Executive Summary

The global colocation market continues to be remarkably robust, even in the face of the broader economic slowdown. The retail sector, in particular, shows consistent growth in both established and nascent markets. Many key metropolitan areas have little site availability, and large and small operators alike are rushing to expand capacity.

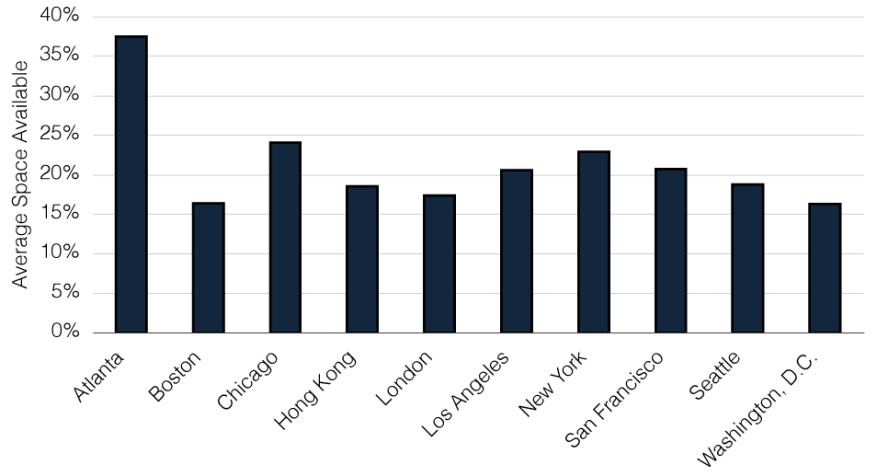
Colocation refers to shared data center space for power, cooling, and network interconnection. A diversity of entities, spanning carrier networks, content providers, private academic networks, government organizations, investment firms, and numerous other types of networks require such shared space. TeleGeography's *Colocation Database* is an online directory containing profiles of 2,223 colocation sites around the world. The analysis focuses on the retail colocation market, which consists of operators who offer relatively low-capacity, short-term leases to multiple clients in a given data center. The analysis is based on 763 retail colocation site updates in 2011.

Metro Capacity

Respondents to TeleGeography's colocation survey indicate that there is relentlessly increasing demand for retail colocation space. Customer uptake of server space continues to outpace development of new facilities and expansion of existing usable space. In nine out of ten metro areas, less than 25 percent of existing retail colocation space is available for lease (see Figure: Average Colocation Space Available in Select Metro Areas, 2011). Five metro areas, including Washington, D.C., London, Hong Kong, Seattle, and Boston are limited to under 20 percent availability.

FIGURE 1

Average Colocation Space Available in Select Metro Areas, 2011



Notes: Based on data collected by TeleGeography in 2011 from survey responses and public information. Percentages represent weighted average floor space, in order to account for the relative sizes of sites reporting.

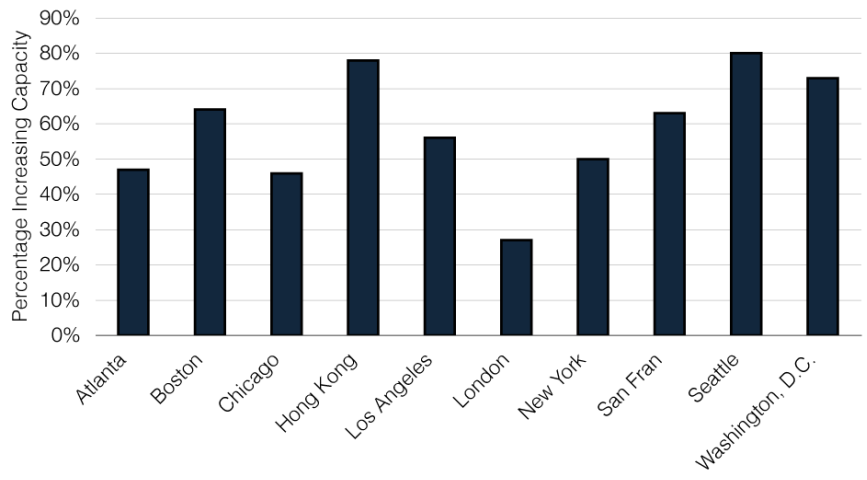
Source: TeleGeography

Operators in several metro areas have much less available colocation capacity in 2011 than they did in 2010. Washington, D.C. saw available space drop by 45 percent from 2010, falling from about 30 percent vacancy to just 16 percent. While 36 percent of existing retail colocation space in New York was available for lease in 2010, only 23 percent was available in 2011. Availability in London dropped by 26 percent in the same period.

Metropolitan areas where colocation space is limited are often the same areas where new development is taking place on a large scale. In the past, high demand for colocation space in these metro areas has quickly run up against supply constraints, even after extensive new site buildout. Operators anticipate that heavy demand will continue. Among sites surveyed, operators most often indicated intentions to expand capacity in the next two years in Hong Kong, Seattle, and Washington, D.C. (see Figure: Percentage of Respondents Planning to Increase Presence by Metro Area).

FIGURE 2

Percentage of Respondents Planning to Increase Presence by Metro Area



Notes: Based on data collected by TeleGeography in 2011 from survey responses.

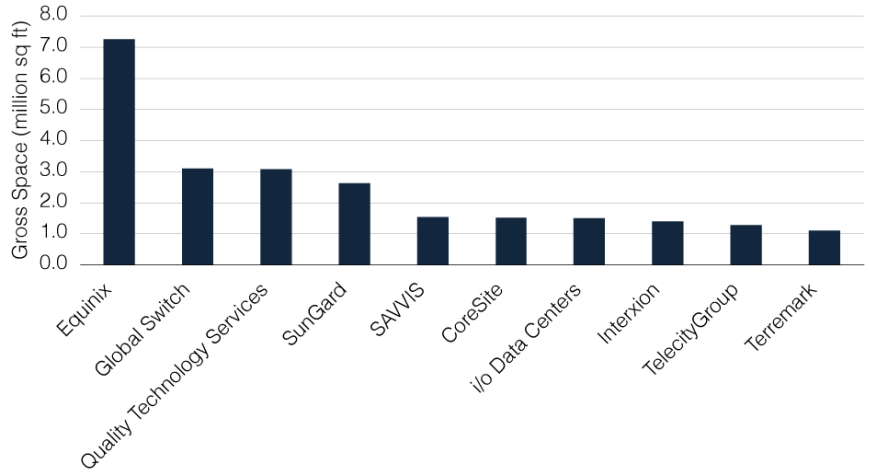
Source: TeleGeography

Providers

Of the retail operators included in TeleGeography's *Colocation Database*, Equinix controls the most real estate. Its gross colocation space grew nearly 11 percent, increasing from 6.6 million square feet in 2010 to 7.3 million square feet in 2011 (see Figure: Largest Operators by Gross Floor Space, 2011). Global Switch has a large presence as well, with just over 3 million square feet. Each of the ten largest retail colocation operators covered in this study controls over 1 million square feet of space, while the largest 15 operators cumulatively control about 27.2 million square feet of data center space.

FIGURE 3

Largest Operators by Gross Floor Space, 2011



Notes: Based on data collected by TeleGeography in 2011 from survey responses and public information. Companies that requested data confidentiality are not shown.

Source: TeleGeography

A few colocation providers have extensive capacity in multiple hub telecom markets (see Figure: Largest Operators in Select Metro Areas, 2011). Global Switch and TelecityGroup have sizable footprints at European hubs, while Coresite and Terremark are strongly represented at U.S. hubs. SAVVIS and Telehouse have the distinction of being well-represented on both sides of the Atlantic, and Equinix is among the largest operators in every European and U.S. telecom market depicted here.

FIGURE 4

Largest Operators in Select Metro Areas, 2011

	Gross Floor Space (sq ft)	Gross Floor Space (sq m)
London		
Global Switch	957,590	88,963
Telehouse	517,647	48,091
Equinix	491,588	45,670
TelecityGroup	411,461	38,226
SAVVIS	110,360	10,253
New York/ New Jersey		
i/o Data Centers	831,000	77,202
Equinix	823,779	76,532
Sungard	378,000	35,117
Telehouse	307,000	28,521
telx	299,202	27,797
Paris		
Telehouse	796,529	74,000
Global Switch	557,118	51,758
Interxion	289,323	26,879
Equinix	238,959	22,200
TelecityGroup	200,209	18,600
Bay Area/ Silicon Valley		
Equinix	750,430	69,717
SAVVIS	282,307	26,227
Coresite	210,721	19,577
Quality Technology Services	135,000	12,542
Terremark	116,000	10,777
Washington, D.C.		
Equinix	711,279	66,080
Coresite	307,137	28,534
SAVVIS	169,483	15,745
Terremark	150,000	13,935
Latisys	72,000	6,689

Notes: Based on data collected by TeleGeography in 2011 from survey responses and public information. Companies that requested data confidentiality are not shown.

Source: TeleGeography research

Major colocation operators have expanded their capacity across the globe over the past two years (see Figure: Operators with Largest Amount of New Colocation Site Capacity by Region, 2009–2011 (sq ft)). While most sizable providers have focused on a single region

for new development, Equinix has greatly expanded its footprint in each major region of the globe, adding nearly 1.5 million gross square feet of new colocation site space since September 2009.

FIGURE 5

Operators with Largest Amount of New Colocation Site Capacity by Region, 2009–2011 (sq ft)

Operator	North America	Europe	Asia-Pacific	Latin America	Net Increase
Equinix	373,829	627,288	342,016	155,643	1,498,776
Quality Technology Services	1,370,000				1,370,000
i/o Data Centers	831,000				831,000
Interxion		162,524			162,524
European Data Hub		161,459			161,459
KVH			151,341		151,341
TelecityGroup		123,785			123,785
SAVVIS	77,968		18,629		96,597
Gyron Internet		88,000			88,000
Internap	73,000				73,000

Notes: Based on data collected by TeleGeography in 2011 from survey responses and public information. Companies that requested data confidentiality are not shown. “New Colocation Capacity” refers to square footage of new colocation sites launched by operators between September 2009 and September 2011.

Source: TeleGeography research

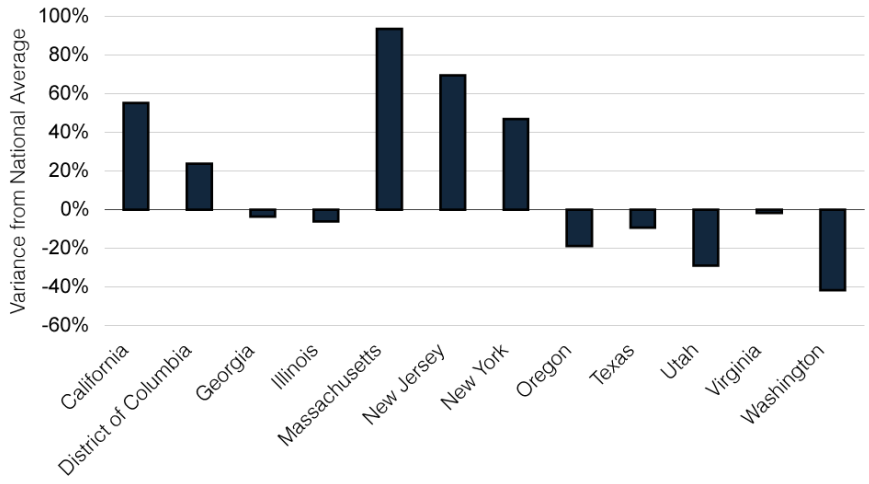
Power Costs

Power is a particularly variable and costly service component. Power costs are rising as a percentage of overall colocation costs, due to the requirements of increasingly sophisticated servers in condensed rack space. Colocation operators pay a premium for power in locations where it is a scarce commodity, and conversely they pay significantly less where power is more abundant or where prices are tightly regulated. These premiums or discounts are then passed on to colocation customers.

Industrial power rates in the U.S. are among the lowest in the world, averaging less than half the cost of industrial rates in Europe. In locations like New York and California, operators and customers are willing to pay utility prices that are much higher than the U.S. national average in order to locate in hub commercial markets (see Figure: Variance of Industrial Utility Rates in Select States). Conversely, colocation operators in Washington state, Oregon, and Utah capitalize on the availability of abundant, cheap power to attract colocation clients despite their relative lack of proximity to major communication hubs.

FIGURE 6

Variance of Industrial Utility Rates in Select States



Notes: Average industrial rates as of April 2011.

Source: TeleGeography, U.S. Energy Information Administration

The content on the preceding pages is a section from TeleGeography's Colocation Database

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