In Santa Clara, Lessons of History Guide New Supply

BY **RICH MILLER** - OCTOBER 24, 2016 — LEAVE A COMMENT

There is currently a limited supply of data center space in Silicon Valley, which has prompted several companies to undertake construction projects to bring additional capacity online. (Photo: Vantage Data Centers)

The Silicon Valley data center market has known boom, bust and boom again. Data center developers are applying the lessons of history as they enter a new phase of expansion, seeking to balance strong demand from hyperscale Internet companies against the risk of overbuilding in one of the nation's most competitive markets.

As a result, Silicon Valley has become a key frontier in the effort to deliver IT capacity quickly and efficiently, as the data center industry becomes the supply chain for cloud capacity.

Much of the action has focused on Santa Clara, which has seen a historic flurry of large leases in 2016.
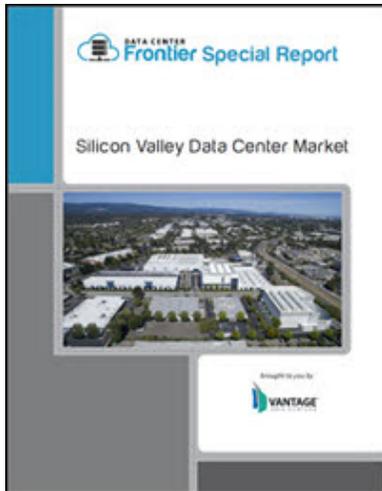
Get the *Data Center Frontier Special Report: Silicon Valley Data Center Market* Download it Now

These deals affirm that the Silicon Valley Data Center Market remains a favored destination for hyperscale cloud providers, who are scaling quickly, prompting them to lease wholesale space in Silicon Valley even as they continue to expand their company-built footprints in Oregon and Washington. Speed of deployment is a critical factor for these cloud providers, who are competing fiercely for market share and mindshare. Proximity to San Francisco is also important due to latency and performance factors in cloud service delivery to Bay Area enterprise customers.

Working with wholesale providers on large requirements – effectively build-to-suit deals – is often the most efficient way for these companies to meet their capacity needs. Amazon, Microsoft and Apple are all building their own space in the Pacific Northwest while leasing wholesale space in Santa Clara.

Cloud isn't the only demand driver. Silicon Valley is a market of markets, with strong activity in both retail colocation and wholesale data center space. Tenants use data center space for a variety of purposes, including corporate IT, research labs and high-performance computing, as well as cloud deployments.

Connectivity Drives Colocation Demand

Many retail colo customers, including content companies and social media providers, seek interconnections and network-rich data center ecosystems. Equinix is the leading player in this niche, and operates seven data centers in Silicon Valley, including a large data center campus in South San Jose. Digital Realty's Telx unit also offers interconnection services from multiple facilities in the region.

The high cost of Silicon Valley real estate has recently been creating demand for data center space. Many companies are seeking to move server rooms and technology labs out of their

headquarters, as the recent hiring boom has led to a shortage of office space on corporate campuses.

> *Silicon Valley has become a key frontier in the effort to deliver cloud capacity quickly and efficiently.*

This has created several types of opportunities for data centers providers. Vantage has done multi-MW deals with several lab tenants for "variable resiliency" space, which support high-density workloads with a non-redundant (N) power configuration. Colovore, which targets high-density customers with colo cabinets featuring water-chilled rear doors, has seen demand from Valley companies whose in-house data centers could not support cloud deployments using converged hardware.

Trends in Supply

There is currently a limited supply of data center space in Silicon Valley, which has prompted several companies to undertake construction projects to bring additional capacity online. These include:

- Vantage recently announced plans to build two new data centers on its Santa Clara campus. The first building, known as V6, is scheduled to come online next year. The total buildout for the two properties will be 21 MW. In addition, Vantage has secured land for a second major data center campus in Santa Clara, which is planned to house an additional 51 MW of IT capacity, with the first building likely to come online in 2018.
- Equinix has broken ground on SV10, a new data center on its South San Jose campus that will be built in three phases, offering 14 MW of capacity at completion. Equinix has plans to build another facility (SV11) on the property as SV10 nears capacity.
- INFOMART has just announced a 6 MW expansion of its campus in San Jose (formerly Fortune Data Centers). The company will retrofit an existing building, and has land available for additional expansion.
- CoreSite has just opened SV7 in Santa Clara, which brings 230,000 SF of space online. The facility is 62 percent leased, reflecting the strong demand for space in Silicon Valley.

A CoreSite Realty data center.in Santa Clara, Calif.. (Photo: Rich Miller)

At the close of the second quarter, there was 27.85 MW of capacity under construction in Silicon Valley, compared to 12.25 MW in the first quarter of 2016, according to datacenter Hawk.

Although this number has doubled, construction volume in Silicon Valley trails far behind other major U.S. data center markets. Northern Virginia, Dallas/Fort Worth and Chicago all have in excess of 100 MWs of capacity currently under construction.

Since demand is strong, this appears to reflect the more disciplined approach to new construction in Silicon Valley.

That's probably why wholesale providers have been reporting stronger pricing on their inventory in Silicon Valley. This has been seen most clearly in the public disclosures of return on invested capital for DuPont Fabros, which has risen by about 2 percent between 2013 and 2016.

A History of Market Fluctuations

As we noted in our discussion of demand, several recent deals have seen new supply leased up before it is built, prompting new construction announcements. Over the past several years, providers in the Silicon Valley market have been cautious about new construction and disciplined in their deployment of capital, building space in smaller increments. This is

reflected in the construction activity in major markets, where Silicon Valley has a lower volume of active projects.

This is an important lesson of history. The supply of data center space in Silicon Valley has fluctuated over the years, including a building frenzy during the dot-com boom that was followed by the bankruptcies of key players (notably Exodus, which built multiple data centers in Santa Clara).

The DuPont Fabros Technology data center in Santa Clara. (Image: DFT)

In 2008-10 Santa Clara emerged as a significant market for wholesale data center space, with Facebook leasing large footprints from multiple providers in Silicon Valley. In 2011 the market got three new players as DuPont Fabros, Vantage and Server Farm Realty opened new data centers.

The market shifted in early 2013, absorbing new supply even as Facebook announced plans to sublease its third-party space in Silicon Valley and migrate capacity to its company-built data center in Oregon. The inventory of sub-leases and newly-built space took some time to digest, but ultimately demonstrated the resiliency of the Silicon Valley market.

While some providers are in expansion mode, others remain cautious about additional development in Silicon Valley, most notably QTS and Digital Realty.

Given the attractiveness of Silicon Valley, new players in the market are always a possibility. It's worth noting that several data center players with national ambitions, Sabey Data Centers and CyrusOne, have no operations in Santa Clara. But Sabey has a substantial footprint in Washington state, where CyrusOne has recently acquired land for future build-to-suit projects.

Meanwhile, land availability is tight, and valuations on recent transactions in Santa Clara (such as Irvine Company's purchase of a 32-acre AMD campus for a reported $175 million) are steep. It remains to be seen whether new entrants will emerge.

This the second excerpt from the Data Center Frontier Special Report: Silicon Valley Data Center Market. You can download the full report from the Data Center Frontier White Paper Library compliments of Vantage Data Centers. **Click here to download the report.**

About Rich Miller

I write about the places where the Internet lives, telling the story of data centers and the people who build them. I founded Data Center Knowledge, the data center industry's leading news site. Now I'm exploring the future of cloud computing at Data Center Frontier.