Data center planning and construction risks | Marsh

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Data center construction risks start before you break ground. Planning can significantly influence the project's risk profile.

The pace of data center development is picking up, driving data center owners and developers to accelerate timelines to keep up with demand. Developers, investors, and operators are often under pressure to secure sites, lock in power, move through financing, and deliver faster than standard construction insurance programs were built to absorb.

These decisions, many of which are made before ground has been broken, can materially define the project's risk profile for years to come. Hard-to-reverse agreements may lead to substantial financial exposures even before their risk implications are fully understood.

Addressing these risks effectively can require a clear understanding of where exposure is building and a practical strategy to address it before those decisions are locked in. Marsh's data center specialists can help you better understand the risks shaping your project before construction begins and throughout the build-out. Fill out the form below to learn more.

It all starts with site selection

Site selection can be one of the most consequential risk decisions in a data center's lifecycle.

Having access to sufficient power does not always mean that you have found the right site for a data center. The ideal site is usually one that is insurable, is attractive for lenders and investors, can be accessed by construction teams, and is viable for long-term operations.

A site can look attractive on paper and still carry hidden costs, be prone to delays, or have insurability issues. In a fast-moving market, that is easy to miss until the project is already committed and sometimes underway.

That is why data center site selection should be approached as an early risk and diligence exercise, not just a land search.

Marsh's team of data center specialists can help you take a risk-informed lens to site selection before decisions are locked in. That includes analysis around natural catastrophe, power, infrastructure, contractual considerations, and the broader practical question of whether the site supports the project you are building.

Compressed timelines can lead to new risks

The market is moving faster than ever before. AI demand and competition for capacity are compressing construction schedules across the sector. Projects are being pushed to move faster through procurement, energization, contracting, and delivery.

This unprecedented speed can create exposure in multiple areas, including pressure to procure long-lead equipment, challenges to secure the needed skilled workforce, and less tolerance for delays once revenue, financing, and customer obligations are in place.

For investors, developers, and operators, a challenge often lies in determining whether their insurance program actually matches the speed being promised to lenders, counterparties, and future tenants and will respond to losses.

What drives construction cost and timeline risk

During the construction process of a data center, risks are often driven by a number of recurring pressures, which can include:

- **Scope and density changes.** Evolving workload assumptions, cooling requirements, and power needs can change the project after early decisions are already made.
- **Procurement and equipment lead times.** Delays in key components can shift completion dates and potentially lead to contract breaches.
- **Labor availability.** Skilled mission-critical labor may be in short supply, particularly in markets where multiple large projects are competing for the same workforce.
- **Contractor capacity and performance.** Availability of experienced contractors is not uniform across geographies.
- **Power timing.** Developers may be able to build on one timeline, while utility and interconnection realities move on another.

These issues can shape a data center's risk profile well before it can welcome tenants, with delays potentially leading to financial consequences.

Insurability and financing now start earlier

Considering the costs involved, lenders and investors are requesting increased visibility into how a site is expected to perform under stress. Because of this, due diligence, valuation, and loss analysis are becoming more important — and often requested before construction is fully underway.

To be better positioned to answer questions, owners and developers can conduct a probable maximum loss (PML) analysis, which provides a defensible estimate of the largest reasonably foreseeable loss under defined scenarios. That figure can help clarify the scale of exposures and support more informed decisions around insurance limits, financing, and capital planning.

This data can help you right-size insurance coverage and strengthen discussions with lenders and investors who can be more confident that their capital investment is adequately protected.

Read more about PML studies and other cost-containment strategies.

Understanding builder's risk and delay in startup coverage

Certain exposures can have an outsized impact on a project during construction. Physical damage that impacts materials, equipment, or the entire site can lead to significant financial losses. It can also delay completion times. And with tight delivery schedules, these delays can become even more expensive than the repairs themselves, potentially leading to breaches of customer commitments and loss of revenue.

Builder's risk insurance and delay in startup (DSU) coverage can address these exposures. While

builder's risk is focused on the physical damage itself, DSU is geared to address the financial consequences of the delay that follows.

Builder's risk insurance is designed to cover physical loss or damage to a project while it is under construction, subject to policy terms. This can include damage affecting insured construction works, materials, or related project assets during the build phase.

Delay in startup (DSU) insurance is intended to address the financial loss that can result when physical damage from an insured event delays completion and pushes back the start of revenue generation.

Due to their potentially critical role in protecting a data center construction project, it is best to start discussions to design builder's risk and DSU programs that reflect the project's real exposures early on. These early discussions can enable the design of insurance solutions that reflect the scale of the asset, the expected construction timelines, and obligations that could be impacted in the case of delays.

Marsh's Nimbus goes a step further, intending to provide lifecycle-spanning construction protection that follows the asset from construction to operations.

Contract structure decides who holds risk

Contracts often determine how risk is allocated across a project. But if they are entered into without a clear understanding of the underlying exposures and their potential impact, they can create significant financial and operational consequences.

Power purchase agreements, service-level agreements, construction contracts, and related project documents often lock in delivery dates, performance standards, and liability assumptions early. If those obligations are not aligned across the project, owners and developers can end up carrying more risk than expected.

Frequent contract challenges include:

- Delivery obligations that are tighter than is realistic
- Delay exposures that are not passed down effectively
- Performance risks that sit with the wrong party
- Contract language that does not align with what is insurable
- Obligations that become expensive to unwind once the project is moving

When it comes to contracts, the structure set now can influence the project for years. Marsh's contracts advisory specialists may be able to help you streamline that structure early, before misalignment becomes embedded in the build and evolves into financing challenges.

These tools may help protect the project while freeing up capital for other essential investments throughout the construction process.