Real Estate Market Intelligence

2015

Data Center Development Quarterly Report–Q3

1. Key Findings

- Approximately 65% of American adults currently own a smartphone and the cloud technology that services them has joined demand from the financial, technology, social media and healthcare sectors to drive up demand for data centers nationwide.

- Analysts forecast that data center construction in the U.S. will grow 4.18% over the 2014–2019 period and the demand for data centers among enterprises is one of the major factors propelling market growth. The U.S. hosts many global enterprises across industry verticals, including leading Communication Service Providers (CSPs) and manufacturers of data center equipment. Collaborative IT environments have assumed immense significance among enterprises because most of their business applications operate through the cloud.

- The growth of data centers, used to house IT infrastructures of enterprises and the demand for cloud-based services, is increasing among enterprises in the U.S., including Fortune 500 companies. Several industry verticals in the U.S. are making use of advanced technologies in the management of their IT infrastructure to gain a competitive advantage. The complexities associated with business applications have increased because of enormous growth in the volume of data. This has triggered an increased need for construction and renovation of data centers.

- Demand for data centers is growing and will continue to grow for the foreseeable future. Depending on the target user of a data center, it may be located in a rural setting or immediately adjacent to a trading exchange in a major city. Centers are categorized by tiers (I to IV) based upon the expected amount of "up time" and a tenant will pay increasingly more the higher up the tier chain. Most data center users will lease space in a data center facility either on a "colocation/retail" basis or on a "wholesale" basis. In the colocation/retail scenario, the landlord provides services down to the computer rack level and installs physical separations between tenants, usually in the form of a cage. In the wholesale scenario, the data center landlord will lease space directly to an end user and the landlord's service obligation will stop at the space power distribution unit for the space.

2. Major Transactions

- Carter Validus Mission Critical REIT II purchased its <u>first data center</u> property, the Indianapolis Data Center, from and leased back to Online Tech for $7.5 million. The property, located in Indianapolis, IN, is a 43,724-square foot hosting center.

- Carter Validus Mission Critical REIT II purchased a <u>colocation data center</u> property for $19.9 million in Minnetonka, MN, from an undisclosed seller. The property has approximately 135,000 rentable square feet and is comprised of three buildings located on 15.54 acres. The property is 100% leased to three tenants.

- Carter Validus Mission Critical REIT II acquired a <u>long term acute hospital</u> in Texas for $49.2 million and a data center in Minnesota for $5.8 million.

- Digital Realty completed the <u>acquisition</u> of colocation provider Telx in a deal valued at $1.88 billion. Telx will now operate as Digital Realty's colocation and connectivity line of business. Digital Realty raised gross proceeds of approximately $1.9 billion of debt and equity capital to fund the Telx acquisition. The 20, carrier-neutral Telx data centers are strategically located in 13 U.S. markets. This equates to 1.3 million square feet of data center space and more than 50,000 connections to high performance global networks, effectively enabling the interconnection of more than 10 million square feet of data center space.

- Equinix is expanding its operations in Dallas, TX, with the opening of a new <u>International Business Exchange</u> (IBX) data center later this year. Equinix will spend approximately $20 million to open its sixth IBX data center in Dallas covering a total area of approximately 40,000 square feet. Once fully completed, the total colocation space and Equinix's total Dallas footprint will exceed 214,000 square feet.

- Equinix is investing $54 million to expand its <u>SG3 datacenter</u> in Singapore, bringing its total investment in the country to $350 million. The second-phase expansion of SG3 will provide increased capacity and network connectivity to allow companies to gain direct access to Equinix's SG1 datacenter, as well as meeting increasing demand for interconnection services in Asia Pacific.

- Equinix filed plans for an <u>expansion plan</u> that could add nearly one million square feet of space in five new buildings in south San Jose, CA. If approved, the company will build three, two-story data-center buildings totaling 579,000 square feet taking up about half of the 34 acres that Equinix bought from Xilinx and two, two-story data-buildings buildings totaling 386,000 square feet built near the existing Great Oaks data centers.

3. REITs & Data Centers

Data center REITs, the landlords that charge rent to companies for housing their servers are part of a specialized market.

- Digital Realty Trust has an $8.5 billion market cap and a diversified tenant base. Its largest tenant—CenturyLink—accounts for just 7% of its annualized rental revenue. Digital Realty has grown its payout at an annualized 20.6% clip over the past five years.

- DuPont Fabros Technology sports a market cap of $1.8 billion, currently owning 10 operational data centers, 7 of which are located in northern Virginia. DuPont Fabros raised its dividend by 50% in the past year and at a staggering 69% annualized rate over the past five years.

- Equinix connects the world's leading businesses to their customers, employees and partners inside the world's most connected data centers in 33 markets across five continents. In the U.S., Equinix operates data centers in Atlanta, Boston, Chicago, Dallas, Denver, Los Angeles, Miami, New York, Philadelphia, Seattle, Silicon Valley and Washington D.C.

- QTS Realty Trust has a market cap of just $890 million and is a fairly young REIT, having gone public about a year ago. QTS currently has a portfolio of 12 data centers scattered across 12 cities. QTS is still something of an unknown entity, but thus far, funds from operations rose 66% year-over-year in the last quarter.

4. Market Overview

Incentives

As states compete to attract data centers they are offering financial incentives, often by waiving sales or property taxes on the expensive equipment they use. State revenue and economic-development records show that government officials extended nearly $1.5 billion in tax incentives to hundreds of data-center projects nationwide during the past decade. At least 23 states now have specially tailored incentives for data centers, most of which have been enacted or updated in the past five years. At least 16 other states have used general economic-development programs to offer incentives. For example:

Indiana—Data centers investing at least $10 million can receive local personal property tax exemptions on their equipment under a 2009 law. Some data centers also have received state tax breaks, including $7.5 million of incentives for ExactTarget.

Ohio—Since enacting a sales tax break in 2011 for data centers that invest at least $100 million, Ohio has since lowered the required payroll threshold from $5 million annually to $1.5 million. The largest recipient of aid is Amazon subsidiary Vadata, which is projected to get $81 million in state incentives plus nearly $20 million in local incentives to invest $1.1 billion in three data centers near Columbus.

Iowa—Offers sales tax breaks to data centers investing as little as $1 million, with larger incentives for projects topping $200 million. It also has no property tax on equipment. Iowa has approved $41 million in incentives for Microsoft and $38 million for Google, which have each invested about $2 billion.

Minnesota—First enacted a data-center tax break in 2012 and has already expanded it. Data centers of at least 25,000 square feet costing at least $30 million can get a 20-year sales tax exemption on equipment and energy and a permanent property tax exemption on equipment. Ten facilities have been certified for the tax break with a projected investment of $800 million, but the state declined to release how much incentives the companies could receive.

Going Green

- Roughly 50% of the world's projected population—3.6 billion people—are expected to be connected to the Internet by 2017. The rapid growth of datacenters providing cloud services is expected to increase electricity demand by as much as 60% by 2020; therefore, causing growing pressure from environmentalists and, increasingly, the general public for governments to offer green incentives: monetary support for the creation and maintenance of ecologically responsible technologies.

- A green data center is a repository for the storage, management, and dissemination of data in which the mechanical, lighting, electrical and computer systems are designed for maximum energy efficiency and minimum environmental impact. Concepts such as free cooling, use of renewable energy sources, consolidation, and waste recycling are some of the methodologies implemented in green data centers.

- Building and certifying a green data center or other facility can be expensive up front, but long-term cost savings can be realized on operations and maintenance. Another advantage is the fact that green facilities offer employees a healthy, comfortable work environment. In addition, green facilities enhance relations with local communities.

- The Global Green Data Center market is expected to grow from $23.41 billion in 2014 to $95.66 billion by the end of 2020.

Lease vs. Building

Benefits of leasing (Colocation)

- Fewer upfront costs, with most of the expenditure being operational, not capital;
- More predictable expenditure model with costs that increase consistently over the life of the data center;
- Flexible—additional capacity can be scaled up as needed, no wasted extra capacity or build outs needed; and
- Offers more accessible space and power through a provider's purchasing.

Data center leases and colocation agreements are unique as they tend to be long, 10 years or more, often with many renewal options, as it is an expensive proposition to move into and out of a data center. Rent may be based on the square footage leased or on the amount of power allocated to the space. However, landlords are very concerned about the potential for damages that could result from the data center not operating. As such, landlords insist on the remedy for an "outage" only be in the form of rent credits. The rent credits are dealt with in a separate agreement between the landlord and a tenant, called a "SLA" or Service Level Agreement. Tenants are very limited in what types of alterations they may make within their space and the landlord will require extremely tight areas of control over all areas.

Benefits of Building

- Complete control over the operating environment, including access, expansion/contraction, temperature, etc.; and
- Low risk of losing the lease and the ability to leverage and share existing space.

However, the detailed and practical costs of building a data center include a fair amount of capital and upfront costs and there are other often overlooked costs that add up quickly. The estimated cost of building the data center shell plus physical security costs about $200 per square foot. Building permits and local taxes—while they vary from region to region- on a moderate national estimate come in at $70 per square foot in building permits and taxes and power expenses accounts for 70-80% of the total costs of running a data center.

5. Outlook

Trends to Watch

- There may be an increase in Tier III data centers as they are more cost effective, especially for companies that don't need the added security on top of their data needs.

- Buying data center properties will rise as more and more companies move into storing data and adding new technology to their company.

- Leasing may see an increase if data center prices rise due to a higher demand, as companies accumulate portfolios of data center properties. Rents may increase for them as well, as more companies turn to green properties as well.

- Tax incentives may become more competitive among states as the demand for space increases. Many states may revisit the incentives they offer and offer more. Companies not only gain financial incentives from leasing but bring added jobs to the communities, creating a demand for other niches to increase. i.e housing, retail shops and office space.