Deloitte.

Data Centers at the edge

Why urban real estate is emerging as the next AI infrastructure layer

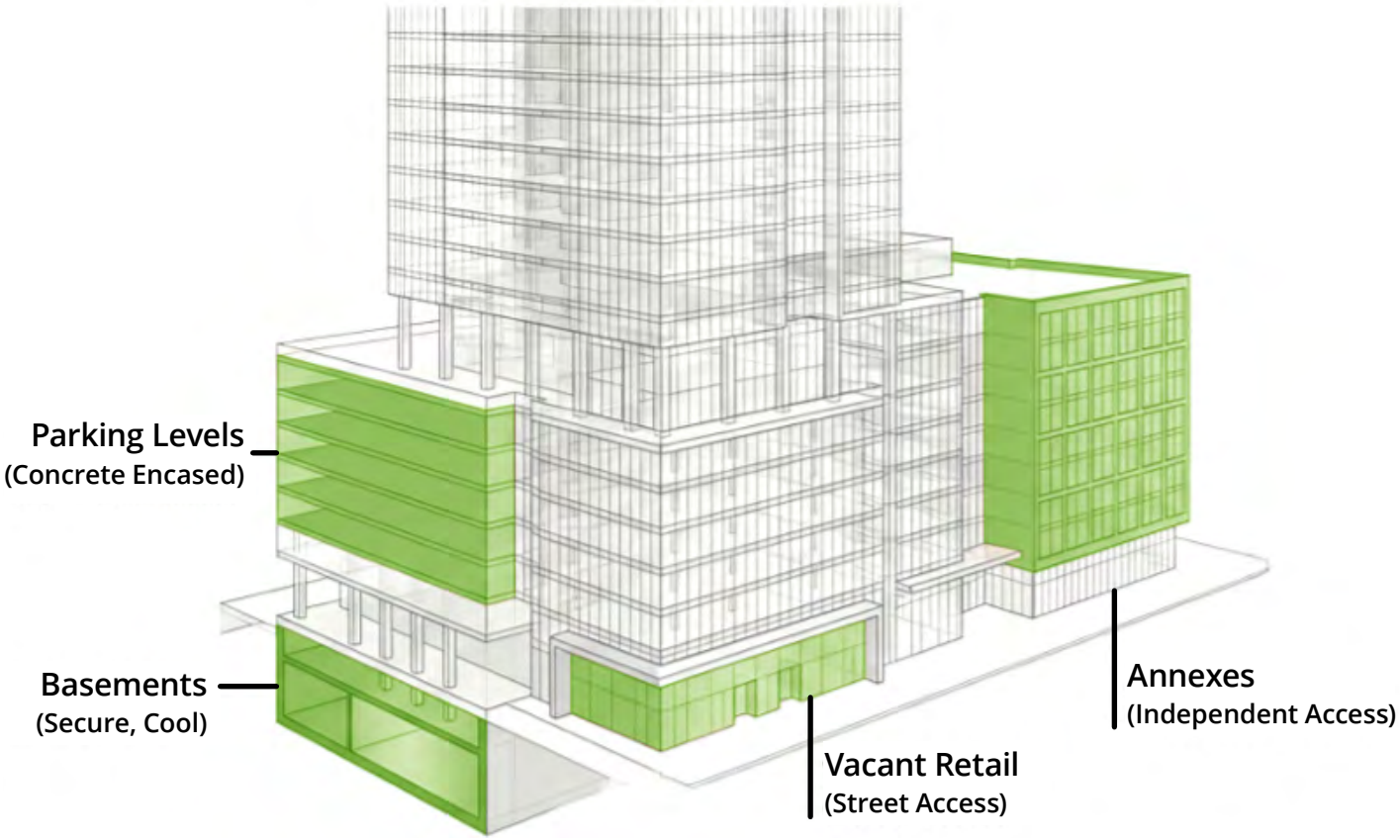
As AI grows, the next constraint will be less about technological innovation and more about physical capacity: where compute (computing power) can be hosted, powered and connected.

The first wave of investment focused on large, hyperscale campuses built for training AI models. That will continue, but longer-term demand will be broader. As AI becomes part of everyday business operations, value will increasingly come from inference workloads (real-time AI processing), which need responsive, reliable compute, located close to users, enterprises and data sources.

Uptime Institute notes that, while attention is currently focused on a small number of specialist training facilities, most data centers are likely to invest more in inference support over time. This is where the need for AI infrastructure will impact the real estate market in a very practical way.

The global commercial real estate sector already controls high volumes of urban, grid-connected and fiber-adjacent space. In many cities, that includes under-used or vacant basements, parking levels, retail floors, annex buildings and older industrial assets. Although these spaces were not originally built for AI, many are located exactly where demand for AI inference is greatest.

Global portfolios already control large volumes of grid-connected, fibre-adjacent space. These assets, though not built for AI, sit in the exact locations where inference demand is highest.



Market analyses confirm this important trend. For example, the International Energy Agency (IEA) projects that global electricity consumption by data centers will roughly double to about 945 TWh by 2030, with AI as the most significant driver. It also observes that **demand from AI-optimized data centers is projected to more than quadruple by 2030**. Industry analysts expect the global data center sector to expand at a 14% CAGR through 2030, and estimate that nearly 100 GW of new data center capacity will be added between 2026 and 2030—effectively doubling global capacity—driven by **33% annual growth in demand for AI-ready capacity**.

These figures matter for real estate because they point to a simple conclusion: **not all future AI demand can be met effectively by remote, greenfield hyperscale campuses alone**.

For many enterprise AI use cases, proximity (distance from data center to data consumer) matters. AI-enabled customer service, building operations, logistics optimization, fraud detection, healthcare workflows and smart city applications all benefit from lower latency and less complex data transfer. Although this does not require every building to become a large-scale AI training site, it does create a strong case for tier 2 and tier 3 AI facilities focused on urban inference. For asset owners and developers, this offers you a high-value proposition, supported by current market indicators:

- Global data center trends signal that market vacancy rates are less than 2%, indicating extreme supply tightness and strong leasing momentum.
- At current co-location benchmarks, 1 MW of AI-ready capacity can generate roughly $2.2 million annually, translating into a rent-equivalent revenue of about $2,300/sqm/year, three times higher than Grade A office benchmarks (region dependent).

- **Operational Inference**
- **Continuous Use**
- **Distributed**

That makes urban AI one of the most under-recognized opportunities in commercial real estate today

There are four reasons why this matters:

01

Urban inference can create performance value. Proximate (near-distance) computing can improve responsiveness and reduce dependence on sending workloads to distant cloud facilities. As AI moves from experimentation into live operational processes, that performance gap becomes commercially meaningful. For financial institutions such as banking, trading, and stock exchanges, nanosecond communication delays, due to remote AI systems, can mean millions of dollars a year. Time-to-compute is money.

02

Urban deployments can unlock energy integration opportunities. AI infrastructure is energy-intensive, but distributed inference facilities generally have a different energy and computing profile from hyperscale training clusters. In dense urban environments, this creates opportunities to integrate data center waste heat into building systems or district heating networks, where policy and infrastructure permit. The IEA has highlighted the potential of data centers as a valuable waste heat source for district heating locally. This is particularly relevant in parts of Europe where decarbonization and heating infrastructure planning are increasingly linked.

03

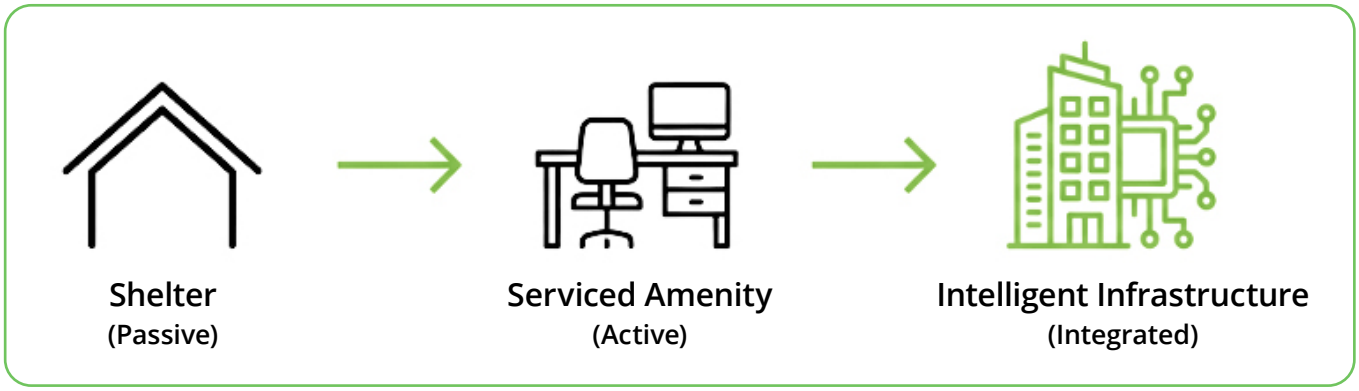
It changes how assets are valued. Power access, substation proximity, fiber routes and upgradeability are becoming more material to underwriting. In practice, this means some assets will gain strategic value even if they were previously considered secondary, while others may face a discount if they cannot support future digital infrastructure requirements.

04

An evolved tenant and revenue model. This is not only a space conversion play, it is a business model shift. An AI-enabled building can diversify income by combining traditional tenancy with digital infrastructure revenues (power capacity, co-location style hosting, connectivity), making the asset more attractive to AI-first occupiers.

The market is already moving towards power-based monetization rather than floor-area economics, which reflects the pricing of digital infrastructure based on performance capacity (how much compute is generated on site), rather than square meters occupied. This means that CRE landlords have a vested interest in higher data center performance, where revenue-share models tighten commitments on SLA performance (e.g., power quality, resilience, maintenance windows, response times).

Power availability is already a limiting factor in many markets where grid constraints create a major challenge to sector growth. Recent utility reporting also shows that large-load demand is rising fast. Reuters reported that Southern Company has already contracted 10 GW of large-load customers and is seeing connection interest totaling around 75 GW, much of it tied to data center demand. This has immediate implications for site selection, permitting strategy, and capital planning.



AI compute is no longer just a tenant category; it is a layer of the building itself. Successful repositioning means becoming part of the digital infrastructure that supports tenant operations.

For corporate real estate leaders, developers and operators, the practical response is not to chase every data center trend, but to assess your portfolio's readiness with discipline.

This raises new and important questions for due diligence:

01 Is the asset's power potential real, or only perceived? Determine what is available today, what can be upgraded, and on what timeline. Many assets look promising until power diligence is done properly.

02 Is the asset in the right demand geography for AI inference, not just in a "good" real estate location? Determine if the asset sits near enterprise clusters, carrier-dense fiber routes and latency-sensitive consumers. This requires mapping digital demand, not just traditional demographics and tenancy comparables.

03 Can the building be retrofitted economically and safely for sustained operations? You should assess cooling strategy, structural constraints, risers, plant space, acoustics, access and physical security. Your focus should not be the technical feasibility of retrofitting, but the commercial viability of achieving the required performance level.

04 Will the market and regulatory environment support execution at speed and scale? The opportunity can be lost through permitting, utility approvals, policy friction or stakeholder resistance. In this market, speed-to-readiness is a competitive advantage.

Conclusion

The strategic shift is that AI compute will no longer be just a tenant category. It is becoming a crucial factor, which shapes highest and best use, capital allocation, asset value and resilience planning across portfolios.

The real estate sector should not aim to emulate hyperscale infrastructure overnight. But, in the next cycle, by identifying and activating urban assets as distributed AI infrastructure, you will be better positioned to capture demand, protect relevance and create differentiated value.

AI compute is not replacing real estate strategy. It is rewriting the criteria by which future-ready real estate will be judged.

Author

Marco Macagnano
Director
UAE - Dubai
mmacagnano@deloitte.com

Deloitte.

MAKING AN IMPACT THAT MATTERS since 1845