

Data centre construction cost increases of up to 8% across region year-on-year but development shows no sign of pausing

- Average construction cost increase of 4.9% across Asia Pacific key markets
- Mature markets dominate data centre land, construction cost indexes
- Data centre development activity across the region remains “significantly elevated”

SINGAPORE, November 7, 2023 – Japan has been named the most expensive market for data centre construction while Singapore has topped the rankings for the most expensive land costs in Asia Pacific, according to a new report.

Mature markets dominated the top five positions for both the Regional Construction Cost Index and the Regional Land Cost Index included in Cushman & Wakefield’s inaugural Data Centre Construction Cost Guide.

Report author and **Head of Asia Pacific Data Centre Construction, Project Development Services, James B. Normandale** said:

“The market is facing some of the highest development rates in data centre market history. This is the result of persistent – although improved – supply chain disruption and construction market inflation, as well as higher capital lending rates across most markets within Asia Pacific. Despite the increased costs, development activity across the region remains significantly elevated as the sector continues to grow in response to secular trends, industry incentives, regulatory relaxation, and interest from investors who see opportunity in the disparity between future population needs and existing IT capacity.”

Rank	Market	Low	Medium	High	Annual YOY Increase
1	Japan	\$10.05	\$12.73	\$15.41	+7.5%
2	Singapore	\$8.87	\$11.23	\$13.60	+8.0%
3	South Korea	\$7.29	\$9.23	\$11.17	+4.0%
4	Greater China (Hong Kong)	\$7.26	\$9.20	\$11.13	+4.0%
5	Australia	\$7.24	\$9.17	\$11.11	+3.5%

Based on a medium specification, 10-50MW data centre build ([refer p19 of report](#)).

Demand and domestic pressures influence land cost

Singapore's limited land supply and government restrictions on data centre development saw the city-state top South Korea, Hong Kong China, Japan and mainland China for the most expensive market for land cost. The Regional Land Cost Index was calculated based on suburban industrial land (medium range) rather than central business district (high range) or industrial outskirts (low range) and based on the average cost of key cities within a market. Among a comparison of cities (see Figure 3), Singapore recorded the top price of USD11,573 per square metre (sqm), above Seoul (USD10,525) and Busan (USD8,865).

Market	Cost (USD/sqm)
Singapore	\$11,573
South Korea	\$9,695
Greater China (Hong Kong)	\$3,418
Japan	\$3,320
Greater China (Mainland)	\$2,966
Greater China (Taiwan)	\$1,889
Philippines	\$1,473
India	\$1,233
Malaysia	\$1,023
Thailand	\$987
Australia	\$554
New Zealand	\$463
Indonesia	\$186
Vietnam	\$168

Based on suburban industrial land and averaged across key cities within a market ([refer p15 of report](#)).

Development costs elevated overall

The average construction cost increase on 2022 was 4.9% across Asia Pacific. Singapore recorded the greatest increase (8%), while Australian and New Zealand recorded the smallest increase (3.5%).

City	Market	Rate (USD/sqm)
Singapore	Singapore	\$11,573

Seoul	South Korea	\$10,525
Busan	South Korea	\$8,865
Kowloon East & Hong Kong Est.	Greater China, Hong Kong	\$6,694
Beijing	Greater China, Mainland	\$4,721
Kwai Chung, Tsuen Wan, Tsing Yi, Shatin	Greater China, Hong Kong	\$4,284
Tokyo	Japan	\$3,615
Metro Manila	Philippines	\$3,588
Fanling, Sheung Shui, Taipo	Greater China, Hong Kong	\$3,213
Shanghai	Greater China, Mainland	\$3,113

Based on suburban industrial land where available ([refer p15](#)).

Key Trends Impacting the Data Centre Sector

- *Power, Location & Management*

The rise of AI and ML, while still in its infancy, is expected to drive substantial changes within the data centre sector. These technologies are increasing power consumption, rack loading requirements, and overall site capacity. Unlike traditional data centres, AI data centres for remote learning can be built between 450km and 1,000km from established data centre locations using existing low-latency infrastructure. While this may help to relieve pressure on land and power in densely populated areas, it could create labour and supply chain challenges.

- *Environmental, Social & Governance (ESG)*

There is a growing emphasis on holistic performance measurement within the sector, encompassing financial performance, ethical conduct, societal contributions, and environmental responsibility. Data centre operators are experimenting with sustainable power and zero-carbon electricity options, resulting in operational improvements and cost savings. The adoption of AI-driven software for data centre operations has started to demonstrate improvements in Power Usage Effectiveness (PUE) ratios.

- *Strategic Sourcing & Supply Chain*

Though improved, supply chain disruption driven by geopolitical uncertainty and economic unpredictability continues to impact costs. This trend is expected to persist into 2024 and has prompted the sector to adopt more conservative approaches to material and resource planning, such as multi-vendor supplier strategies.



“The data centre sector in Asia Pacific is in a dynamic phase as it undergoes further growth and innovation. The colocation market size was reported to be USD25.5 billion in 2022 and it is expected to reach USD51.8 billion by 2028 – a Compound Annual Growth Rate of 12.5%. Hyperscale cloud revenue is expected to grow at 19% CAGR through now and 2028. Investors who stay abreast of developments in the AI and ML space will be well-placed to capitalize on these growth opportunities,” said Mr. Normandale.

About the Data Centre Construction Cost Guide 2023

The guide tracks 37 key data centre locations across Asia Pacific with a comprehensive breakdown of costs covering land acquisition, advanced land clearance and demolition works, base build and fit-out construction costs. It offers a comprehensive analysis of the Asia Pacific data centre landscape, including key trends that are shaping the region's data centre sector. This is the first year that Cushman & Wakefield has published its data centre development cost data. [Read the Asia Pacific Data Centre Construction Cost Guide here.](#)

About Cushman & Wakefield

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