For My Next Data Center Location, I'll Take Manhattan

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The Data Center Exodus From Manhattan

Over the course of the last 11 years, there has been a data center exodus from Manhattan for a variety of reasons. Many events took place over this time period to make data center tenants nervous about locating their data centers in the heart of New York City. The financial crisis of 2007 caused many companies to cut back drastically on information technology expenditures. Then, one of the tenants at 111 8th Avenue, a large data center located in Manhattan, purchased the building, inspiring fear that the new owners would drive the other data center tenants out, drastically reducing the amount of available data center colocation space in Manhattan.

Compounding those fears, Superstorm Sandy, which occurred in the fall of 2012, brought devastating flooding to the entire region. This prompted several large data center tenants to consider relocating substantial mission-critical operations out of Manhattan and even out of the tri-state area.

To obviate the anticipated space and power restrictions companies foresaw occurring in Manhattan and, fearful of another natural disaster, many data center tenants fled to New Jersey to take advantage of cost efficiencies available there at the time. At the same time, the significant technological advances in latency reduction made the move out of the city even more feasible, enabling companies to house mission-critical data centers and process transactions farther and farther from Manhattan without seeing a negative impact on speed or efficiency. This new faster fiber connectivity inspired more telecom operators and enterprises to diversify their operations and utilize backup data centers in northern New Jersey and beyond, extending south and west to Northern Virginia, Baltimore and Chicago.

Why Data Centers Are Now Returning to Manhattan

Fast forward to today: changes in the data center market are driving an influx of data center tenants back to New York City. Despite the rise in popularity of developing data center hubs in other regions, New York City proper is once again one of the top data center locations in the country.

According to the New York/New Jersey Data Center Market Report from Data Center Frontier, New York has 600,057 square feet (SF) of data center space currently in use, representing 61 megawatts (MW) of commissioned power. Demand for space is strong, evidenced by New York's 2016 total absorption rate of 4.1 MW of space and a vacancy rate of just 11.6 percent in the second quarter of 2017.

The graphic below illustrates the decrease in available data center space in Manhattan from 11 MW at the end of 2016 to 7 MW in 2017. Overall commissioned space has remained constant over this time period at 61 MW. There is now virtually no other pure raw space left available in Manhattan.

(click to enlarge)
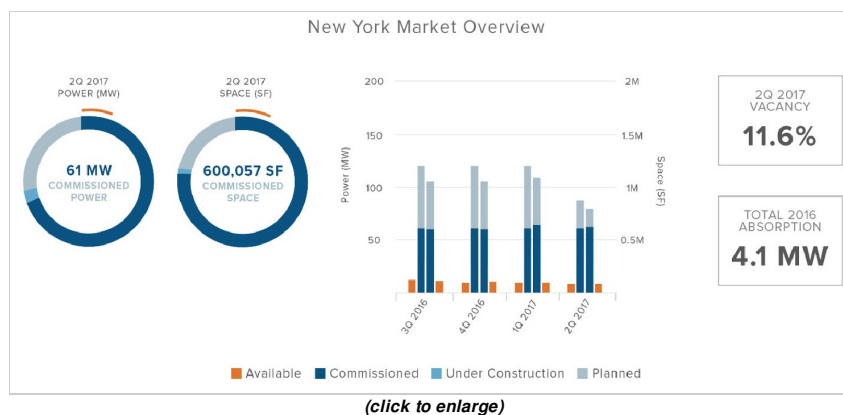
There are several key reasons why the New York City data center market once again has become so highly desirable. The region remains a strategic location for many international firms entering the U.S. as well as for U.S. companies whose businesses require a New York City presence. Another contributing factor is the heavy concentration of data center-dependent industries located in New York, including financial services, healthcare, insurance, media, technology, telecommunications and transportation, along with the availability of the highly skilled workforce required to operate and maintain data center infrastructure.

Few locations can compete with the benefits a Manhattan data center provides today:

Unparalleled Connectivity

New York City has more than 24 fiber carriers that offer both metro and long-haul fiber connectivity. These include telecom operators such as Verizon, Sprint, CenturyLink, Level3, XO and Zayo. These carriers include regional and specialized providers such as Fibertech, Axiom, Crown Castle and ZenFi providing Manhattan's data centers and carrier hotels with high-quality fiber.

A New, More Positive Risk Assessment

Despite the risks that exist, the New York region still enjoys minimal hazard risk when compared to other parts of the country, in part due to the city's preparedness. Data center providers in the New York market have built redundancies into their systems to mitigate potential damage from natural disasters and terrorist attacks, including backup data centers in near—but not too near—locations like New Jersey. Many data center providers have also installed generators and HVAC cooling units on their rooftops to prevent power interruptions in the event of future floods.

An Island Built for Cloud Computing

The rapidly growing popularity of cloud computing has empowered enterprises and even telecom operators to move away from large, dedicated data centers to wholesale data centers and colocation operators. This move has also fueled the growth of the data center market for these services in Manhattan. The sheer number of businesses of all sizes local to Manhattan makes it a prime market for cloud service providers. Cloud computing requires faster delivery time in a prebuilt space that is highly scalable to meet rapidly changing market demands. In any location, data center providers must be able to provide on-demand space that leverages fortified colocation facilities and custom suites with minimal deployment requirements. To keep up with this demand, data centers must plan and future-proof facilities to meet this increasing demand for added levels of power, connectivity and resiliency.

The heavy concentration of financial service institutions in Manhattan, paired with their dependence on state-of-the-art technology, ensures that the city will be at the forefront of technological developments. 60 Hudson Street, considered the premier data center hotel in New York, is one location that has undergone a major technology upgrade in recent years, allowing a much higher degree of customization to Manhattan data center customers than ever before.

DataGryd, a leading data center facility within 60 Hudson Street, can provide up to 5000 KW (7 x 24/365), along with wholesale pricing for turnkey entry to the New York City market. This premier

data center offers utility-grade power, a must-have for any data center anywhere, delivering voltage ranging from 48 volts DC to 13,200 volts AC. It has 56,000 square feet of space for the support infrastructure required to maintain and sustain a large enterprise or service provider's data center operations. DataGryd provides enough space and power for the largest hyperscale enterprises, cloud service providers and telecom operators to comfortably colocate there.

Data center tenants must also have the ability to control their environment in a wholesale offering, and the DataGryd facility within 60 Hudson Street provides the availability of UPS, battery backup and a cooling system backup of N+1. It can also store approximately 26,000 gallons of diesel fuel to ensure operations continue running smoothly in the event of a power failure.

DataGryd is a prime example of the type of data center space that 60 Hudson Street has to offer. With two leased floors in the building that are offered as wholesale data center space and its 120,000 square feet of premier colocation space, DataGyrd is the largest single footprint data center available in Manhattan.

Moreover, DataGryd's high-density colocation space has four feeders from the utility offering dual contingency (2N) and offering up to 12,000 kW of power. They directly connect their tenants to over 300 interconnected carriers and exchanges with multiple Points of Entry (PoEs) from diverse data network providers and direct fiber conduits.

In addition to providing facilities meeting the specifications outlined above, the data center has up to five 1MW suites that can be customized in smaller increments, starting at 250 kW up to 5 MW, to meet tenants' needs. Utilizing customized space for direct connect between company platforms can save a significant amount of money, alleviating the burdensome expense of cross-connects and third-party Meet-Me-Rooms (MMRs) altogether.

As a direct effect of the recent changes and upgrades in the New York City data center market, large enterprises, cloud computing and communications service providers all have good reason to locate their data centers in Manhattan once again.