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# Q2 2014
# National Data Center Market Update

DATA CENTER
SOLUTIONS GROUP

CBRE GLOBAL RESEARCH
AND CONSULTING

The national data center marketplace is robust as demand and velocity for quality space remains strong. The primary wholesale colocation data center markets have sustained solid market dynamics and new markets are emerging in response to growing demand for services including Colorado, Minnesota and Toronto, Canada. Demand for wholesale data center space is led by global IT infrastructure companies, cloud providers, and technology companies as well as financial services clients. Bitcoin mining operations are pursuing massive deployments, which is expected to continue throughout the balance of 2014 and into 2015. Although demand from these users is significant, it is still to be determined how bitcoin operations will impact data center providers and market supply in the long term.

Data center pricing has stabilized in recent quarters along with a slight uptick in some markets, which will continue throughout the remainder of the year as new supply to the market absorbs growing demand. The dividing line between wholesale and retail models has blurred, leading to increased competition among providers. Additionally, a trend towards hybrid solutions will increase as companies evaluate the cloud and changing technologies.

## GLOSSARY OF TERMS

**DC**
Abbreviation for data center

**RFSF**
Abbreviation for raised floor square footage

**Powered Shells**
Purpose built or hardened shell; Power and Fiber to site; No equipment included

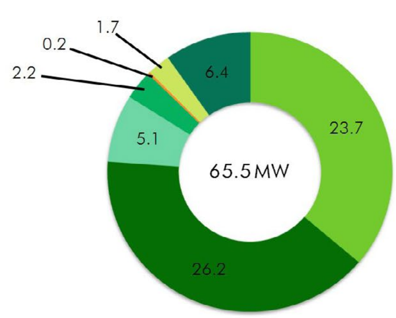
**Carrier Hotels**
Single buildings with multiple fiber providers and generally support retail colocation providers

## Q2 2014 PRIMARY WHOLESALE COLOCATION MARKET SNAPSHOT

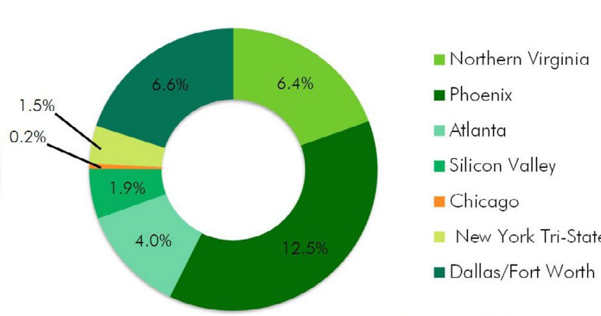
| Market | Inventory | Vacancy | Absorbtion | Rental Rates (kW/mo) |
|---|---|---|---|---|
| Northern Virginia | 368 MW (▲ 20 MW) | 19.6 MW / 5.3% (▼ 20.6%) | 23.7 MW (▼ 7.4 MW) | $130-$150 |
| Phoenix | 209 MW (▲ 24 MW) | 6.3 MW / 3.0% (▼ 33.9%) | 26.2 MW (▲ 23 MW) | $140-$160 |
| Atlanta | 127 MW (▲ 5 MW) | 28.5 MW / 22.5% (▼ 4.3%) | 5.1 MW (▲ 9.1 MW) | $120-$150 |
| Silicon Valley | 116 MW (nil) | 13.9 MW / 12.0% (▼ 13.7%) | 2.2 MW (▲ 2.2 MW) | $145-$150 |
| NYC/NJ | 115 MW (▲ 6.8 MW) | 36.7 MW / 31.9% (▲ 9.3%) | 1.7 MW (▼ 6.6 MW) | $145-$160* |
| Chicago | 110 MW (nil) | 4.5 MW / 4.11% (▼ 4.4%) | 0.2 MW (▼ 4.9 MW) | $145-$165 |
| Dallas | 97 MW (▲ 10 MW) | 10.9 MW / 11.2% (▲ 33.3%) | 6.4 MW (▼ 0.1 MW) | $150 |

Source: CBRE Data Center Solutions Group, Q2 2014
Arrows reflect quarter-over-quarter changes.
*Quoted rates are outside of NYC proper. NYC (Manhattan) wholesale rates average $225-$300/kW/mo

Q2 2014 NET ABSORPTION (MW)




Q2 2014 NET ABSORPTION AS A SHARE OF MARKET INVENTORY




Source: CBRE Data Center Solutions Group, Q2 2014

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# Data Center Capital Market Trends

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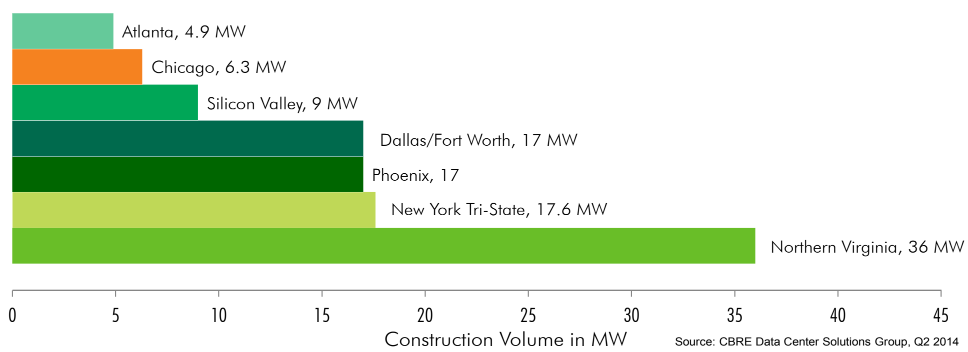
In the second quarter of 2014, nearly all markets saw strong growth in critical load capacity while Phoenix, Northern Virginia and Dallas experienced the highest increases in volume. Noteworthy pre-leasing activity for new construction confirms that quality assets, and cost will continue to drive ultimate decisions.

**Q2 2014 DATA CENTER CONSTRUCTION PIPELINE**

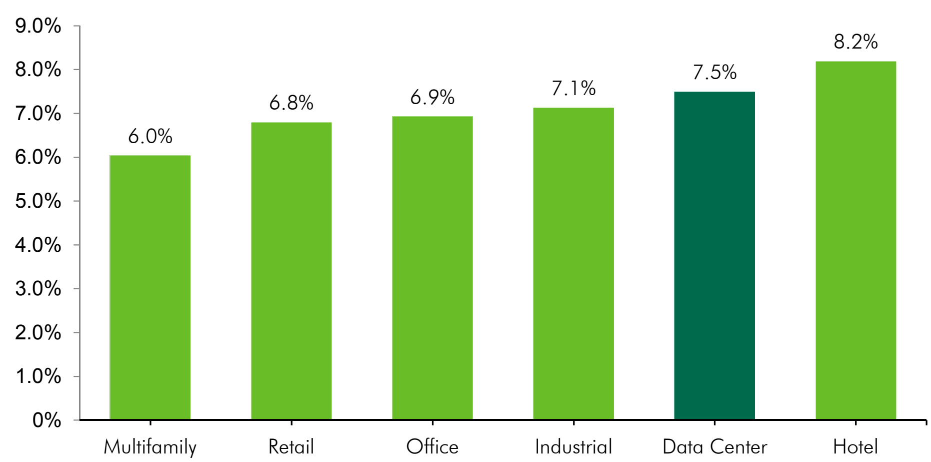



Source: CBRE Data Center Solutions Group, Q2 2014

### DATA CENTER CAPITAL MARKETS TRENDS

There was a slight uptick in cap rates for Q2 2014 from our previous Q4 2013 Market Update. Credit rating, market, term and lease up capability are critical variables in lease and sale-leaseback transactions. Data center cap rates averaged 7.5% during Q2 2014 for fully leased facilities with a term of seven years or more remaining. Conversely, transactions with terms under seven years and/or sub-investment grade credit commanded rates 9.5% and higher. An increasing number of corporate clients with owned data centers are considering sale-leaseback or sale partial-leasebacks of their data center assets. This is primarily the result of changing data center needs and strategies resulting in excess space in their existing facilities. Many of these dispositions require impairment discussions relative to the initial investment and the current market value.

**Q2 2014 U.S. CAP RATE AVERAGES**




Source: Real Capital Analytics & CBRE Data Center Solutions Group, Q2 2014

## GLOSSARY OF TERMS (CONT.)

**Wholesale Colocation**
Building shell & infrastructure to PDU providing space, power & cooling; Generally in demised suites above 250 kW

**Retail Colocation**
Building shell and infrastructure in shared environment, space generally divided by racks or cages; May include IT hardware as well as a menu of services

**Enterprise Centers**
Hardened data center; Houses "mission critical" operations of individual companies

**Greenfield Sites**
Areas/Sites identified to build to suit data centers; Typically close to power/fiber

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# State of the Market - Primary Market Chicago

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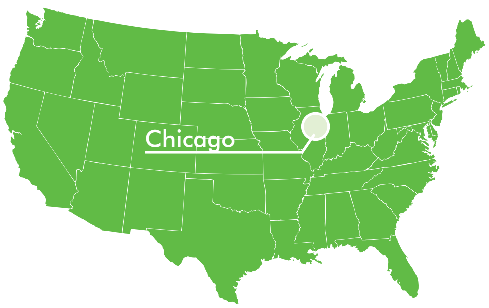


Despite a decrease in transactional activity in the first half of 2014, the Chicago wholesale colocation market is poised to capitalize on local, regional and national demand with a significant amount of new capacity scheduled to go under construction in late 2014. Much of the recent lack of leasing momentum can be attributed to an absence of conditioned and ready-to-occupy space, a position the market has consistently found itself in over the last 18-24 months. Moreover, the dip in completed transactions is counter intuitive to a stronger than average level of demand as tracked by tenants actively engaged in data center site selection.

As of the end of Q2 2014, wholesale vacancy had settled in at 4%. Only one provider's facility has more than 800 kW of critical IT load conditioned and available. Further, during the first half of 2014, just under five MW of critical IT load is reported as under construction in the Chicago market, including suburban and downtown submarkets. However, active data center requirements in the market (both downtown and in the suburbs), are up by approximately 20% as compared to the same period in 2013.

The supply imbalance is not going unnoticed by providers. Currently, multiple wholesale providers, including DuPont Fabros and QTS Technologies, have announced plans to add meaningful amounts of supply over the next 18 months. Additionally, the market has seen a few new entries including:

- New Continuum Data Centers, which acquired a partially complete data center development located in West Chicago and will deliver its first phase this summer;
- ByteGrid, which acquired (via partial sale leaseback) CNA's corporate data center in Aurora and began to market unleased capacity this year; and
- Forsythe Technology, which has announced plans for a multi-phase data center in Elk Grove set to deliver conditioned space sometime in 2015.

Notably, a number of the major retail colocation providers are announcing or are actively working to identify solutions for significant expansion of their footprint in both downtown and suburban locations.

The outlook for data centers in Chicago remains positive. Demand is trending up and the future supply currently under construction does not appear to be sufficient to correct the existing supply and demand imbalance. Additionally, with meaningful development activity, we expect to see more geographically agnostic data center users evaluating the Chicago market, supporting greater leasing momentum.

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# State of the Market - Primary Market Chicago (cont.)

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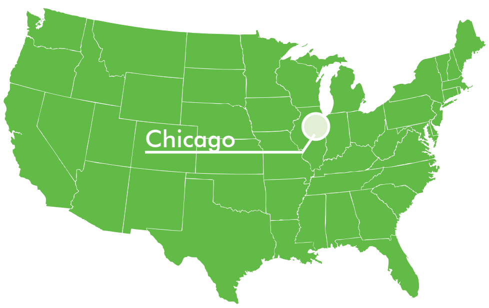


## NOTABLE MARKET ACTIVITY

- DuPont Fabros announces plans to expand in Elk Grove with its CH2 facility located across Busse Road from CH1. Plans call for a 335,371 sq. ft. building which will provide 25.6 MW of critical load capacity. Construction of the first, 7.1 MW critical load phase of CH2 is scheduled to begin in Q3 2014 and is projected to be complete by mid-2015.
- Verizon renewal of its lease at Digital Realty's data center located at 600 Federal Street.
- Equinix renewal of its long term lease in Digital Realty's data center located at 350 E Cermak.
- QTS Technologies acquires the former Chicago Sun-Times printing and distribution facility located at I-55 and Ashland Avenue.

| | Minneapolis/St. Paul | Chicago |
|---|---|---|
| Colocation Market Size | 30,000 RFSF | 977,000 RFSF |
| Current Vacancy | 10,000 RFSF Wholesale | 33,000 RFSF |
| Under Construction | No new construction in the pipeline | 49,600 RFSF / 6.3 MW |
| 2014 Deliveries | 10,000 RFSF / 1.2 MW | 32,000 RFSF / 5 MW |
| Office Market Size | 68 M SF | 236 M SF |
| Key Industries | Healthcare, Medical, Technology & Finance | Finance, Legal Services, Manufacturing, Food Processing |

Source: CBRE Data Center Solutions Group, Q2 2014

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# State of the Market - Emerging Market Minneapolis/St. Paul

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Minneapolis/St. Paul has historically been an enterprise data center market with users such as Target, United Health Group, US Bank and Thomson Reuters building and owning their own data centers. Until recently, Minneapolis/St. Paul has been underserved by enterprise-grade colocation providers with the majority of existing colocation options offering less than enterprise-grade infrastructure while demanding premium pricing. This landscape in Minneapolis/St. Paul is quickly evolving in response to the market's supply and demand imbalance, as well as notable new tax incentive legislation. As of year-end 2013, only 1.8 MW of colocation capacity was available in the seven-county region; however as of Q2 2014, there is 7.7 MW of concurrently maintainable colocation capacity that will be commissioned by mid-2015. The influx of colocation providers to the market is also driving improved network pricing and reliability as carriers now need to compete at these facilities.

The delivery of these new offerings is opportune due to expected increases in demand for colocation space as companies realize the benefits of outsourcing including improved economics, flexibility, speed to market, increased security and the ability to focus on their core business.

End users will benefit from as much as a 30% drop in pricing throughout the second half of 2014 and into 2015 as the correction in the market takes effect. Beyond rent, electricity rates will also impact pricing between alternatives as electrical rates achievable through existing providers range from \$0.071/kWh to \$0.076/kWh plus taxes. Minnesota recently passed data center tax incentive legislation that provides for sales tax exemption on IT infrastructure, software, facility equipment and electricity consumption through June 2042 with minimum thresholds of 25,000 sq. ft. and \$30 million invested within four years. The incentive allows for providers and their tenants to pool their investments to meet these thresholds. With the majority of local users unable to qualify for the incentive on their own, they will find the economics of colocation much more appealing. Incentive estimates may equate to savings of approximately \$68/kW per month. Minneapolis/St. Paul is well positioned to capitalize on the enterprise and colocation markets alike due to its competitive marketplace, new tax incentive legislation, improving fiber network, business-friendly atmosphere, low risk of natural disasters and cool temperatures.

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# State of the Market - Emerging Market Minneapolis/St. Paul (cont.)

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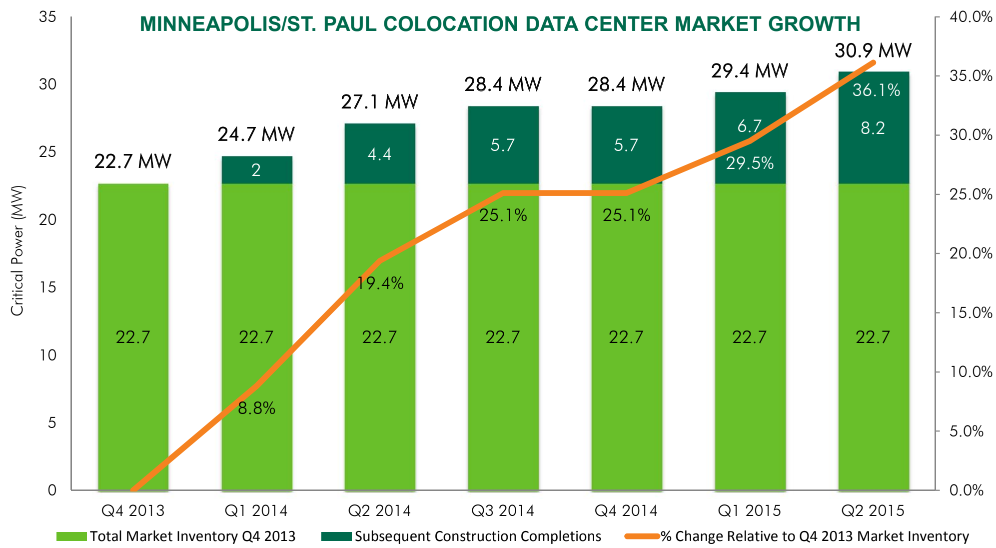


Source: CBRE Data Center Solutions Group, Q2 2014

## NOTABLE MARKET ACTIVITY

- ViaWest retrofitted a 158,000 sq. ft. manufacturing shell and is currently commissioning the first 2 MW of its 9 MW development.
- Compass commissioned the first CenturyLink Solutions pod in Shakopee consisting of a 25,000 sq. ft. data center holding 1.2 MW and has plans for an additional 3.6 MW of capacity.
- Stream built a 73,000 sq. ft. data center in Chaska and is commissioning the first of three 1.2 MW private data center suites. Their site can also accommodate a second data center facility.
- DataBank acquired an 88,000 sq. ft. building in Eagan with plans to convert it to a data center which will have 6 MW of critical load.
- A former American Express and Ameriprise facility is now on the market for sale. The 541,000 sq. ft. property is currently capable of providing 2.7 MW of commissioned critical load.

## ABOUT THE DATA CENTER SOLUTIONS GROUP

CBRE has the world's only fully integrated data center real estate team, offering strategy, acquisition and disposition representation, project management and facilities management from a single provider. Our Data Center Solutions Group has experience in primary, secondary and tertiary mission critical markets across the globe. We have the tools and knowledge to make your project successful regardless of location. With over 100 data center acquisition/ disposition specialists, 4,200 engineers, and over 300 project managers in over 75 global markets, CBRE has the global reach, resources, expertise and relationships to provide our clients with end-to-end market analysis, planning, construction, operations, maintenance, and execution capabilities. The DCSG completed over 180 MW of transactions globally in 2013, has managed over 2.5 MSF of projects over the last five years, and has over 450 Tier I to Tier IV data centers under management.

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