# **TOKYO 23 WARDS | Supply of New Office Space 2018** & Office Stock Pyramid 2018



December 7, 2017

Xymax Real Estate Institute hereby releases its report on the **Supply of New Office Space 2018** and **Office Stock Pyramid 2018** covering the Tokyo 23 Wards area. The volume of new office supply, which is an aggregation of rentable areas of offices that are newly constructed in the coming years (hereinafter, "new supply"), indicates the direct impact on the market balance in the future. The Office Stock Pyramid is an aggregation of the rentable areas of office buildings in the market and indicates the breakdown of the office building stock (rentable area and number of buildings) by size of the building (small & medium/large) and by age, as well as the proportion of large and small/medium-sized buildings and their age composition.

1 tsubo = approx. 3.3 sq m

#### **SUMMARY OF RESULTS**

## TOKYO 23 WARDS | Supply of New Office Space 2018

- ✓ New supply in 2018–2020 is expected to be relatively large at around 200,000 tsubo per year, while new supply in 2021 is currently forecast at 87,000 tsubo, the smallest since 2008.
- ✓ Average new supply in 2018–2021 is expected to be 180,000 tsubo per year, exceeding 164,000 tsubo, the annual average of the past 10 years.
- ✓ 65% of new supply in 2018–2021 is concentrated in the three central wards of Chiyoda, Chuo and Minato.
- ✓ The ratio of new supply in Tokyo 23 Wards (2018–2021) to office stock at end of 2017 (new supply rate) is expected to be approx. 5.8% (average of 1.5% per year).

### TOKYO 23 WARDS | Office Stock Pyramid 2018

- ✓ Office stock at end of 2018 is expected to be 12.61 million tsubo on a rentable area basis, with small & medium-sized buildings and large buildings accounting for roughly the same amount: 5.94 million tsubo (47%) and 6.68 million tsubo (53%), respectively.
- ✓ On a number of buildings basis, office stock is 8,899 buildings, of which small & medium-sized buildings account for more than 90% (8,162 buildings).
- ✓ The average age of buildings is 30.0 years for the entire stock, 30.7 years for small & medium-sized buildings, and 23.0 years for large buildings. Aging of stock is more prominent in small & medium-sized buildings.
- Compared to 2000, rentable area increased by approx. 3 million tsubo (approx. 31%), and number of buildings rose by approx. 500 (approx. 6%).



# **TOKYO 23 WARDS | Supply of New Office Space 2018**

The new supply of office buildings with a gross floor area of more than 3,000 tsubo is planned to be around 200,000 tsubo per year in the Tokyo 23 Wards area in 2018–2020, exceeding 164,000 tsubo, the annual average for 2008–2017 (hereinafter, the "10-year average") (Figure 1). However, new supply in 2021 is currently expected to be 87,000 tsubo, the smallest amount since 2008. The annual average for 2018–2021 is 180,000 tsubo. This exceeds the 10-year average but is roughly equivalent to 181,000 tsubo, the annual average for 2017–2020, which was released in our previous report\*1. In terms of large buildings with a gross floor area of 10,000 tsubo or more, average new supply in 2018–2021 is expected to be 164,000 tsubo per year, exceeding the 10-year average of 123,000 tsubo per year. A large amount of supply of 222,000 tsubo is planned in 2020.

The new supply rate, which is the ratio of new supply in Tokyo 23 Wards (2018–2021) to office stock at end of 2017, is 5.8% (average of 1.5% per year).

\*1 "TOKYO 23 WARDS | Supply of New Office Space 2017 & Office Stock Pyramid 2017" released on December 26, 2016 https://www.xymax.co.jp/english/research/release/161226\_2.html

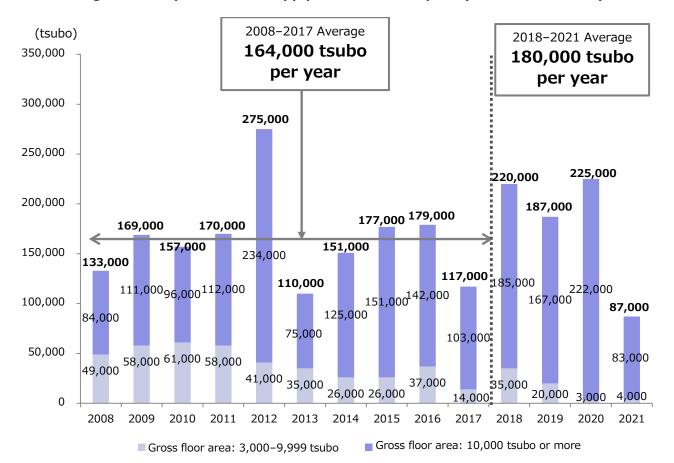


Figure 1: Tokyo 23 Wards Supply of New Office Space (Net Rentable Area)

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By area, 65% of total new supply is planned in the three central wards (Chiyoda, Chuo and Minato). The highlights of major areas are as follows (Figure 2).

- Marunouchi-Otemachi-Yurakucho, the prime office district in central Tokyo, will see the largest new supply, with 115,000 tsubo. Reconstructions of buildings are continuing in this area due to a chain of redevelopment projects.
- The Toranomon area will see continued supply due to large-scale redevelopments, including infrastructure developments such as Beltway 2, a new subway station and a Bus Rapid Transit system, and hotel/medical compound facility developments.
- In the Shibaura-Kaigan area, which used to be a non-office district, supply of offices due to large-scale redevelopment projects is expected.

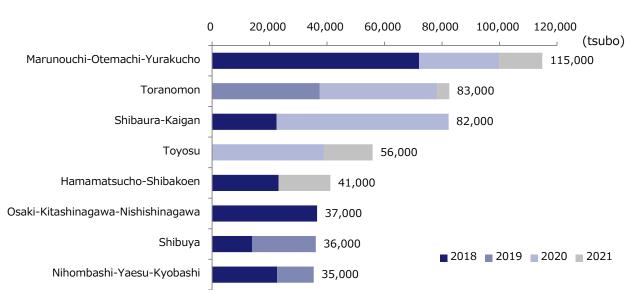


Figure 2: New Supply by Area (2018–2021)



# **TOKYO 23 WARDS | Office Stock Pyramid 2018**

The Office Stock Pyramid follows the method of a population pyramid representing the distribution of age groups by gender. We classified office buildings with a gross floor area of 300 tsubo or more into large buildings and small & medium-sized buildings, and compared the stock (rentable area, number of buildings) by building age. The pyramid indicates the proportion of large buildings and small/medium-sized buildings as well as their age composition.

#### 1. Large Buildings and Small & Medium-Sized Buildings

Office stock of Tokyo 23 Wards as of end of 2018 is expected to be 12.61 million tsubo on a rentable area basis. Small & medium-sized buildings with a gross floor area of less than 5,000 tsubo and large buildings with a gross floor area of 5,000 tsubo or more account for roughly the same amount of stock: 5.94 million tsubo (47% of the entire stock) and 6.68 million tsubo (53%), respectively (Figure 3).

The average building age of the entire stock is 30.0 years. By size of building, the average age of small & medium-sized buildings is 30.7 years, while that of large buildings is 23.0 years. Aging of stock is more prominent in small & medium-sized buildings.

Tokyo 23 Wards 12.61 million tsubo 8,899 buildings Average building age: 30.0 years 70 Large Buildings Small & Medium-sized Buildings (Gross floor area: 300-5,000 tsubo) (Gross floor area: 5,000 or more) 65 5.94 million tsubo 8,162 buildings Age: 30.7 year 60 6.68 million tsubo 737 buildings Age: 23.0 years 55 Old seismic standards: Old seismic standards: 50 1.55 million tsubo (26%) 1.22 million tsubo (18%) 45 40 Aged 20 years or older: -35 Aged 20 years or older: 4.86 million tsubo (82%) 30 3.34 million tsubo (50%) 25 20 15 10 Aged less than 20 years: Aged less than 20 years: 1.07 million tsubo (18%) 3.33 million tsubo (50%). 500,000 400,000 300,000 200,000 100,000 0 100,000 200,000 300,000 400,000 500,000 Net Rentable Area (tsubo)

Figure 3: Tokyo 23 Wards Office Stock Pyramid 2018 (Net Rentable Area)

\*The sum totals may not match due to rounding.



In terms of number of buildings, on the other hand, the entire office stock of Tokyo 23 Wards is 8,899 buildings, of which small & medium-sized buildings account for 92% (8,162 buildings) and large buildings 8% (737 buildings) (Figure 4).

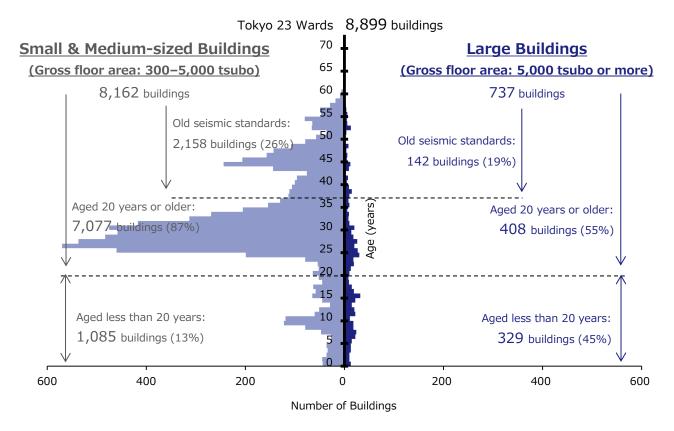


Figure 4: Tokyo 23 Wards Office Pyramid 2018 (Number of Buildings)

Many small & medium-sized buildings were completed during the "bubble" economy period (1986–1997; building age 21–32 years), with more than 80% (4.86 million tsubo) aged 20 years or older. New supply after the bubble period was few, with only 1.07 million tsubo aged less than 20 years. In terms of number of buildings, small & medium-sized office buildings aged 20 years or older also account for a majority, with 7,077 buildings aged 20 years or older, while 1,085 buildings are aged less than 20 years.

Among large buildings, 3.34 million tsubo of office space are aged 20 years or older, while 3.33 million tsubo—roughly the same amount of office space as older buildings—are aged less than 20 years. In terms of number of buildings, 408 buildings are aged 20 years or older, which is slightly more than the 329 buildings aged less than 20 years. However, the difference is small, indicating that supply of large buildings continued after the bubble period.



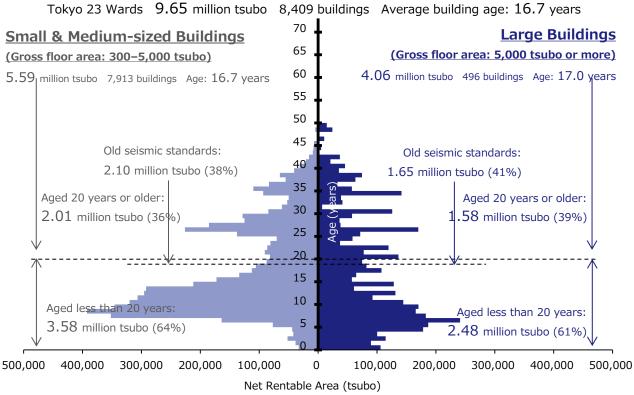
# 2. Comparison with 2000

**Figure 5** is the office stock pyramid as of 2000. Office stock at end of 2000 was 9.65 million tsubo on a rentable area basis, of which small & medium-sized buildings accounted for 5.59 million tsubo, slightly more than large buildings, which accounted for 4.06 million tsubo.

In terms of age, more than 60% of both small & medium and large buildings were aged less than 20 years. In terms of number of buildings, 7,913 (94% of total) were small & medium-sized buildings, while 496 (6%) were large buildings.

The age of buildings was 16.7 years for the entire office stock, 16.7 years for small & medium-sized buildings, and 17.0 years for large buildings. There was no significant difference between large buildings and small & medium-sized buildings.

Figure 5: Tokyo 23 Wards Office Stock Pyramid 2000 (Net Rentable Area)



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**Figure 6** compares 2000 with 2018. In the entire Tokyo 23 Wards, rentable area of offices increased by approx. 3 million tsubo (31%) from 2000 to 2018, while the number of buildings increased by approx. 500 (6%).

In terms of building size, large buildings have seen a certain amount of supply each year even after the burst of the bubble economy, with rentable area increasing by approx. 65% and the number of buildings increasing by approx. 49%. Around half of the buildings are aged 20 years or older, and half are aged less than 20 years.

On the other hand, the supply of small & medium-sized buildings have remained small after the mass supply during the bubble period, with rentable area increasing by approx. 6% and the number of buildings rising by approx. 3%. As a result, although more than 60% of offices in terms of both rentable area and number of buildings were aged less than 20 years in 2000, the ratio fell to less than 20% at the end of 2018.

The average age of small & medium-sized buildings rose from 16.7 years to 30.7 years between 2000 and 2018, while that of large buildings rose by only six years, from 17.0 years to 23.0 years.

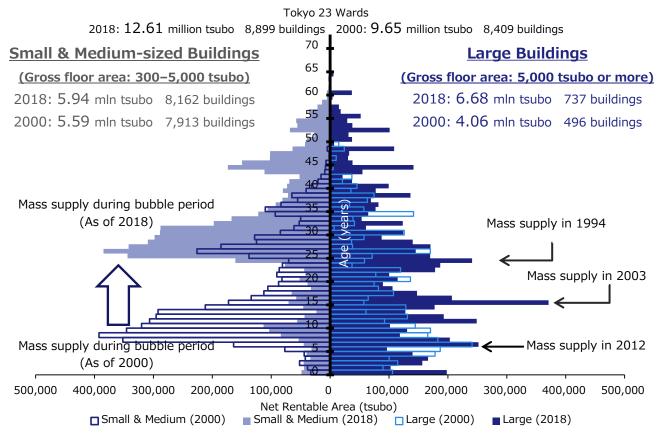


Figure 6: Tokyo 23 Wards Office Stock Pyramid 2000 and 2018 (Net Rentable Area)

New supply of large buildings is expected to continue, leading to intensified competition. In small & medium-sized buildings, aging is expected to accelerate, giving rise to the need for the development of high quality stock, such as through appropriate renewal of facilities and renovation.



## Survey Overview

#### Supply of New Office Space

**Date** November 2017

**Area** 23 wards of Tokyo

**Target** Properties with a gross floor area of 3,000 or more and used mainly as office space

**properties** (excluding owner-occupied buildings, in principle)

**Target data** Rentable office area (tsubo)

**Method** Primarily through publicly available information such as newspaper articles, in addition to

on-site surveys and interviews with operators

\* The target of this survey is the floor area of buildings to be newly supplied. Note that this is not a complete survey.

- \* Rentable area represents such area, if published, and if not, the area estimated from gross floor area based on a formula derived from the joint development with Naoki Kato Lab, Architecture and Architectural Engineering, Kyoto University Graduate School of Engineering.
- \* The new supply estimated in this survey is the estimated amount as of the date of the survey. The value of new supply changes as information is added and updated on a daily basis.

#### Office Stock Pyramid

**Date** November 2017

**Area** 23 wards of Tokyo

Target properties

Office Stock Pyramid 2018: Office buildings with a gross floor area of 300 tsubo or more, completed (or scheduled to be completed) in or after 1946, and used mainly as office

space as of end of 2018

Office Stock Pyramid 2000: Office buildings with a gross floor area of 300 tsubo or more, completed in or after 1946, and used mainly as office space as of end of 2000 (includes

properties that were demolished between 2001 and 2017)

Target data The number and rentable office area (tsubo) of large and small & medium-sized office

buildings.

Large buildings: Gross floor area of 5,000 tsubo or more

Small & medium-sized buildings: Gross floor area of 300-4,999 tsubo

- \* The collected data were aggregated from properties whose date of construction is known based on publicly available information such as newspaper articles and for-rent information (including past information). Owner-occupied buildings have been excluded, in principle.
- \* The data of reconstructed or demolished buildings have been collected and reflected to the extent possible.
- \* Figures of this survey are the aggregated amount as of the date of the survey. Since information is added and updated on a daily basis, any difference from figures published last year is not necessary due to new construction or demolition.
- \* The office stock in 2018 includes buildings whose scheduled completion date is known as of November 2017.
- \* 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.
- \* "Old seismic standard" buildings refer to buildings constructed with the design method before the enforcement of the Revised Seismic Design Method of 1981. In this report, they refer to buildings completed in and before 1981.