. **Robust Connectivity –** New York City's telecommunications infrastructure, specifically the transatlantic cables enabling faster international connectivity, is an advantage to users with those needs.

Most of the data centers in NYC are in older buildings that have been converted into data centers. The aged infrastructure is causing data center operators to focus on upgrading facilities to meet the security and redundancy needs of data center users in the city.

Data center users in the New York City market typically need to be there for compelling business reasons. The city's infrastructure for connectivity, especially in Manhattan, is world class due to the data requirements of the area's large companies.

When comparing the NYC market to other colocation markets in close proximity (Northern New Jersey and Northern Virginia), New York City will always be more expensive. Extremely high power and real estate prices often drive the total cost up higher than in competing markets. Because of this, most data center requirements in the NYC market are below 1 MW.

Many firms with larger data center requirements choose to move out of the city for total project cost, hazard risk or safety reasons. Industries with consistent data center requirements in the NYC market include financial, healthcare, insurance, media, technology, telecommunications, and transportation.

Many customers pursue a strategy in which they host a small number of cabinets in New York for connectivity, but place a larger footprint in New Jersey for compute and storage.

TRENDS IN DEMAND

Data center demand in New York is dominated by the presence of the financial industry, which employs 330,000 in New York and accounts for more than 39 percent of the city's economic output. Data center and IT infrastructure is critical to the operations of the city's financial industry, tracking securities trading and storing transaction data. In recent years trading activity has been dominated by electronic platforms, including the rise of automated "robo advisor" services, and high frequency trading (HFT) operations that place enormous value on low latency computing and network operations.

Manhattan also has a high concentration of technology firms and startups ("Silicon Alley"), while the insurance, real estate and healthcare industries also drive demand for data center space.

Recent trends in demand have been shaped by two events: The financial crisis of 2007 and Superstorm Sandy in 2012.

The financial crisis prompted liquidity concerns that led many large corporations to conserve cash, including investments in single-tenant financial data centers. Many large financial IT firms became more amendable to working with service providers and operating in data centers controlled by third-parties.

Although NYC is at low risk for natural disasters, it was dramatically impacted by Sandy, which followed an unusual path that focused its storm surge on Manhattan and Northern New Jersey. High winds and severe flooding caused several NYC data centers to lose both utility and generator power. This pushed some of the users in these data centers to vacate the market altogether, while others have opted for space further uptown, outside of the most flood-prone regions in lower Manhattan.

In addition, there is an understandable concern about terrorist attacks in NYC, dating to the attacks on Sept. 11, 2001, which did extensive damage to network infrastructure in lower Manhattan. Data centers in the city plan for contingencies such as generator power, auto-failover, and data disaster recovery strategies. In the wake of 9-11, financial regulators emphasized the need for backup data center space for Wall Street firms to be "out of region," boosting the market for DR space in New Jersey and beyond.

Growth in New York is often tightly tied to economic stability or instability. With the financial markets near or surpassing all-time records, it is likely corporations in the area will resume data center investments. This is reflected in the recent decision by a major financial firm to build a large single-tenant data center in the region.

New York is also likely to gain from the rise of Smart Cities technology that integrates data from devices ("The Internet of Things"). The city has been an early adopter of many security-related IoT technologies (security cameras, license plate scanners) as part of its post 9-11 focus on homeland security.

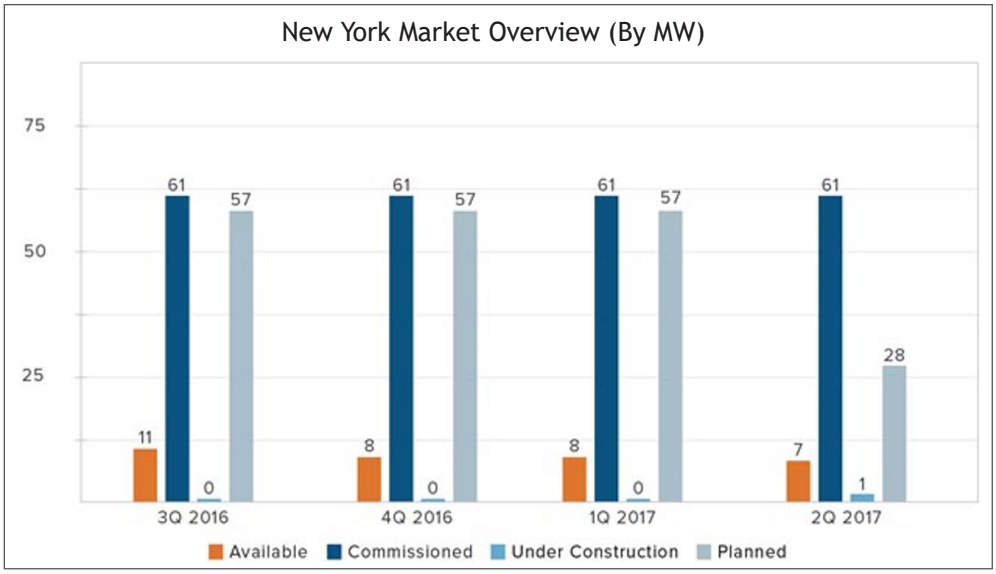
The city could also see future IT infrastructure demand from autonomous vehicles, which are the equivalent of supercomputers rolling down the highway, generating and transmitting a mind-boggling volume of data – up to 4 terabytes per day, per car. As driverless vehicles take to the roads, they will require low-latency wireless connections to fiber networks and data centers. This connectivity, storage and data-crunching infrastructure will need to exist almost everywhere cars can drive, but especially in major cities like New York.

TRENDS IN SUPPLY

The inventory of available data center space in New York City has trended lower (from 11 MW to 7MW) over the past year, even as overall commissioned space has remained steady at 61 MW.

The largest and most densely-populated data center in the NYC area is 111 East 8th Avenue. The building grew into a colocation hotspot by attracting data

center operators that wanted to be in the city and take advantage of the building's connectivity. In 2010, Google purchased the 2.9 million SF building for $1.9 billion. As the data center operators' leases in 111 East 8th expire, Google is taking back the space for internal purposes. Many data center providers are in the building with long-term leases, including Digital Realty, Equinix, XO Communications, and zColo.



There's also been some changes at 60 Hudson Street, the city's other major carrier hotel. In 2012 DataGryd leased four floors within the building to offer as wholesale data center space. The building's other major provider is Digital Realty, which acquired Telx to become the primary interconnection specialist at 60 Hudson, which houses dozens of telecom and data center service providers.

Additional data center developers and providers have invested in the lower Manhattan area. These providers focus on completing smaller more organic transactions in the market. The following data center providers have a significant presence in the buildings below:

- **65 Broad Street –** 365 Datacenters, InfoRelay
- 75 Broad Street – vXchnge
- **32 Avenue of the Americas –** CoreSite, Digital Realty
- **325 Hudson Street –** Netrality Properties
- **85 10th Avenue –** Telehouse America
- **811 10th Avenue –** AT&T

In 2011, Sabey Data Centers purchased 375 Pearl Street, a 1.15 million SF former Verizon building overlooking the Brooklyn Bridge. Sabey has worked to redevelop the facility to deliver colocation solutions for both small and large users and has both power and space available for lease today. In 2014 the company began offering up to 15 stories of the 32-story building as office space, with the remainder focused on data center use.

While several data center providers are active in the New York market, most operators prefer to invest on large scale deployments in markets with lower costs. Although the density of businesses in the New York metropolitan area creates enough demand to occupy a large facility, the power costs alone can prevent data center providers from investing in the area.

This has prompted the emergence of a new data center sub-market in Rockland County, focused on the town of Orangeburg, about 25 miles north of Manhattan. In 2014 Russo Development and Sentinel Data Centers partnered to build a $700 million new data center for financial information provider Bloomberg LP.

Soon after, 1547 Realty recently announced the development of 1 Ramland Road in Orangeburg, which is on the west side of the Hudson River and closer to the New Jersey data center market than lower Manhattan.

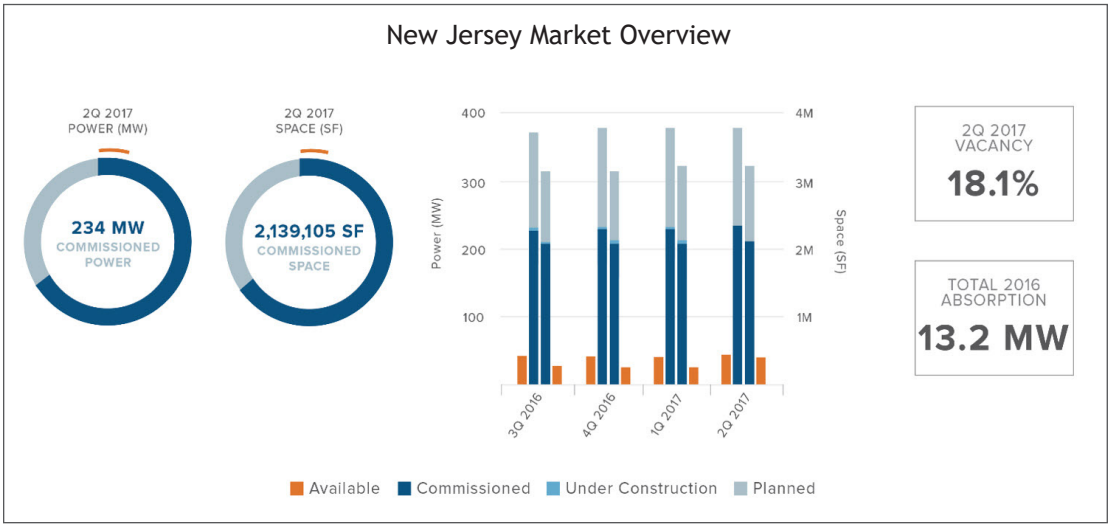
This year financial giant JPMorgan Chase has pursued plans to buy land in Orangeburg for new data center construction. The company has interest in a 60-acre plot of land on the former Rockland Pyschiatric Center, which it will reportedly purchase for $7.5 million. The company's plans were approved by local officials in May.

Several other providers have set up shop on the East side of the Hudson in West Chester County.

T5 Data Centers is marketing 600 Albany Post Road in Briarcliff Manor, NY, approximately 30 miles outside of lower Manhattan. The 38,000 SF building can be converted to accommodate 2 MW of critical power.

In 2Q, TierPoint announced the expansion of their Hawthorne campus in New York. The current building accommodates 52,000 SF of raised floor space, with the expansion adding 38,000 SF. The expansion project will be delivered in phases, with the first 13,500 SF coming in November.

Market Overview & Analysis: NEW JERSEY



It's no surprise the New Jersey data center market has grown over the past few years. Even with the threat of oversupply two years ago, the market has continued to see demand and activity from data center users and operators.

The New Jersey data center market is home to 2.14 million SF of data center, representing 234 MW of commissioned power, according to research from DatacenterHawk. With a vacancy rate of 18.1 percent, New Jersey has more unfilled space than most major data center markets, reflecting lower demand. The state saw absorption of 13.2 MW of space in 2016 as activity began to pick up.

The Northern New Jersey colocation market has grown considerably over the last few years for the following reasons:

1. **Proximity to New York City —** Firms with a need to be close to the city have found more reliable and cost-effective options in Northern New Jersey.
2. **Robust Infrastructure —** The Northern New Jersey market's infrastructure serves the needs of data center users and providers consistently.
3. **Favorable Business Climate —** Companies find New Jersey more business-friendly compared to the challenging business environment found in New York City, and the concentration of those companies generate data center requirements for the region.

Northern New Jersey's data center market experienced a building frenzy that started in 2005, but fizzled after an economic recession led to an excess of supply. In 2008, the New Jersey market featured many companies that built, owned, and operated their own enterprise data centers.

The financial implosion of 2009 helped fuel the rise of the colocation market as data center providers scoured Northern New Jersey for sites and opportunities to offer solutions to these companies. The industry regulations around data security and internal capital regulation instituted after the crash also made colocation more attractive.

In addition, for both economic and security reasons, the New York Stock Exchange and NASDAQ have moved their data centers out of New York City and into Northern New Jersey. Larger providers like Digital Realty, DuPont Fabros, and Sentinel Data Centers were well positioned to capitalize on the market conditions at the time and enjoyed steady growth.

The majority of data center activity in the New Jersey market can be seen in two areas: The I-95 Corridor in Northern New Jersey and in Central New Jersey along Route I-287 (approximately 30 miles to the southwest).

The Northern NJ market on the I-95 Corridor includes the following cities: Weehawken, Jersey City, Carlstadt, Secaucus, Clifton, and Newark. Several major U.S. data center providers occupy the Northern New Jersey I-95 Corridor.

- Jersey City contains data center providers near the Hudson River, typically with data centers taking up a floor or several floors in high-rise buildings. Smaller users with managed IT needs find these offerings from CenturyLink and QTS most attractive.

- Weehawken is three miles to the north, where CenturyLink, Digital Realty, and Telx have invested significantly in facilities and services over the past four years. Its location immediately across the river from Wall Street has made Weehawken an important site for financial applications and high-frequency trading.
- Secaucus, a city two and half miles west, has been a recipient of major data center activity recently. It is a key hub for Equinix, which has multiple data centers with a strong financial ecosystem. AT&T, CoreSite, Internap, and vXchnge are all located in Secaucus.
- Other providers within close proximity to the I-95 Corridor are Digital Realty (Telx), with facilities in Clifton, and Sungard, which operates three facilities in Carlstadt, NJ. Equinix (NY1) is also located in Newark, NJ.

Activity in the I-287 area is also brisk. The Central NJ market includes Edison, Piscataway, and Somerset.

The most significant investment in this area comes in Piscataway, where AT&T, CenturyLink, Digital Realty, DuPont Fabros, Green House Data, and Verizon all have data centers. IO Data Centers landed their 830,000 SF building in Edison, NJ in 2011. They are focused on delivering their modular product at the facility. Somerset is directly to the west from Piscataway, where Digital Realty, One Neck IT Solutions, and Sentinel Data Centers have facilities.

The data center providers impacted by Hurricane Sandy all had contracts with local fuel suppliers, who stood by when generators required refueling.

The market is occasionally tested with strong winds and rains from hurricanes that form along the East Coast. Despite careful preparations, Hurricane Sandy in 2012 proved more damaging than most data center operators and users expected. While the challenges created in Northern New Jersey were less than the issues in New York City, it was still a major event for the area. Many data centers lost power, but were switched to generator power and continued to serve their customers without interruption.

The data center providers impacted by Hurricane Sandy all had contracts with local fuel suppliers, who stood by when generators required refueling.

The Carlstadt area, where Sungard has a strong presence, dealt with nearby levees breaking and flooding, with one of the company's data centers serving as a refuge for flooded residents and temporary command center for local officials.

The impact from Hurricane Sandy forced many users to evaluate their data center strategy and ways to mitigate future risk from similar events.

The area's proximity to other major markets in the region, as well as the connectivity to international markets in the UK and Canada, has made New Jersey an attractive location for international companies looking to locate in the US.

TRENDS IN DEMAND

The New Jersey market is made up of mostly larger colocation and single-tenant data center users. Typical requirements in the Northern New Jersey market are above 1 MW, but some companies entering the market will have requirements starting at 100 kW. Industries active in the Northern New Jersey market include financial, healthcare, media, and technology companies.

New Jersey is working its way back from a period in 2011-12 in which multiple service providers built new facilities at the same time, including new market entrants DuPont Fabros Technology (DFT), IO Data Centers and Sentinel Data Centers. This led to an oversupply condition in the market for wholesale space.

Despite a general lack of activity in recent years, the New Jersey data center market is starting to see an upswing in interest. Several major players in the industry, like CyrusOne and QTS, have recently entered the market, with others considering establishing a New Jersey presence. CyrusOne acquired Sentinel's New Jersey operations in early 2017, while QTS acquired the former DFT facility in Piscataway in 2016 as well as a McGraw-Hill data center near Princeton in 2014.

The area's proximity to other major markets in the region, as well as the connectivity to international markets in the UK and Canada, has made New Jersey an attractive location for international companies looking to locate in the US.

The Northern New Jersey data center market grew significantly following the economic downturn in 2009, as financial institutions looked to outsource their IT/ data center initiatives to retain capital.

Service providers have been among those filling data center space in New Jersey. In April, cloud infrastructure services provider ProfitBricks announced a five-year lease with Anexio, a tenant at the QTS data center in Piscataway. The company, which is a unit of Germany's 1&1 Internet, chose to locate in the area due to the projected growth in cloud needs.

The Northern New Jersey data center market grew significantly following the economic downturn in 2009, as financial institutions looked to outsource their IT/data center initiatives to retain capital. A growing financial sector is a positive for the New Jersey data center market, due to its close proximity to Manhattan.

TRENDS IN SUPPLY

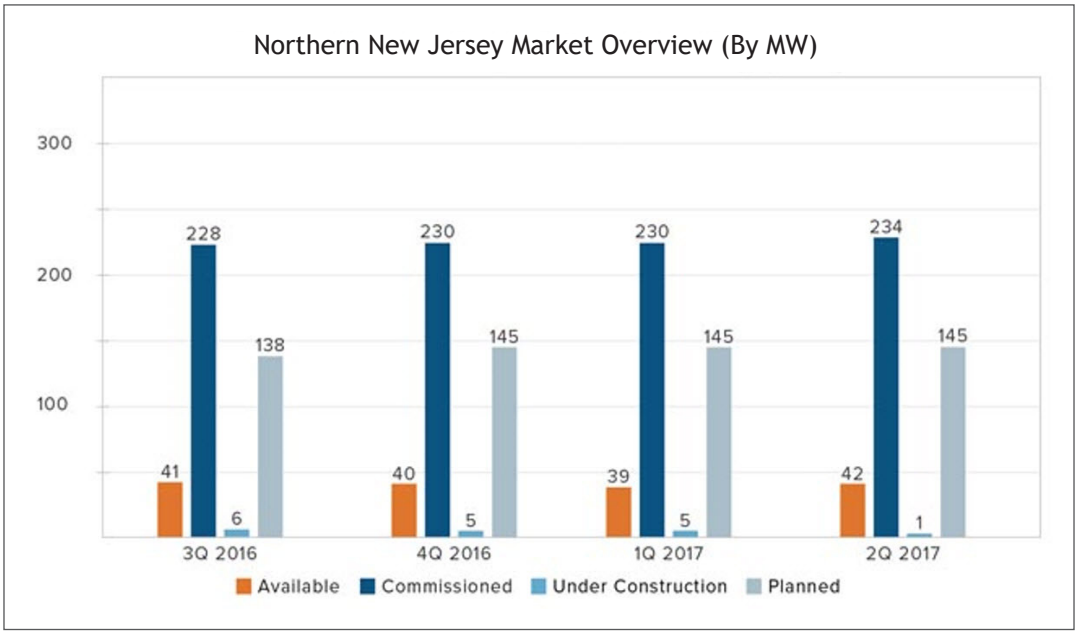
The momentum for data centers slowed in 2013, when the New Jersey market faced an oversupply of space, particularly in the wholesale market. But the past year has seen a renewal of interest, including several providers bringing new supply online.

An interesting example is NJFX, a new player that reflects a trend in which colocation providers are building data centers at the sites where undersea fiber optic cables arrive in North America. NJFX is the largest and most ambitious of those projects. In late 2016 it opened 64,000 square foot Tier III data center built next to a cable landing station in Wall Township operated by Tata Communications. The 10-megawatt facility is about a mile from the ocean.

In March, 2017, just months after opening the new facility, NJFX announced plans to construct a second two-story data center on 48-acres of land adjacent to their existing facility. The new 80,000 SF data center will add to NJFX's international connectivity services.

Meanwhile, CyrusOne has the opportunity to expand in Somerset. The former Sentinel New Jersey data center is about 95 percent leased, with the option to add up to 22 megawatts of additional capacity on adjacent land.

The market could soon see another new player. Aligned Data Centers, a provider of highly scalable, pay-for-use colocation solutions, is actively exploring expansion opportunities in major markets, including New Jersey, Northern Virginia, and Silicon Valley.



Business Environment: NEW YORK

Many factors are considered in the site selection process for IT infrastructure. Here's a look at some of these issues and how they vary between New York and New Jersey:

CONNECTIVITY

Over two dozen fiber carriers offer connectivity in New York City. Nationally-known carriers such as CenturyLink, Level3, Sprint, Verizon, XO, and Zayo offer a mix of both metro and long haul fiber. Regional and specialized providers such as Axiom, Fibertech, and Lightower serve Manhattan's data center clusters with high-quality fiber. NYC also serves as a network interconnection point at the eastern edge of the United States to the transatlantic undersea Internet cables running between North America and Europe. International providers such as Global Cloud Xchange offer direct connections to the financial hubs across the Atlantic.

In 2015, the state's legislature instituted the New York State Energy Plan to promote a larger share of renewable energy sources in overall electricity generation and transmission.

POWER

NYC's transmission lines and substations in Manhattan provide stable power on a robust but aging grid. Consolidated Edison Company of New York (ConEd) is the investor-owned and state-regulated utility providing electricity to NYC. ConEd's rates are extremely high and political initiatives have done little to either maintain or lower these rates. In 2015, the state's legislature instituted the New York State Energy Plan to promote a larger share of renewable energy sources in overall electricity generation and transmission. To comply with these green initiatives, ConEd plans phased infrastructure upgrades to a "smart" electric grid along with adding renewable energy generation sources. However, the increased investments required by ConEd to meet new regulations—along with a sharp decrease in NYC's overall electric supply due to the closure

For years, data center providers in the NYC market build redundancies into their systems to mitigate any potential damage from disasters.

of the second reactor at the Indian Point nuclear power plant at the end of 2015, and the last reactor to shut down in 2021—indicate rates will increase in the future.

DISASTER RISK

The New York City market is at relatively low risk for natural disasters such as hurricanes and earthquakes. Superstorm Sandy caused extensive flooding and wind damage, but is something of a historic outlier due to an unusual path that steered the storm on a Western path into New Jersey, rather than following prevailing currents and winds that steer storms out to sea or towards Long Island. A greater concern for data center providers and users in NYC is the man-made disaster of terrorism in a post-9/11 world. Because of the city's population density, damage done by either the region's infrequent threats can be magnified. For years, data center providers in the NYC market build redundancies into their systems to mitigate any potential damage from disasters.

ECONOMIC DEVELOPMENT AND INCENTIVES

New York City does not offer formal tax abatement and incentives for data centers. However, large data center providers and enterprises wanting to build new or retrofit an existing building can lobby NYC officials to ease the sales and use taxes in some cases.

Business Environment: NEW JERSEY

CONNECTIVITY

The Northern New Jersey market is flush with fiber connectivity thanks to a confluence of economic and topographic factors. Newark, Piscataway, and other New Jersey locations offer a favorable population density-to-available real estate ratio needed by carriers to install (and profit from) expensive fiber networks. Thousands of miles of fiber installed by over a dozen private and public entities sprawl under Northern New Jersey to provide fast connectivity. Northern New Jersey also serves as a network interconnection point at the eastern edge of the United States to the undersea Internet cables running between North America and Europe. This direct connection to Europe's financial hubs of London and Paris is a key factor in the sustained growth of the Northern New Jersey's network connectivity.

POWER

Northern New Jersey's electricity costs are high when compared to other colocation and enterprise data center markets in the United States. However, the rates are almost 11% less than the average cost across the state line in New York. Due to incentives to build rather than retrofit, Northern New Jersey offers data center users significantly lower power costs in purpose-built facilities.

DISASTER RISK

The Northern New Jersey market is at moderate risk for hurricane threats directly from the Atlantic Ocean. It's not yet clear whether the disaster risk from Atlantic hurricanes and Nor'easters is growing due to climate change. The damage from Superstorm Sandy in 2012, coming just a year after a similar unusual track was followed by powerful Hurricane Irene, has prompted data centers to address customer concerns about flood zones. The location of mission-critical equipment, and access to generator fuel over an extended loss of utility power. With few exceptions, the region's providers have addressed these concerns.

In 2014, the state paid out over $2 billion in corporate subsidies to businesses participating in economic redevelopment programs for urban areas with high unemployment; typically, areas where few data centers are located.

ECONOMIC DEVELOPMENT AND INCENTIVES

New Jersey actively seeks to lure business away from neighboring states. In 2014, the state paid out over $2 billion in corporate subsidies to businesses participating in economic redevelopment programs for urban areas with high unemployment; typically, areas where few data centers are located. While the state did offer specific tax incentive packages for data centers in the past, it does not currently. The Associated Press reported in October 2015 that New Jersey authorized a projected $134 million in incentives for data center projects since 2000 but the actual amount of incentives received is significantly less.

Overview of Major Providers

1547 REALTY GROUP

1547 Realty Group is a data center development company located in New Jersey. The leadership of the company is made up of experienced executives from the data center and financial industries. Build-to-suit, turnkey, and powered shell data centers are products 1547 has currently delivered to the market at its data centers in New York, Wyoming, and Hawaii, and Chicago.

New York: The 1547 Realty facility at 1 Ramland Road in Orangeburg, NY (about 25 miles north of Manhattan) is a 232,000 SF multi-tenant data center for customers located in the NYC market. The facility can accommodate both smaller and larger users, with two separate utility feeds from different substations. Power costs at the facility are between $.08-$.09/kWh, significantly cheaper than data center providers with locations in Manhattan. Expansion plans include adding a 50 MW onsite substation. There is currently 6 MW of commissioned power delivered and the site can expand to 24 MW. 1547 configured the 150,000 RFSF data center with N+1 UPS and standby power redundancy and N+1 for the cooling infrastructure.

365 Data Centers guarantees both 100% uptime SLAs and over a dozen top fiber provider options in the 9,883 SF of commissioned space.

365 DATA CENTERS

Headquartered in Emeryville, CA, 365 Data Centers is a carrier-neutral data center provider with locations in eight markets across the United States. Providing colocation, interconnection, and remote hands services to clients, the company gives users a 100% uptime SLA.

New York: Offering carrier-neutral colocation and interconnection, 365 Data Centers' 65 Broadway facility is located on the third floor of a twenty-one-story building in the heart of Manhattan's financial district. 365 Data Centers guarantees both 100% uptime SLAs and over a dozen top fiber provider options in the 9,883 SF of commissioned space.

AT&T

AT&T offers colocation, managed hosting, and cloud services to its customers throughout the United States. The company operates 38 data center facilities across five continents for a globally-scalable hosted IT infrastructure.

New York: AT&T's 10th Avenue data center is a carrier-neutral facility with multiple fiber provider options to enable the redundancy prized by enterprises. Originally a legacy telco facility, the NYC IDC was retrofitted with 24/7 onsite data and physical security, fault-tolerant power infrastructure, and loading docks.

New Jersey: Both AT&T data centers in Northern New Jersey are carrier-neutral facilities—a requirement to enable the redundancy prized by AT&T's enterprise customers. The Secaucus IDC at 15 Enterprise Avenue has diverse power feeds and 98,853 SF of commissioned colocation space.

The Piscataway IDC has two 36 kV commercial power service feeds. The building, retrofitted in two phases back in 2007, is capable of 135 W/SF power densities in Phase 1 and up to 150 W/SF in Phase 2. The Piscataway IDC features a total area of 35,300 RFSF.

COLOGUARD

ColoGuard is a privately-held colocation provider based in Brooklyn, NY. Just minutes from Manhattan, the company provides affordable colocation, cloud, and managed IT solutions for enterprises across three continents. ColoGuard operates six carrier-neutral data centers that offer solutions from a single 1U server up to fully-custom cages.

New York: Two ColoGuard data centers, CGNY1 and CGNY2, are housed in the sprawling Industry City mixed-use complex along Brooklyn's waterfront at 882 3rd Avenue. CGNY1 is fed power from two electrical utility grids and an on-site 140 MW substation. The 20,250 SF of commissioned data center space and approximately 2 MW of commissioned power are offered in locking cabinets, cages, and private suites.

The 15,000 SF CGNY2 data center of commissioned space is carrier neutral, HIPAA, and SSAE-16 certified. It also has dual utility feeds for power, and its power infrastructure is configured for N+2 with N+1 for cooling infrastructure.

CORESITE

CoreSite is a colocation provider headquartered in Denver, CO. With a location in eight different markets, CoreSite provides colocation and connectivity throughout the seventeen data centers in their portfolio. Their dense environment of network and cloud/ IT service providers give customers interconnection and peering opportunities throughout their facilities

New York: The company's NY1 facility is a 48,600 SF carrier-neutral data center on the 7th floor of the 27-story carrier hotel at 32 Avenue of the Americas. NY1 features direct access to Amazon's cloud service, New York's largest peer exchange, NYIIX, and to multiple international peering providers. The data center's redundant power and connectivity SLAs were proven in 2012 when CoreSite NY1 maintained 100% uptime during Hurricane Sandy.

New Jersey: CoreSite NY2 is a two-story 255,000 SF building the company is retrofitted for 11 data halls in Secaucus. The building features diverse utility feeds from PSE&G capable of delivering 1.5 MW to each data hall. The CoreSite-owned facility is being constructed in four phases. NY2 will have a total of 16.5 MW available at full build. CoreSite NY2 is a carrier-neutral facility, with direct interconnects to both the CoreSite Open Cloud Exchange and the AWS Direct Connect for low-latency links to Amazon's cloud service.

CYRUSONE

CyrusOne is a global colocation company headquartered in Dallas, TX. They have 31 data center facilities throughout the United States, Europe and Asia and are continually growing. In efforts to drive down operational costs for customers, CyrusOne delivers their "Massively Modular" data center concept, which brings power/space to the market quickly in large facilities. In addition, the company offers solutions with various levels of redundancy (N/N+1/2N). In July 2015, CyrusOne acquired Cervalis to gain four data center facilities serving the New York metropolitan area.

New York and Connecticut: Formerly a Cervalis data center, CyrusOne's 6 Norden Place in Norwalk, CT (while technically outside New York, it is close enough to serve the NYC market). The data center has three separate utility feeds from two electric companies. This provides the SSAE 16 and PCI-compliant facility, with up 75,000 SF of commissioned data center space and approximately 8 MW of commissioned power.

In efforts to drive down operational costs for customers, CyrusOne delivers their "Massively Modular" data center concept, which brings power/space to the market quickly in large facilities.

CyrusOne's data center in Stamford, CT (approximately 30 miles from Midtown Manhattan) is located in an office park at 10 Riverbend Drive South. Spread across two buildings, this data center provides approximately 2 MW of commissioned power and 20,000 SF of commissioned data center space.

Located just under 20 miles north of NYC, CyrusOne's data center at 155 Myers Corners Road in Wappingers Falls, NY is designed to meet the data replication and disaster recovery needs for NYC enterprises. The 155 Myers Corners data center has two separate utility feeds for up to approximately 5 MW of commissioned power. The 37,000 SF of commissioned data center space is designed for high-density configurations and configured the power/cooling infrastructure for N+1 redundancy.

New Jersey: 50 Madison Road in Totowa, NJ is another of the data centers acquired from Cervalis and is CyrusOne's closest location to New York City. Because of its proximity to New York, CyrusOne markets their 50 Madison data center as both a primary production and synchronous data replication facility for mission-critical applications. 50 Madison can deliver up to approximately 8 MW of power with 2N UPS units and a power/cooling infrastructure configured for N+1. The carrier-neutral facility has 50,000 square feet of data center space and 60,000 square feet of work area recovery.

In 1Q 2017, CyrusOne purchased two data centers in Somerset, NJ and Raleigh-Durham, NC from Sentinel Data Centers for $490 million. The majority of the capacity at both facilities was leased at the time of purchase. CyrusOne has the ability to expand capacity at both facilities, as well.

DATAGRYD

DataGryd was founded in 2013 to provide wholesale data center space in New York City. The company is led by CEO & Principal Peter Feldman, who has executive experience with both data centers (Telx) and energy (United Technologies Power).

New York: DataGryd's location at 60 Hudson provides potential access to over 300 interconnected carriers and exchanges, with multiple POEs from diverse data network providers and direct fiber conduits. DataGryd data centers have no cross connect fees or obligations to use any third party meet me rooms. DataGryd operates a total of 240,000 SF of space at 60 Hudson, including 60,000 SF of space leased to a leading service provider and 180,000 SF of build-to-suit shell space, with 12 MW of available power.

DIGITAL REALTY

Digital Realty (DLR) is a real estate investment trust (REIT) and the largest wholesale data center provider in the world. The company has grown to 187 data centers in 33 major metropolitan areas, totaling more than 27 million SF of space. Digital Realty delivers colocation, powered shell, private suite, and custom data center solutions. In July 2015, Digital Realty acquired Telx, a New York-based company offering colocation, interconnection and access, for $1.89 billion. The Telx acquisition expanded and expedited Digital Realty's ability to provide integrated services for SMB-to-enterprise customers. Digital Realty employs over 750 people and is headquartered in San Francisco, CA.

New York: The Telx acquisition expanded DLR's footprint in the New York City market from one data center to four total. Three of those data centers still fly the Telx flag. Two of the company's data centers are leased space located in Google's massive facility on 111 8th Avenue (DLR's data center and Telx NYC2), one in the carrier hotel at 32 Avenue of the Americas (Telx NYC 3), and one at 60 Hudson Street (Telx NYC1). Digital Realty has commissioned 3.2 MW of commissioned power at 111 8th Avenue.

It's important to note that all three of the former Telx data centers (NYC1, 2, and 3) not only offer low-latency connections to 400 major carriers, financial exchanges, and content distributors but also an on-net ecosystem of Telx enterprise networking services (i.e. disaster recovery, cloud-based IT services from AWS, Google, etc.).

Digital Realty has grown to 187 data centers in 33 major metropolitan areas, totaling more than 27 million SF of space. Digital Realty delivers colocation, powered shell, private suite, and custom data center solutions.

New Jersey: DLR operates a total of 11 data centers in Northern New Jersey with three of those data centers still flying the Telx flag.

In Northern New Jersey, Digital Realty operates a major data center in Weehawken at 300JFK Boulevard East, a four-story, 312,000 SF building which houses many low-latency trading applications for financial services firms. The company also operates a campus in Clifton that was built by Telx, featuring two facilities. 100 Delawanna Avenue is a 179,000 SF connected building housing low-latency back office operations for Wall Street firms. 2 Peekay Drive is a purpose-built colocation and wholesale data center. The three-story 215,000SF facility provides more than 100,000 SF of rentable colocation space.

Digital Realty's efforts in the Central New Jersey market have been focused on their campus located in Piscataway. A dedicated, onsite 69 kV substation with two independent feeds for 80 MVA of redundant power anchors the site. The campus features three (3) buildings including 365 S. Randolphville Road, a 265,000 SF building that was expanded in 2015 for an additional 88,000 SF, and a total power capacity of 34 MW.

Directly next to the facility is 3 Corporate Place where DLR has leased 100% of the 3.3 MW of commissioned power plus large blocks of Powered Base Building to tenants for a total power capacity of 26 MW.

1115 Centennial Ave. is the third campus building purpose-built new in 2015 at 127,000 SF and a total power capacity of 12 MW.

EQUINIX

Equinix is a global data center company providing colocation, interconnection, and connectivity services to users. The company has over 140 data centers in 40 markets throughout the world, and gives access to over 450+ cloud providers in their portfolio. Equinix operates their data centers under the International Business Exchange (IBX) product name.

In North America, Equinix revenues come from colocation and telecom interconnections while a mix of colocation and managed infrastructure services bring in more revenues for the rest of the world.

Equinix pricing is typically higher due to the ecosystems created in Equinix facilities and access to cloud and connectivity services. In North America, Equinix revenues come from colocation and telecom interconnections while a mix of colocation and managed infrastructure services bring in more revenues for the rest of the world.

New York: The company operates two data centers in NYC. Equinix NY8 is 10,000 SF of commissioned data center space offered in 60 Hudson, one of the most connected buildings in the city. Equinix NY9 is 36,000 SF of commissioned data center space with densities up to 3.0 kVA per cabinet. Equinix leverages these highly-connected buildings' diverse power/networking options along with their redundancy configuration for power and cooling infrastructure.

In 4Q 2016, Equinix acquired one purpose-built Verizon facility in the New York region, located at 401 Fieldcrest Drive in suburban Elmsford (north of NYC).

New Jersey: Equinix has a significant presence in the Northern New Jersey data center market. The company's largest investment is in Secaucus, where the company operates four carrier-neutral data centers. Equinix has another data center in North Bergen and the sixth in Newark. The Newark data center, NY1, is located on the eighth floor of the fourteen-story 165 Halsey Street carrier hotel.

Equinix NY2 at 275 Hartz Way in Secaucus, NJ receives electricity from two separate power feeds. The facility has just over 131,000 RFSF of commissioned data center space capable of providing 2.4 kVA per cabinet. About half a mile away on 755 Secaucus Road is Equinix NY4, a 338,967 SF data center with 151,772 RFSF of commissioned data center space. Equinix NY4 was built in four phases with varying power and cooling capacities.

Equinix NY5 is less than 200 yards away at 800 Secaucus Road and is another multi-phase data center build. With two utility feeds, NY5 can deliver up to 5 kVA per cabinet. The 275,363 SF building is LEED Silver and SSAE 16 SOC-1 Type 2 certified. The building is well connected via multiple fiber providers to Equinix's interconnect infrastructure. In 2Q 2016, Equinix announced additional construction at NY5, which will add capacity to hold an additional 1200 cabinets at the facility by 2Q 2017.

The Equinix NY6 IBX data center at 105 Enterprise Avenue South in Secaucus is the most recent. Built in 2015 with both wholesale colocation and business suite configurations for enterprise clients, each hall can accommodate the equivalent of 60 customer cabinets by default (assuming an average 5 kVA per cabinet) and has self-contained IT infrastructure separated by hard walls. The 70,183 SF building has room for either two large suites at 1,800 kVA or twelve sub-suites of 300 kVA of commissioned power.

In North Bergen, Equinix NY7 at 5851 West Side Avenue is a three-story building with power from two utility feeds. Designed for N+1 redundancy on power and cooling, NY7 features a total 71,590 RFSF of colocation space spread across the first and second floors of the building.

Equinix acquired two Verizon data centers in the Northern New Jersey market. The Piscataway, NJ location at 201 Centennial Avenue, is a 64,698 SF office building with approximately 10,000 SF of commissioned data center space and 1.2 MW of commissioned power. The Carteret data center was constructed in 2000 and is 116,527 SF. The building has 7.5 MW of commissioned power and over 63,000 SF of commissioned data center space.

FORTRUST DATA CENTERS

FORTRUST Data Centers is headquartered in Denver, CO. FORTRUST delivers solutions for customers needing single cabinets and private suites. They have also partnered with IO to also bring IO Anywhere Data Modules, which are Tier III Design certified by the Uptime Institute.

New Jersey: FORTRUST operates their Edison, NJ colocation data center in an 830,000 SF carrier-neutral building owned by IO Data Centers. FORTRUST has a small presence in the 439,153 SF data center space that is augmented with an additional 112,036 SF of office space for clients. The data modules available at the facility offer users ranges specific to critical infrastructure, square footage, and densities.

Green House Data, founded in 2007, focuses on delivering “green” solutions; powering its infrastructure through the purchase of renewable energy credits, the use of free cooling in the data centers, and heavy virtualization of servers.

GREEN HOUSE DATA

Green House Data is a Cheyenne, WY-based cloud hosting, colocation, and managed IT services provider with ten data centers across the United States. Founded in 2007, the company’s focus is on delivering “green” solutions; powering its infrastructure through the purchase of renewable energy credits, the use of free cooling in the data centers (with their corporate HQ, built in partnership with 1547 Realty, capable of year-round free cooling), and heavy virtualization of servers.

New York: Located less than 20 miles from Midtown Manhattan, Green House Data’s carrier-neutral Orangeburg Data Center (located within 1547 Realty Data Center) provides low-latency connections to major financial markets and other businesses in the NYC metro area. Green House Data markets the fact the Orangeburg Data Center has two separate utility feeds, two diverse substations, and sits on a separate power grid with the “lowest utility rate in the tri-state region at $0.10/kWh.”

InfoRelay was founded in 1995 and has since grown to include a high-availability network, state-of-the-art routing and switching equipment, and twenty-one data center locations in eight major markets across the United States.

INFORELAY

InfoRelay Online Systems, Inc. (InfoRelay) delivers enterprise-level data center and managed IT solutions to Fortune 500 and federal agencies. The company was founded in 1995 and has since grown to include a high-availability network, state-of-the-art routing and switching equipment, and twenty-one data center locations in eight major markets across the United States.

New York: InfoRelay operates three data centers in downtown NYC. LGA1 in the 60 Hudson Street carrier hotel, is a SSAE 16-certified data center with a total power capacity of 2 MW. InfoRelay’s LGA2 data center, located inside the 65 Broadway building, is configured almost identically to LGA1. In 3Q 2016, Atlantic Metro and InfoRelay announced a merger, adding an additional data center (LGA11) to InfoRelay’s portfolio.

INTERNAP

Internap is a global colocation company head-quartered in Atlanta, with a presence in 15 different cities around the world, offering colocation, cloud, and managed services to each market. Internap’s focus on low latency/high availability network services provide vertically-integrated services to their clients.

New York: Internap recently vacated a facility at 75 Broad Street, migrating customers to its newer data center in Secaucus, NJ.

New Jersey: Internap’s NYJ004 data center in Secaucus, NJ is a purpose-built facility. Growing customer demand and a strategic move out of 111 E 8th in New York (now owned and operated by Google) led to the development of this data center. A multi-phase project, Phase 1 of NYJ004 is almost fully leased and data center tenants are moving into Phase 2. In the second quarter of 2017, customers from Internap’s 75 Broad Street facility were migrated to Secaucus.

IO DATA CENTERS

IO Data Centers is a colocation and cloud data center provider located in Phoenix, AZ. The company has four locations in the United States and has a presence in the Singapore market as well. Their Data Center as a Service model provides customers a suite of services, including traditional raised-floor data center infrastructure with densities of 3 kW-5 kW per cabinet, higher density modular colocation environments with providing up to 30 kW per cabinet, and virtual/private cloud options.

New Jersey: IO New Jersey, their cavernous 830,000 SF facility in Edison is carrier neutral, housing both IO hardware and other colocation providers' data centers in its multiple data halls. The IO New Jersey data center is powered by an on-site 100 MW-capable substation (and pre-approved for a second power substation) with dedicated PSE&G feeds. Plus, it's one of the utility's priority substations. The data center is also connected by redundant loops from a nearby switching station. IO New Jersey is configured for N+1 redundancy for its power and cooling infrastructure. IO offers both raised floor colocation space at the facility as well as their Baselayer product, a modular offering that provides users flexibility specific to critical infrastructure, square footage and densities.

Netrality controls carrier hotel assets and operating meet-me-room environments with no monthly cross connect fees in six major US markets.

NETRALITY PROPERTIES

Netrality Properties is a joint venture between a real estate development firm Amerimar Enterprises and Hunter Newby, a venture capitalist and CEO of Allied Fiber. Netrality controls carrier hotel assets and operating meet-me-room environments with no monthly cross connect fees in six major US markets.

New York: The firm owns and operates the Meet Me Room in 325 Hudson Street, a secure carrier hotel. The ten story, 240,000 SF building was built in 1965 but converted in 2004 into a carrier hotel. Netrality's 325 Hudson location has direct access to trans-Atlantic submarine cable systems along with almost 30 different fiber providers.

The New Jersey Fiber Exchange's theme is "Tier 3 by the Subsea" and focuses on building an interconnected ecosystem that routes around expensive NYC data hubs.

NJFX

The New Jersey Fiber Exchange (NJFX) is one of the first colocation campuses focused on a cable landing station. The company's theme is "Tier 3 by the Subsea" and focuses on building an interconnected ecosystem that routes around expensive NYC data hubs. NJFX was founded by industry veteran Gil Santaliz, who previously founded metro fiber network 4 Connections, which was acquired by Optimum Lightpath.

New Jersey: In late 2016 it opened 64,800 square foot Tier III data center built next to a cable landing station in Wall Township, N.J. operated by Tata Communications. The 10-megawatt facility is about a mile from the ocean.

In March, 2017, just months after opening the new facility, NJFX announced plans to construct a second two-story data center on 48-acres of land adjacent to their existing facility. The new 80,000 SF data center will add to NJFX's international connectivity services.

PEER 1 HOSTING

PEER 1 Hosting, headquartered in Toronto, Canada, is a managed hosting and IT services provider for enterprises. The company delivers their managed cloud, hosting, colocation, and IT services via a private 10 Gbps fiber network linking sixteen data centers and more than fifty telco points of presence (PoPs) in North America and Europe.

New York: PEER 1's server colocation data center is located at 75 Broad Street in Manhattan, with two additional PoPs in the Telehouse America data center at 25 Broadway and in the Telx/DLR-owned data center at 60 Hudson. PEER 1 leverages these buildings' infrastructure for highly-available and redundant power and cooling at all locations.

Integrating real estate services with data center operational experience, QTS enables their mostly Fortune 1000 customers to utilize the "3Cs" of custom data centers (C1), colocation (C2), and cloud services (C3).

QTS REALTY TRUST

QTS Realty Trust (QTS) is a publicly-traded real estate investment trust (REIT) with more than 20 data center properties in the continental United States. The company traditionally finds large, robust facilities and transforms them into LEED-certified data centers. Integrating real estate services with data center operational experience, QTS enables their mostly Fortune 1000 customers to utilize the "3Cs" of custom data centers (C1), colocation (C2), and cloud services (C3). In May 2015, QTS acquired Carpathia Hosting, a competitor whose secure hybrid cloud solutions and VMware partnership enhanced QTS' ability to serve government agencies.

New Jersey: QTS operates three data centers in Northern New Jersey. Located in a multi-tenant office building at 95 Christopher Columbus Drive in Jersey City, the 16th floor data center is backed up by rooftop generators with approximately 6,000 gallons of fuel. The 31,500 SF of data center space also offers connectivity options back to Google's massive 111 East 8th Avenue carrier hotel in New York City.

QTS purchased its second data center in Central New Jersey in 2Q 2014 from McGraw Hill Financial. The acquisition of the 560,000 SF building cost $75 million and included a signed 10-year lease with Atos, an international technology services company that was previously providing data center services at the facility to McGraw Hill. The strategic relationship allowed Atos to utilize several of QTS' products, while continuing to work with McGraw Hill. The facility currently contains around 6 MW of commissioned power and 58,517 SF of data center space. Additional opportunities to expand on the 194 acre Princeton campus are available today.

In 2Q 2016, QTS purchased DuPont Fabros' NJ1 data center in Piscataway for approximately $125M to establish their third data center in this market. Built on 36 acres in 2010, the multi-phase construction (NJ1 Phase I and NJ1 Phase II) will include 36 MW total power and 176,200 SF of data center space at full build. Currently, the Phase I development included commissioning 18 MW of power with 88,000 SF of data center space, of which approximately 7.5 MW of commissioned power and 26,400 SF of data center space are available. NJ1 Phase II will include a future development of 18 MW of commissioned power and 88,000 SF of commissioned data center space.

SUNGARD AVAILABILITY SERVICES

Sungard AS is a global data center provider offering disaster recovery, cloud, and managed hosting to customers. The company is also focused on providing services around application management, security and compliance, and business continuity.

New York: Sungard AS operates a 98,000 SF workgroup office at 43rd Ave in Long Island City, NY. A five-mile drive from LaGuardia Airport, the data center is designed with conference rooms, lounge areas, and 242 seats in a "shared workgroup" space available to employees of companies using Sungard AS' disaster recovery services.

New Jersey: Sungard is heavily invested in the Northern New Jersey market. Their facility at 410 Commerce Boulevard in Carlstadt, NJ is a 187,725 SF facility with over 93,000 SF of commissioned data center space in six different data halls. Sungard's nearby 326,000 SF building at 777 Central Boulevard offers managed IT services through over 40,000 SF of commissioned data center space. Sungard provides other recovery services through another 130,000 SF within the facility. The site has diverse utility feeds from PSE&G and eight, 2 MW generators for backup power.

T5 DATA CENTERS

T5 Data Centers is an experienced colocation developer headquartered in Atlanta, GA. T5 delivers colocation, powered shells, and build to suit data centers to enterprise clients across the United States.

New York: T5's 38,000 SF T5@NY facility, located on nine acres of land 30 miles north of New York City in Westchester County, currently has 2 MW of commissioned power available and is expandable to 4.25 MW if needed. Aimed at enterprise clients in the healthcare, financial, and technology industries, T5@NY is designed as either a powered shell or turnkey colocation facility.

TELEHOUSE AMERICA

Telehouse America, a subsidiary of Japanese telecom company KDDI, is an enterprise colocation provider operating three carrier-neutral data centers in New York City and Los Angeles. These locations are crucial for connecting US customers to Telehouse's network of 48 global data centers because the company also owns and operates two key Internet peering exchanges: the Los Angeles International Internet Exchange (LAIIX) and the New York International Internet Exchange (NYIIX).

New York: Telehouse operates their data center and one of their NYIIX peering points out of their secure, carrier-neutral Chelsea Data Center facility on the 7th floor of the 85 Tenth Avenue building. The Chelsea Data Center has four utility feeds with a total power capacity of over 4 MW. The UPS, standby power, and cooling infrastructure is configured for N+1 redundancy.

TIERPOINT

Tierpoint is a cloud, colocation, and managed services provider headquartered in St. Louis, MO. The company's national growth strategy is to acquire operators of highly-redundant, carrier-neutral data centers in mostly underserved or secondary markets.

Tierpoint Metro NYC is strategically placed to provide low-latency access to Manhattan's top businesses while offering a recovery/failover position twenty miles away from those same businesses in case of disaster.

New York: Located at 111 Skyline Drive in Hawthorne, NY (a suburb of NYC in Westchester County), Tierpoint's Metro NYC data center is spread across two adjacent buildings, containing both data center infrastructure and business continuity space. With a total of 50,000 SF of commissioned data center space, the N+1 data center offers both cabinets and cages for customers. Tierpoint Metro NYC is strategically placed to provide low-latency access to Manhattan's top businesses while offering a recovery/failover position twenty miles away from those same businesses in case of disaster.

In 2Q 2017, TierPoint announced the third expansion of their New York campus, adding approximately 38,000 SF of raised floor space.

VXCHNGE

Created in 2013 when private equity firm Stephens Group bought the Bay Area Internet Services (BAIS), vXchnge is a national colocation provider. In May 2015, vXchnge bought eight Sungard AS data center facilities to expand their footprint into a total of 15 U.S. markets. The acquisition is part of vXchnge's strategy to create "Built for Performance" carrier-neutral data centers and address distance to customer or localization issues for the cloud and service providers that fuel the digital economy.

New York: The NYC market has two vXchnge data centers: A 10,000 SF secure, carrier-neutral facility in a leased Manhattan building and a much larger purpose-built facility in suburban Chappaqua, NY. The 38,000 SF Chappaqua data center features 3.75 MW of dedicated utility power and at least five major fiber providers (including Verizon, whose data center is located in nearby Elmsford).

New Jersey: vXchnge operates one data center in the Northern New Jersey market. Their 48,000 SF facility in Secaucus, NJ facility has approximately 1.1 MW of commissioned power. The SSAE-16 compliant data center's electrical and mechanical infrastructure is configured for N+1 redundancy.

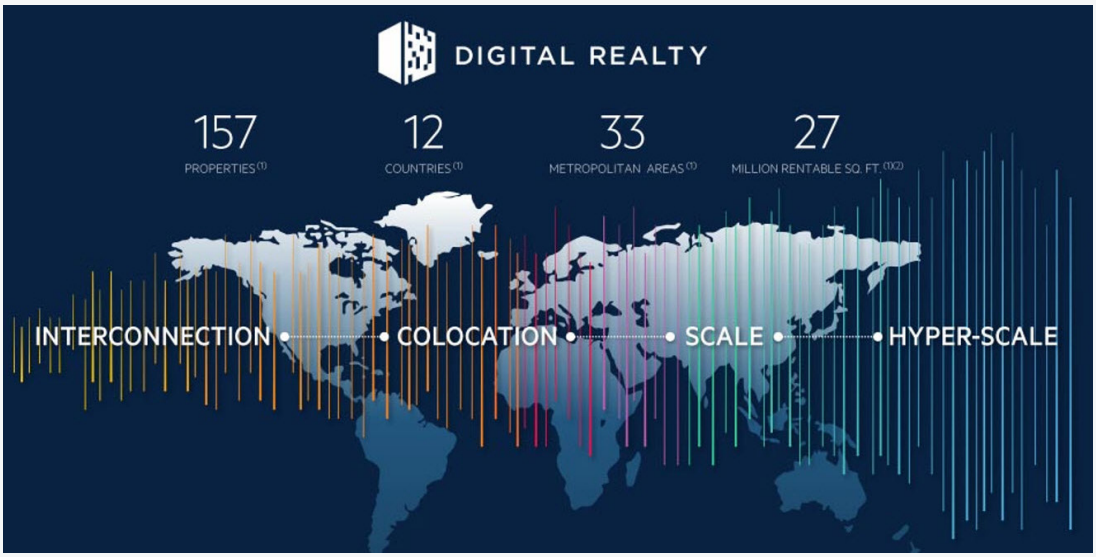
ZCOLO

Boulder, CO-based zColo is a carrier-neutral data center provider whose parent company, Zayo, is a publicly-traded global provider of bandwidth infrastructure services. zColo's data center footprint of 35 facilities extends to over twenty United States markets. They also offer their Metro Interconnect Service in eleven major U.S. markets, providing connections to multiple data centers across their network. In 2015, the company purchased Latisys, a provider of hybrid Infrastructure-as-a-Service (IaaS) solutions for cloud and colocation customers, for $675 million.

zColo operates two data centers in NYC: one in 60 Hudson (4.75 MW commissioned power) and the other in Google's 111 8th Avenue building (2.56 MW commissioned power).

About Our Sponsor

DIGITAL REALTY



Digital Realty

www.digitalrealty.com/

Digital Realty supports the data center and colocation strategies of more than 2,300+ firms across its secure, network-rich portfolio of data centers located throughout North America, Europe, Asia and Australia. Our clients include companies of all sizes, ranging from financial services, cloud and information technology services, to manufacturing, energy, gaming, life sciences and consumer products.

Where the cloud lives and business thrives

We built the global standard for technical real estate, developing a unique capability to acquire, manage, and scale data center campuses. Now, Digital Realty is building a unique ecosystem of open solutions that power customer growth through exceptional service on a foundation of unrivaled data center expertise. The new Digital Realty combines unparalleled data center services, carrier-dense interconnection, real estate acumen, and financial strength to create unique power of choice and value when and where our customers need it.

Today, we are delivering modular and interconnected building blocks designed to futureproof your IT strategy and connect you to your relevant networks, services, customers and partners. Our added capabilities further strengthen our commitment to serve as the foundation for the digital world by making it easier for you to position and grow your business. It's an experience built around our culture of exceptional service and innovation that tailors offerings to meet your business needs and support your objectives by delivering maximum customer value

Methodology

datacenterHawk continuously monitors data center development and activity in 35 regional North American markets. Regional markets are placed into one of two categories:

1. **Primary –** Data center markets with larger number of colocation and cloud providers. These are in major cities with diverse business sectors and large economies
2. **Secondary –** Data center markets with smaller number of colocation and cloud providers. These are in midsized cities with small-to-medium economies

Primary and Secondary data center market sizes are defined based on the total amount of power and space in the market. The total amount of power and space in each market is calculated based on four key attributes:

1. The amount of commissioned power and space
2. The amount of available power and space
3. The amount of under construction power and space
4. The amount of planned power and space

METHODOLOGY EXAMPLE

Data Center Provider A builds a 75,000 gross square foot data center, with three separate data halls of 1,200 kilowatts (kW) and 10,000 square feet (SF) of data center space each during a phased construction. Data Center Provider A leases one of the three data halls (1,200 kW/10,000 SF) to a user and completes construction on the second data hall (1,200 kW/10,000 SF) to be ready for the next leasing opportunity. The third data hall is in shell condition and therefore considered "planned" space. The resulting datacenterHawk analysis of Data Center Provider A's power and space capacity is:

In addition, the datacenterHawk analysis considers that many colocation and cloud providers lease infrastructure from larger data center providers. In datacenterHawk's analysis, power, and space leased from one data center provider to another is counted only once. As an example, if the lease completed by Data Center Provider A in the scenario above was completed with Data Center Provider B with the intent to lease that 1,200 kW/10,000 SF of commissioned power and space to smaller customers, the analysis would only include the 1,200 kW of commissioned power and 10,000 SF of commissioned space one time.

These attributes in each market are tracked and refreshed on a quarterly basis throughout the year. Through the continuous monitoring of these components, a baseline is calculated for each market that is used to measure market growth and deliver the most current and valuable information needed.