

## Office Space per Person 2022

–Office space per person changing due to the pandemic–

January 20, 2023

Xymax Real Estate Institute ("Xymax REI") has been conducting a survey of office building tenants on a continuous basis to understand how companies are using offices. In this report we analyze the leased space per user at companies occupying typical office buildings (hereinafter, "office space per person") to offer materials for considering office space that takes into account companies' ratios of workers coming to the office.

### Findings

- As telework spread and resulted in a rapid divergence between the number of office users and the number of office occupants, we were confronted with the need to reconsider our concept of office space per person. In this report, we have taken into account new elements such as the "coming-to-office ratio" as we analyze "office space per <office occupant>" and "office space per <worker coming to the office>" instead of the previous office space per office user (**Figure 1**).

**Figure 1: Change in Concept of Office Space per Person**

#### Concept of office space per <office occupant>:

$$\text{Office space} = \text{No. of office occupants} \times \text{Office space per <office occupant>}$$

Note: The concept of the previous office space per office user is deemed the same as the office space per <office occupant>.

#### Concept of office space per <worker coming to the office>:

$$\text{Office space} = \text{No. of workers coming to the office} \times \text{Office space per <worker coming to the office>}$$

$$\text{No. of workers coming to the office} = \text{No. of office occupants} \times \text{Coming-to-office ratio}$$

- The office space per <office occupant> in the 23 wards of Tokyo ("Tokyo 23 Wards") was 3.66 tsubo in 2022, and the office space per <worker coming to the office> was 4.88 tsubo.  
(1 tsubo = approx. 3.3 sqm)

# 1. Introduction

Xymax REI had been analyzing and publishing information on the leased space per user of a typical office every year between 2013 and 2019 through the "Office Space per Person Survey"<sup>\*1</sup>.

<sup>\*1</sup> *Office Space per Person 2019*, released October 2, 2019  
<https://www.xymax.co.jp/english/research/images/pdf/20191002.pdf>

Due to an increase in tenants implementing work style reforms through initiatives such as the introduction of hotdesking and telework, office space per person had been gradually decreasing since before the COVID-19 pandemic and was 3.71 tsubo in 2019.

Since the outbreak of the pandemic in 2020 and the first declaration of a state of emergency, companies have been forced to control the number of workers coming to the office. In a survey of companies in Greater Tokyo conducted by Xymax REI in August 2020<sup>\*2</sup>, around 80% of the companies controlled the percentage of employees coming to the office to be lower than pre-pandemic levels, with more than 40% of the companies actually reducing the percentage to less than 50%. Since these circumstances led us to believe that the number of office users and the number of office occupants<sup>\*3</sup> were rapidly growing apart, we were faced with the need to reconsider our concept of office space per person.

<sup>\*2</sup> *Greater Tokyo Company Survey on Work Styles and the Workplace | August 2020*, released September 2020  
<https://www.xymax.co.jp/english/research/images/pdf/20200918.pdf>

<sup>\*3</sup> The number of office occupants refers to the number of people belonging to the office. Since the number of office users is derived by multiplying the number of office occupants by the coming-to-office ratio, the "number of office occupants", the "number of workers coming to the office" and the "number of office users" were roughly the same before the pandemic, when it was assumed that everyone came to the office (coming-to-office ratio: 100%). However, now that the coming-to-office ratio is no longer necessarily 100% due to the spread of telework, the number of office users may not be the same as the number of office occupants.

Subsequently, the company survey continuously conducted by Xymax REI<sup>\*4</sup> indicates that the coming-to-office ratio has been trending steadily at around 65% on average since the Autumn 2020 survey in terms of both the actual state and intentions for after the pandemic. **In other words, it is likely that telework will remain in place to a certain degree even after the end of the pandemic, resulting in a divergence between the number of office users and the number of office occupants.** Therefore, since 2021 we have been studying both the "number of office occupants" and the "number of workers coming to the office" instead of the previous "number of office users," and **have been calculating the respective office space per person.**

<sup>\*4</sup> *Metropolitan Areas Office Demand Survey Autumn 2022* ①Demand Trend, released December 15, 2022  
[https://www.xymax.co.jp/english/research/images/pdf/20221215\\_1.pdf](https://www.xymax.co.jp/english/research/images/pdf/20221215_1.pdf)

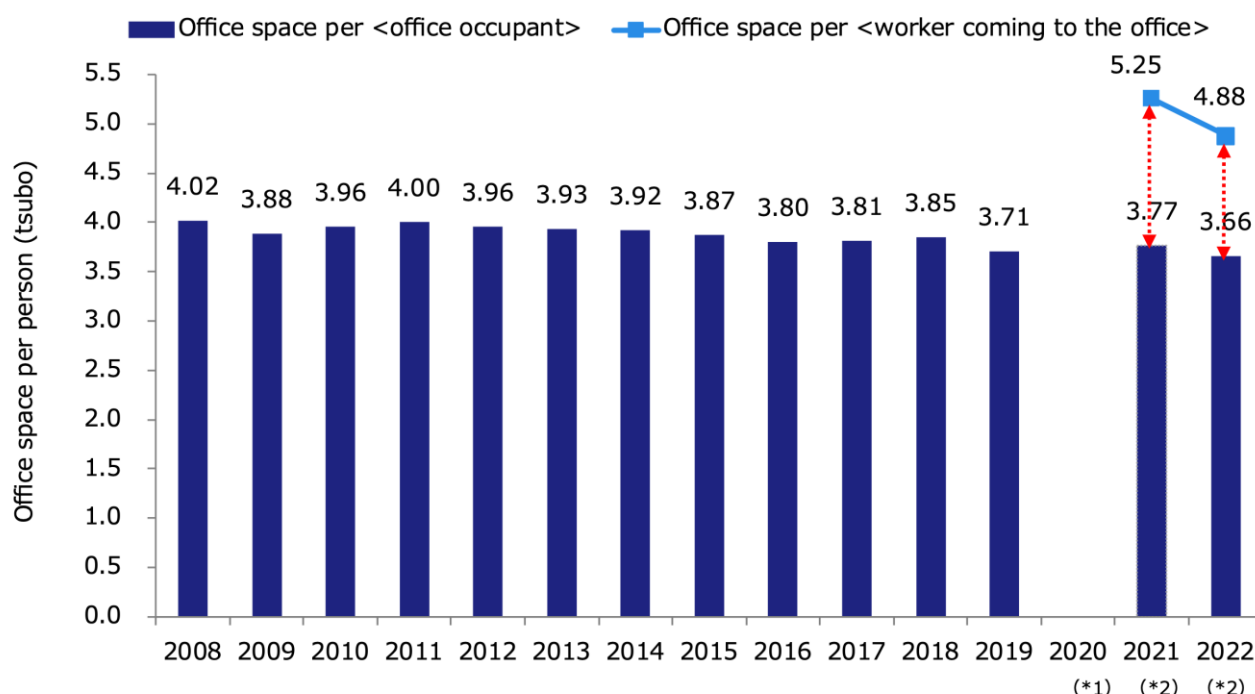
## 2. Office Space per Person

**Figure 2** shows the annual trend of office space per <office occupant> and office space per <worker coming to the office> based on the leased space and the numbers of office occupants and workers coming to the office of the corporate tenants.

The median office space per <office occupant> in 2022 was 3.66 tsubo, the smallest ever. The office space per <worker coming to the office> was 4.88 tsubo, showing a significant drop from the previous year.

The reasons for the larger office space per <worker coming to the office> compared to the office space per <office occupant> include the drop in the coming-to-office ratio on the back of restrictions on coming to the office and the implementation of telework due to the pandemic.

**Figure 2: Trend of Office Space per <Office Occupant and Worker Coming to the Office> (2008–2022, Tokyo 23 Wards)**



\*1 2020: In consideration of the possibility of a variance in the definition of the number of users between samples, the index for this year is treated as defective.

\*2 2021 and 2022: Office space per office occupant and per worker coming to the office were calculated.

**Figure 3** is a summary of the factors that affect office space per person.

Between 2021 and 2022, office space per person decreased for both office occupants and workers coming to the office. Possible factors include an increase in the number of people and a decrease in space.

First of all, the reasons for the decrease in office space per <office occupant> include the introduction of hotdesking and the downsizing of the main office (decrease in space) as part of efforts to promote hybrid work, the trend of decentralizing workplaces outside of the main office, and an increase in personnel due to enhanced recruitment on the back of companies' improved business confidence.

On the other hand, the possible factors that led to the decrease in office space per <worker coming to the office> include a rise in the number of workers coming to the office as workers increasingly returned to the office on the back of the end of the state of emergency and the relaxation of restrictions on coming to the office.

**Figure 3: Factors That Affect Office Space per <Office Occupant and Worker Coming to the Office>**

Index	Factors for increase	Factors for decrease
Office space per <office occupant>	<ul style="list-style-type: none"> <li>• Decrease in no. of office occupants</li> <li>• Increase in space</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in no. of office occupants</li> <li>• Decrease in space</li> </ul>
Office space per <worker coming to the office>	<ul style="list-style-type: none"> <li>• Decrease in coming-to-office ratio, decrease in no. of workers coming to the office</li> <li>• Increase in space</li> </ul>	<ul style="list-style-type: none"> <li>• Increase in coming-to-office ratio, increase in no. of workers coming to the office</li> <li>• Decrease in space</li> </ul>

### 3. Summary

In this report, we described the office space per office occupant and per worker coming to the office.

The large gap between the office space per <worker coming to the office> and that per <office occupant> indicates that, due to a drop in the ratio of workers coming to the office, there may be redundant space in offices that were set up based on the conventional number of office occupants.

Going forward, we expect office space per person to continue to undergo gradual changes on the back of companies' strategies for their employees to come to the office and adjustments to their office space.

Since the number of people using the office has become fluid, Xymax REI has also been conducting analyses related to desks, i.e., "office space per desk," in addition to "office space per person," based on the results of the *Metropolitan Areas Office Demand Survey*<sup>\*5</sup>. The results were published in *Reconsidering How to Assess Office Space Due to the COVID-19 Pandemic*<sup>\*6</sup>. We plan to release the latest results of this index in the future, which we hope will be of use along with this survey.

\*5 *Metropolitan Areas Office Demand Survey Spring 2021*, released June 9, 2021  
<https://www.xymax.co.jp/english/research/images/pdf/20210609.pdf>

\*6 *Reconsidering How to Assess Office Space Due to the COVID-19 Pandemic*, released December 14, 2021  
<https://www.xymax.co.jp/english/research/images/pdf/20211214.pdf>

### Survey Overview

<b>Period</b>	2008–2022 (Once a year)
<b>Target</b>	Office tenants occupying space in typical office buildings in the 23 wards of Tokyo
<b>Number of valid data</b>	<ul style="list-style-type: none"> <li>Office space per &lt;office occupant&gt; 9,865 tenants (total number over the survey period) 2008: 397 2009: 790 2010: 852 2011: 894 2012: 909 2013: 987 2014: 872 2015: 637 2016: 524 2017: 523 2018: 518 2019: 483 2020: 449 2021: 541 2022: 489</li> <li>Office space per &lt;worker coming to the office&gt; 973 tenants (total number over the survey period) 2021: 497 2022: 476</li> </ul>
<b>Calculation method</b>	Median of the figures derived by dividing the tenants' leased space by the number of users
<b>Remarks</b>	<ul style="list-style-type: none"> <li>The size of office space is the size specified under the lease contract. This includes the office area as well as the entrance (reception) area, meeting rooms, employees' lounge area, document storage space, other storage space, and corridors within the dedicated area.</li> <li>The number of office occupants refers to the number of workers belonging to the office.</li> <li>The number of workers coming to the office refers to the average number of workers who have come the office at the time of the survey.</li> </ul>

**For further inquiries please contact below:**

**Xymax Real Estate Institute**

<https://soken.xymax.co.jp> | E-MAIL: [info-rei@xymax.co.jp](mailto:info-rei@xymax.co.jp)