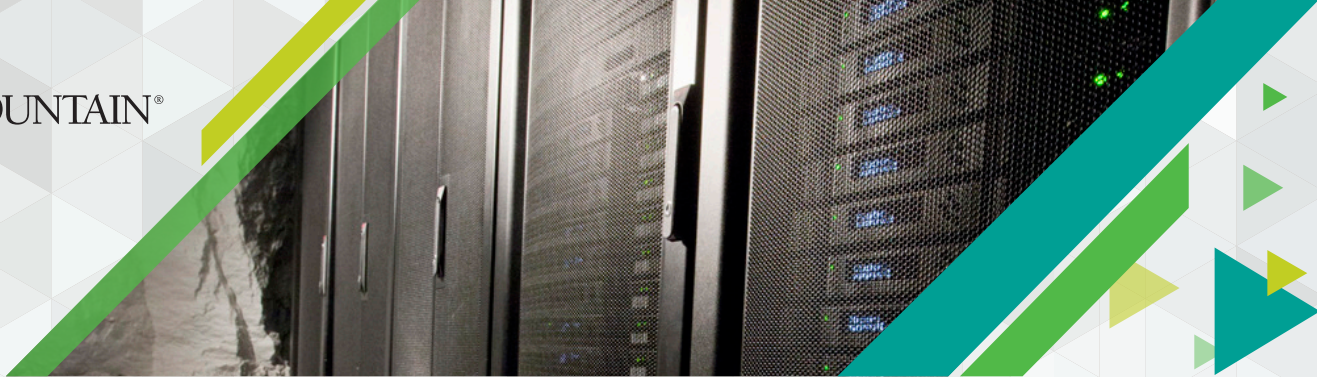
IRON MOUNTAIN®



DATA CENTER GUIDE FOR CORPORATE REAL ESTATE EXECUTIVES

WHY THE SHIFT TOWARD COLOCATION?

- **Lower Total Cost of Occupancy.** Annual cost for an internal data center can be up to 10% higher than leasing colocation.
- **Vacancy Rates Up ↑ Rental Rates Down ↓.** National vacancy rates have increased from 10% to 30% during the last three years and rental rates have decreased by 20% in certain markets.
- **Improved Energy Efficiencies.** With data doubling every two years, internal data centers are typically devoting more space and power to storage, which is expensive and inefficient.
- **Opportunity to Invest in the Core Business.** Capital is too valuable to over spend on building an internal data center when providers can build for half the cost.
- **Compliance Support.** Stringent compliance and e-discovery requirements mean organizations must store and manage more data over longer periods of time, which strains legacy data centers.
- **High Reliability and Availability.** Colocation providers offer a range of services and features that are designed to minimize downtime and maintain high availability of applications, while offering major improvements in disaster preparedness.

KEY COMPONENTS TO KNOW ABOUT DATA CENTER REAL ESTATE

- Data Center pricing models are on a per kilowatt basis (not square foot).
- Locations that have utility rates less than $.07/kWhr provide significant savings.

MARKET	PUC COST PER KWH	$/KW OF IT LOAD	PUE (COOLING FACTOR)	MONTHLY COST/KW WITH PUE
CHICAGO	$0.065	$47	1.4	$66
BOSTON	$0.140	$102	1.3	$133
NEW JERSEY	$0.129	$94	1.5	$141
SJC	$0.090	$65	1.4	$92
IRON MOUNTAIN UNDERGROUND	$0.054	$39	1.2	$47

- Power Usage Effectiveness (PUE) measures the efficiency of the data center.
- Internal data centers avg. PUE of 1.8-2.1, while Tier 3 data centers avg. 1.2-1.5.
- Tier rating measures redundancy (Tier 3 is becoming standard).

WHY SHOULD CORPORATE REAL ESTATE BE INVOLVED?

- Contracts have transitioned from SLAs to leases
- Ensures the transaction structure is aligned with business goals – e.g., Capex vs. Opex
- Tax incentives are ignored; 17 states have customized incentives for data centers
- Pursue a Sale-lease back: As the interest level from enterprise users to sell their legacy data center increases, cap rates approach 7.75%
- Good money after bad; time to euthanize the legacy data center and embrace new technology
- The pricing model is challenging to understand and companies oversubscribe on power
- Migrations are expensive and concession packages that include installation allowances and beneficial occupancy are overlooked
- Ambiguity within contract language often times shifts responsibility to the tenant for future capital expenditures – e.g., replacement of a shared generator
- Insufficient research on certain providers' capital structure can be costly in terms of investment and risk.

COMMON MYTHS FROM IT ABOUT OWNING AND BUILDING INTERNAL DATA CENTERS

- Less expensive
- More predictable cost structure
- More control
- Easier to plan for expansion
- Restrictions around outsourcing

WHEN TO ASK QUESTIONS ABOUT YOUR DATA CENTER

- During an office relocation
- If the data center was built prior to 2007
- 18 months before outsourcing contract expires
- As compliance and e-discovery requirements become more complex
- When an unexpected outage occurs

Visit www.ironmountain.com/datacenters to view Iron Mountain's data center services.

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