Xymax Real Estate Institute RESEARCH REPORT

Office Stock Pyramid 2022



Xymax Real Estate Institute hereby releases *Office Stock Pyramid 2022*, which covers the 23 wards of Tokyo (hereinafter, "Tokyo 23 Wards") and the city of Osaka (hereinafter, "Osaka City"). The Office Stock Pyramid illustrates the distribution of the rentable area and number of buildings for buildings with a gross floor area of 300 tsubo or more whose main usage is office. The data is distributed by building age and categorized by size of building.

(1 tsubo = approx. 3.3 sqm)

Main Findings

1. TOKYO 23 WARDS | Comparison between Small & Medium and Large Buildings

- The office stock at the end of 2022 is 12.98 million tsubo on a net rentable area basis, which is broken down roughly equally into small & medium buildings and large buildings, at 6.07 million tsubo (47%) and 6.91 million tsubo (53%), respectively.
- In terms of the number of buildings, the office stock in 2022 is 9,378 buildings, of which small & medium buildings account for 92% (8,620 buildings).
- The average age of the buildings is 32.9 years for the entire stock, 33.6 years for small & medium buildings, and 24.9 years for large buildings, revealing that the stock is especially aging in small & medium buildings.

2. TOKYO 23 WARDS | Comparison between 5 Central Wards and 18 Peripheral Wards

- The office stock of the 5 central wards (Chiyoda, Chuo, Minato, Shinjuku, and Shibuya Wards) consists of 6,862 buildings with a total rentable area of 9.69 million tsubo, accounting for 75% of total, while the office stock of the 18 peripheral wards consists of 2,516 buildings with a total rentable area of 3.30 million tsubo.
- The average building age is 33.1 years in the 5 central wards and 32.4 years in the 18 peripheral wards.

3. OSAKA CITY | Comparison between Small & Medium and Large Buildings

- The office stock at the end of 2022 is 2.83 million tsubo on a net rentable area basis, which is broken down roughly equally into small & medium buildings and large buildings, at 1.41 million tsubo (50%) and 1.42 million tsubo (50%), respectively.
- In terms of the number of buildings, the office stock in 2022 is 1,749 buildings, of which small & medium buildings account for 89% (1,561 buildings).
- The average age of the buildings is 34.0 years for the entire stock, 34.4 years for small & medium buildings, and 30.3 years for large buildings.

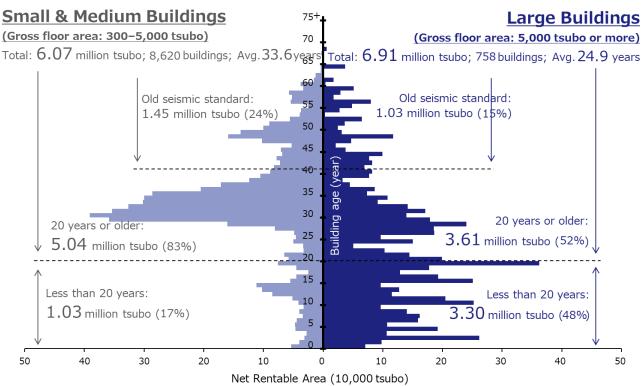


1. TOKYO 23 WARDS | Comparison between Small & Medium and Large Buildings

The office stock in Tokyo 23 Wards as of the end of 2022 will be 12.98 million tsubo on a net rentable area basis (**Figure 1**). Of this, the stock of small & medium buildings with a gross floor area between 300 and 5,000 tsubo is 6.07 million tsubo, 47% of total. Large buildings with a gross floor area of 5,000 or more account for roughly the same rentable area at 6.91 million tsubo, 53% of total.

The average building age of the entire office stock is 32.9 years. The average age of the stock of small & medium buildings (33.6 years) is older than that of large buildings (24.9 years).

Figure 1: Tokyo 23 Wards Office Stock Pyramid 2022 (Net Rentable Area)

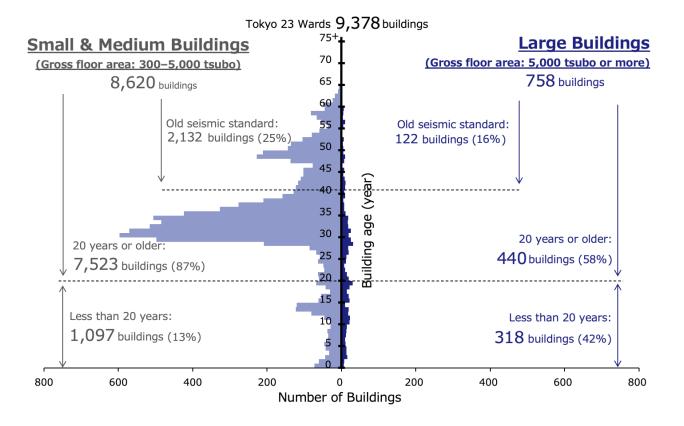


Tokyo 23 Wards 12.98 million tsubo; 9,378 buildings; Average age 32.9 years



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In terms of the number of buildings, the office stock of Tokyo 23 Wards as a whole is 9,378 buildings, of which small & medium buildings account for a majority with 8,620 buildings (92%), while large buildings number 758 buildings (8%) **(Figure 2)**.





Many small & medium buildings were completed during the bubble economy period (i.e., completed between 1986 and 1997; building age 25–36 years), with 83% (5.04 million tsubo) of the buildings aged 20 years or older. New supply has been few after the bubble economy period, with only 1.03 million tsubo of the rentable area aged less than 20 years. Buildings aged 20 years or older also account for a majority of small & medium buildings in terms of number of buildings, with 7,523 buildings aged 20 years or older and 1,097 buildings less than 20 years old.

As for large buildings, 3.61 million tsubo of rentable area are aged 20 years or older, while roughly the same amount (3.30 million tsubo) is aged less than 20 years. In terms of the number of buildings, 440 buildings are aged 20 years or older, which slightly outnumbers the buildings that are less than 20 years old (318 buildings). The difference is small, however, indicating that the supply of large buildings has continued since the end of bubble economy.



2. TOKYO 23 WARDS | Comparison between 5 Central Wards and 18 Peripheral Wards

Here we examine the office stock by sorting the 23 wards into 5 central wards (Chiyoda, Chuo, Minato, Shinjuku, and Shibuya Wards) and 18 peripheral wards. The office stock in Tokyo's 5 central wards as of the end of 2022 is 9.69 million tsubo based on net rentable area, which accounts for 75% of the entire office stock of Tokyo 23 Wards (12.98 million tsubo) (**Figure 3**). This is broken down into 4.49 million tsubo (46%) of small & medium buildings and 5.20 million tsubo (54%) of large buildings. The average age of the entire stock of the 5 central wards is 33.1 years. Small & medium buildings are aging more rapidly than large buildings, with the average age 33.7 years for the former and 25.7 years for the latter.

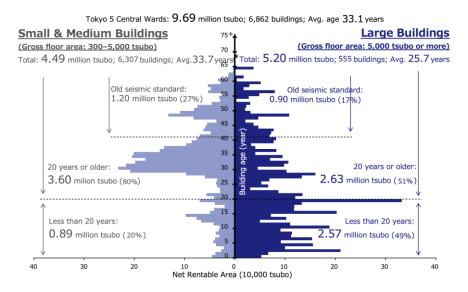
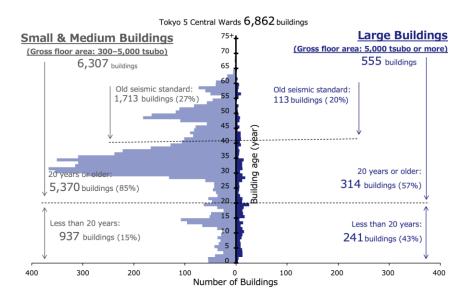


Figure 3: Tokyo 5 Central Wards Office Stock Pyramid 2022 (Net Rentable Area)

The number of buildings is 6,862, of which 6,307 (92%) are small & medium buildings and 555 (8%) are large buildings (Figure 4).

Figure 4: Tokyo 5 Central Wards Office Stock Pyramid 2022 (Number of Buildings)



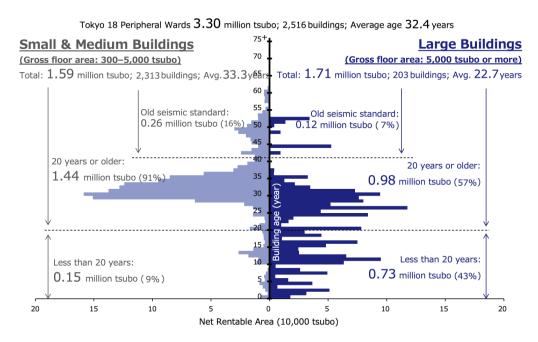
Office Stock Pyramid 2022

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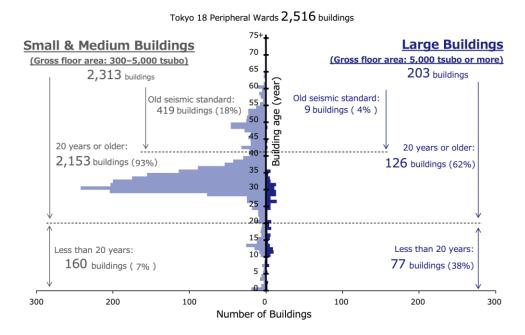
Meanwhile, the office stock in Tokyo's 18 peripheral wards at the end of 2022 is 3.30 million tsubo on a net rentable area basis, 25% of the stock of the entire Tokyo 23 Wards (12.98 million tsubo) **(Figure 5)**. Of this, small & medium buildings account for 48% with a net rentable area of 1.59 million tsubo, while large buildings account for 52% with 1.71 million tsubo. The average building age of the entire stock of the 18 peripheral wards is 32.4 years, which is not that different from the 33.1 years of the 5 central wards. By building size, the average age of small & medium buildings is 33.3 years, while that of large buildings is 22.7 years.





The number of buildings is 2,516, of which 2,313 (92%) are small & medium buildings and 203 (8%) are large buildings (**Figure 6**).

Figure 6: Tokyo 18 Peripheral Wards Office Stock Pyramid 2022 (Number of Buildings)



Office Stock Pyramid 2022

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3. OSAKA CITY | Comparison between Small & Medium and Large Buildings

The office stock in Osaka City at the end of 2022 is 2.83 million tsubo on a net rentable area basis (**Figure 7**). This is broken down roughly equally into small & medium buildings with a gross floor area between 300 and 5,000 tsubo (1.41 million tsubo; 50%) and large buildings with a gross floor area of 5,000 or more (1.42 million tsubo; 50%). The office stock of Osaka City (2.83 million tsubo) is approximately a fifth of that of Tokyo 23 Wards (12.98 million tsubo).

The average building age of the entire office stock is 34.0 years. The average age of small & medium buildings is 34.4 years and that of large buildings is 30.3 years.

In terms of building age, office stock aged 20 years or older accounts for 88% of small & medium buildings, with 1.24 million tsubo aged 20 years or older and 0.17 million tsubo aged less than 20 years, indicating that supply has been limited over the past 20 years. Among large buildings, 0.99 million tsubo are aged 20 years or older, while 0.43 million tsubo are less than 20 years old.

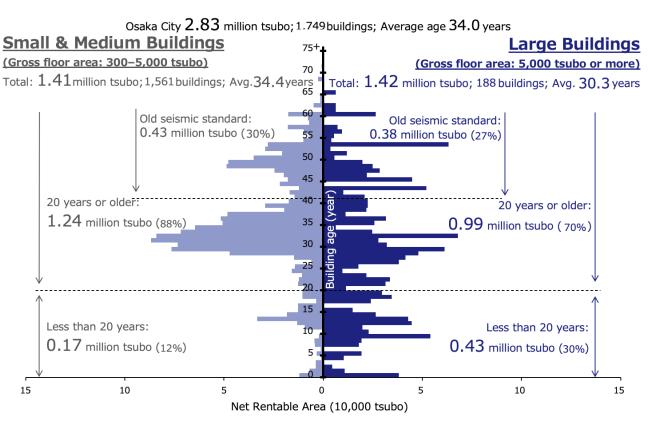


Figure 7: Osaka City Office Stock Pyramid 2022 (Net Rentable Area)

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In terms of the number of buildings, the office stock of Osaka City as a whole is 1,749 buildings, of which small & medium buildings account for 1,561 buildings (89%), while large buildings number 188 buildings (11%) **(Figure 8)**.

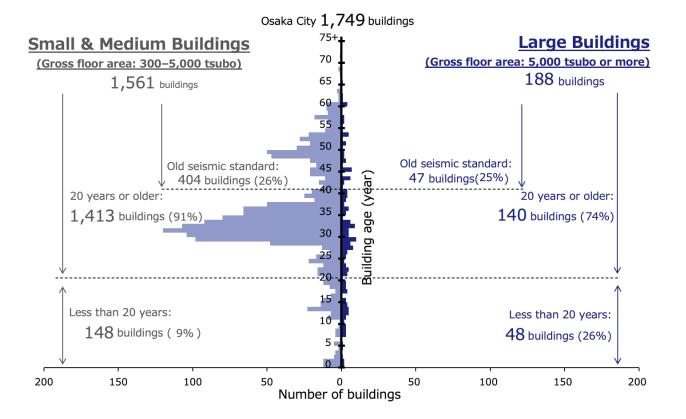


Figure 8: Osaka City Office Stock Pyramid 2022 (Number of Buildings)



Survey timing	December 2021
Coverage	23 wards of Tokyo, city of Osaka
Target properties	Office buildings with a gross floor area of 300 tsubo or more, completed (or scheduled to be completed) in and after 1946 and used mainly as office space as of the end of 2022 (excludes owner-occupied buildings)
Target data	Number of office buildings and net rentable area for offices (tsubo) of small& medium and large buildings. Large buildings: Gross floor area of 5,000 tsubo or more Small & medium buildings: Gross floor area between 300 and 5,000 tsubo
Survey method	Mostly based on publicly available information such as newspaper articles, with some field surveys and interviews with business operators
Remarks	 * The data of reconstructed or demolished buildings have been collected and reflected to the extent possible. Therefore, the overall stock volume and stock volume for a certain building age may decrease from the previous year's survey. * The sum figures may not match due to rounding. * The figures contained in the survey were aggregated at the time of the survey. Since information is added and updated on a daily basis, any differences from figures released in the previous year are not necessarily due to new construction or demolition. * The office stock for 2022 includes buildings whose scheduled completion date was known in December 2021. * The net rentable area represents such area, if published, and if not, the area estimated from gross floor area based on a formula jointly developed with Naoki Kato Lab, Architecture and Architectural Engineering, Kyoto University Graduate School of Engineering. * In this report, buildings completed in and before 1981, when the Revised Seismic Design Method of 1981 was enforced, are aggregated as "old seismic standard" buildings.

Survey Overview

For further inquiries please contact below:

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