

Changes in the Use of Real Estate Over Time – Fukuoka

Diversification of usages and changes in area characteristics in central Fukuoka

March 24, 2020

How real estate is used changes over time due to various factors including economic trends, industrial structure and lifestyle changes, and government policies. The source of such changes is the developments that take place at each property, such as the replacement of aged buildings with new buildings (re-building), the conversion of the usage of existing buildings, and the construction of new buildings on vacant land.

Following the Osaka edition^{*1} of the survey that was carried out in 2017 in partnership with the laboratory of Professor Yukio Komatsu of the Department of Architecture at Waseda University, Xymax Real Estate Institute (hereinafter, "Xymax REI") studied the changes in the use of real estate in central Fukuoka, namely the Tenjin, Hakata, and Gofukumachi area, between 1997 and 2017.

We hope that these basic data on real estate use will facilitate a wide range of people, including not only the owners, users, and investors of individual properties but also policy makers, in considering future ways of using real estate.

*1 *Changes in the Use of Real Estate Over Time: Diversification of usages and changes in area characteristics in central Osaka*, released on April 17, 2017

<https://www.xymax.co.jp/english/research/images/pdf/20170417.pdf>

Key Findings

- In central Fukuoka, buildings have become larger, and re-buildings and new construction are active.
- Due to strong inbound tourism demand, buildings are increasingly being re-built or newly built as accommodation and commercial facilities, resulting in a greater diversity of building usages within the area.
- Deregulation of building height and floor-area ratio restrictions has led to larger and revitalized business facilities.

Introduction

In carrying out our survey, we used the 1997, 2007, and 2017 Land Use Survey lent by Fukuoka city and looked at the following data for the four usages of business, commercial, accommodation, and residential in central Fukuoka, which is the Tenjin/Hakata/Gofukumachi area (**Figure 1**): ①changes in building stock (gross floor area, number of buildings, etc.); ②changes due to re-building; ③buildings built on vacant land; and ④ newly built buildings (**Figure 2**). Furthermore, since the latest available year of the Land Use Survey was 2017, we used other supplementary data for buildings that were completed or planned after 2017 and examined a fifth item: ⑤recent trends resulting from supply after the survey year.

Figure 1: Target Area

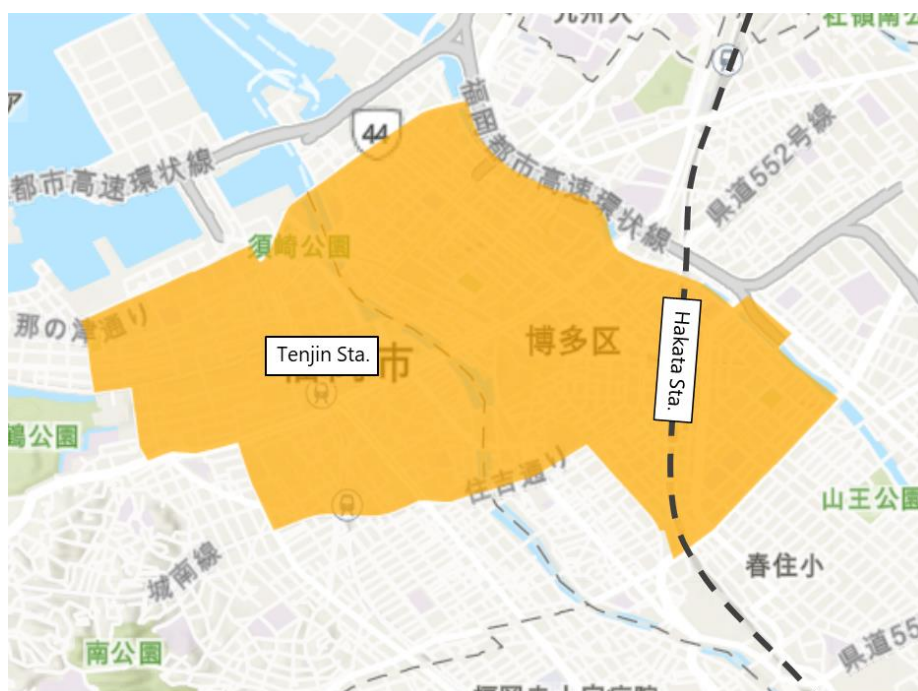
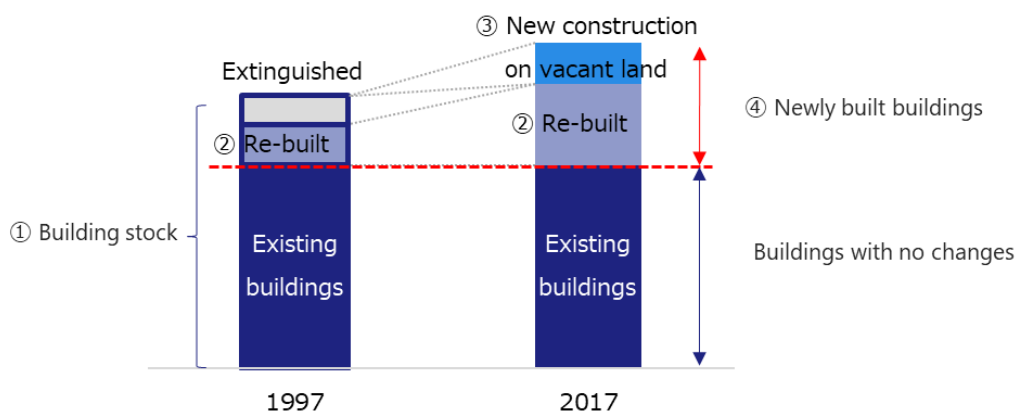


Figure 2: Image of Building Stock



① Changes in Building Stock

The total gross floor area of the Tenjin/Hakata/Gofukumachi area in 2017 was 11.52 million sqm, an increase of 2.43 million sqm (27%) from 1997 (Figure 3). By usage, the gross floor areas of residences, commercial facilities, and accommodation facilities increased by around 1.4 times, with the largest increase seen in residences (by 1.27 million sqm). Meanwhile, the rate of increase in business facilities was smaller at around 1.1 times (Figure 4). Since the number of buildings in the entire area has decreased from 9,947 to 8,752, these figures indicate that the floor area per building has expanded due to re-building.

Figure 3: Building Stock by Usage

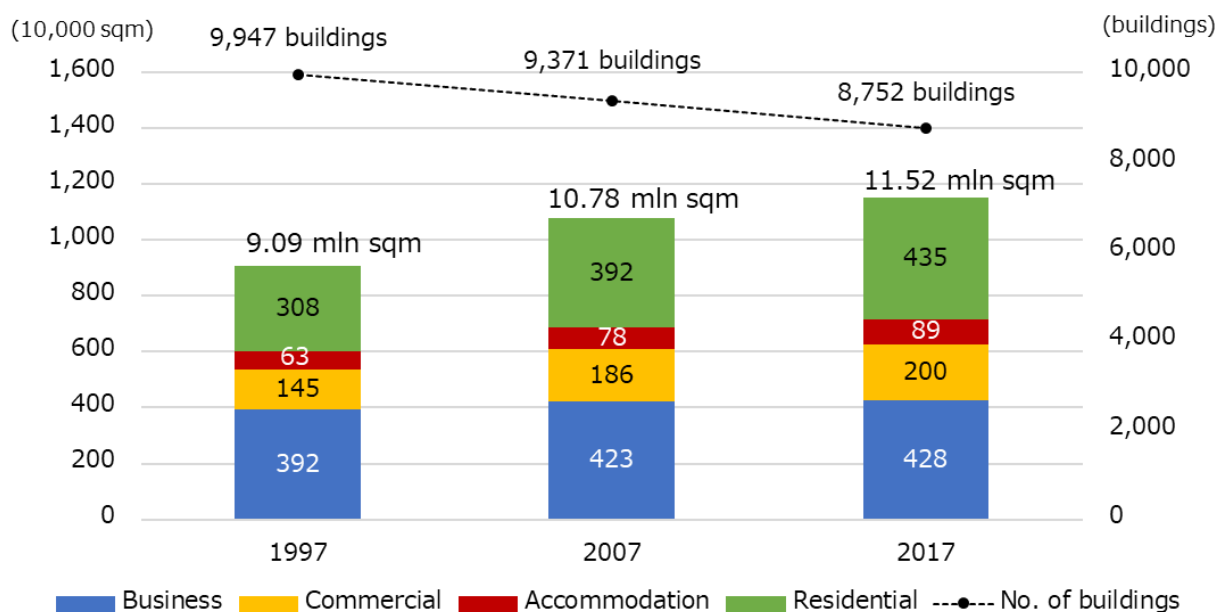
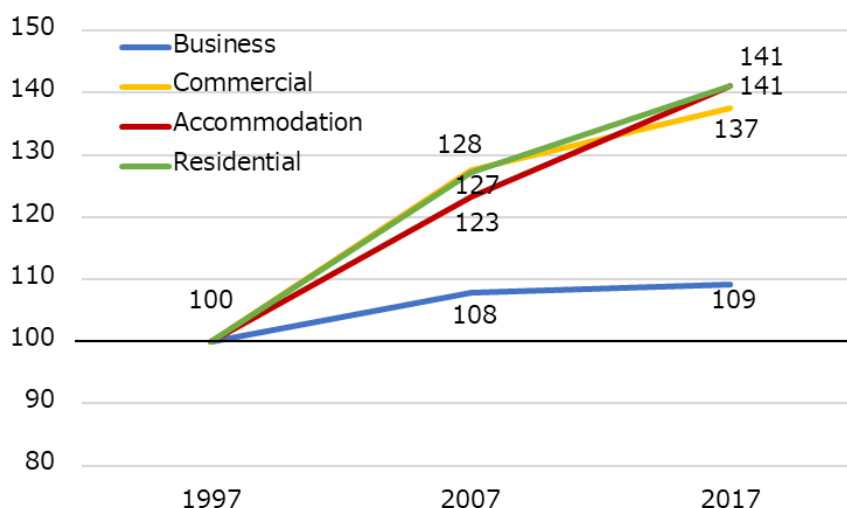


Figure 4: Change in Gross Floor Area by Usage (1997=100)



② Changes Due to Re-building

We looked into the changes due to re-building by comparing the gross floor area and number of buildings before re-building (1997) and after re-building (2017). While the total gross floor area increased from 2.27 million sqm to 3.62 million sqm, the number of buildings decreased from 3,068 to 2,286 (Figure 5), indicating that buildings have been re-built at a larger size per building for all usages (Figure 6).

Figure 5: Changes Before and After Re-building (Left: Gross Floor Area; Right: No. of Buildings)

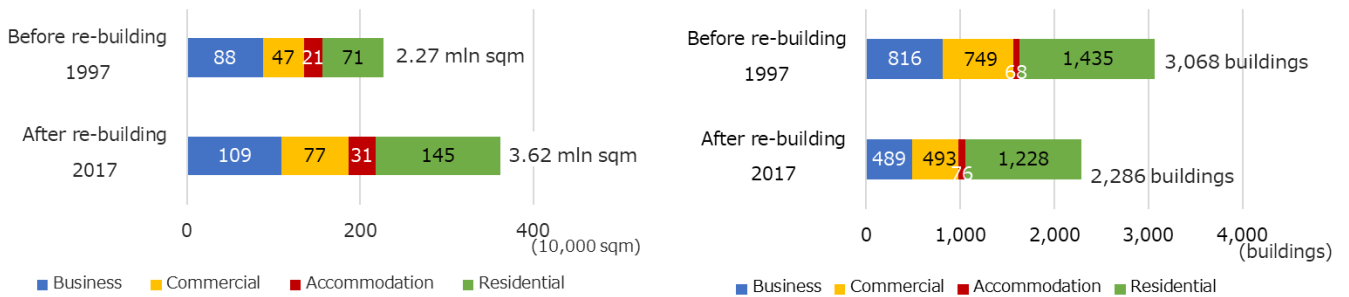


Figure 6: Re-built Buildings: Gross Floor Area per Building

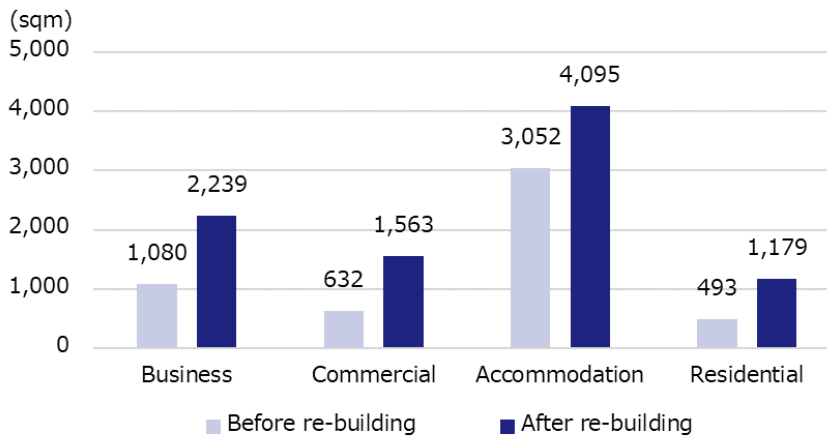
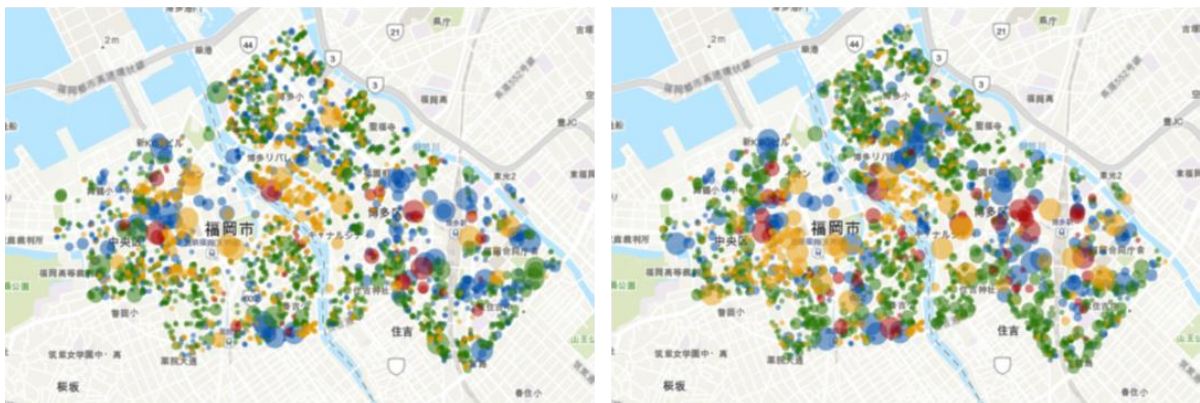


Figure 7: Re-built Buildings (Illustration)

1997 Before re-building

2017 After re-building



●: Business ●: Commercial ●: Accommodation ●: Residential (The size of ● indicates the size of the building)

③ Buildings Built on Vacant Land

The gross floor area and the number of buildings that were newly built on vacant land between 1997 and 2017 was 1.58 million sqm and 1,022, respectively (Figure 8). This is around a third of all buildings built over 20 years in terms of both gross floor area and number (5.2 million sqm and 3,308 buildings in total for re-built buildings and buildings built on vacant land). By usage, around half were residences, followed by business, commercial, and accommodation facilities, in this order (Figure 9). The map indicates that large accommodation and commercial facilities have increased in the central area (Figure 10).

Figure 8: Buildings Built on Vacant Land (Gross Floor Area, No. of Buildings)

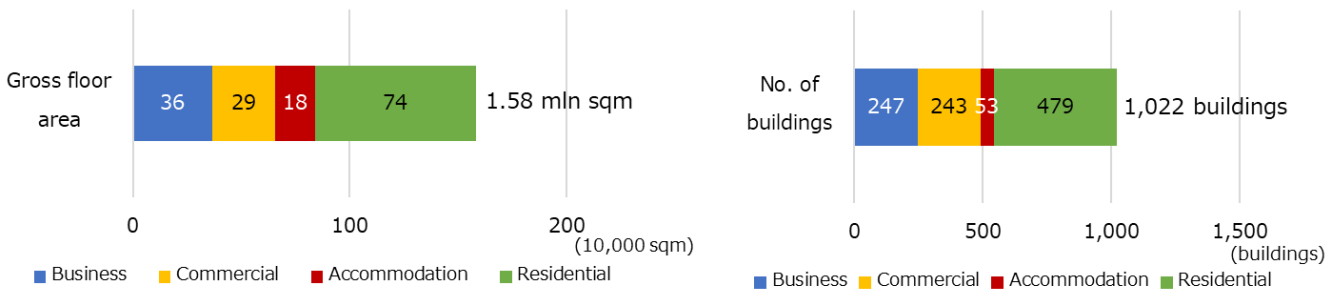


Figure 9: Percentage of Buildings Built on Vacant Land by Usage (Gross Floor Area, No. of Buildings)

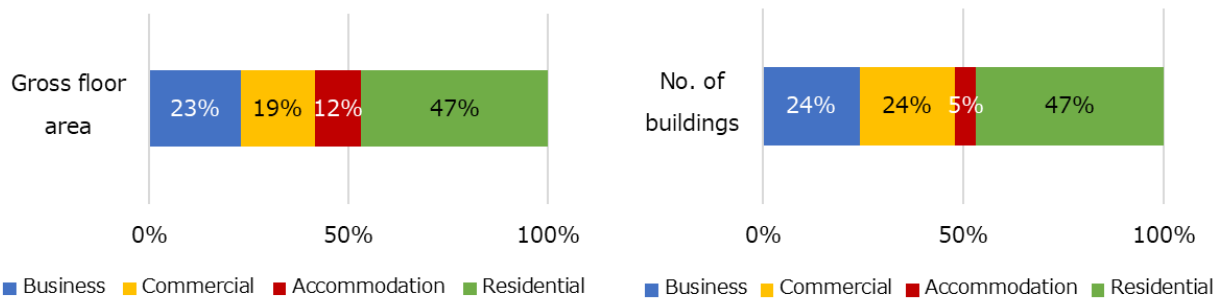
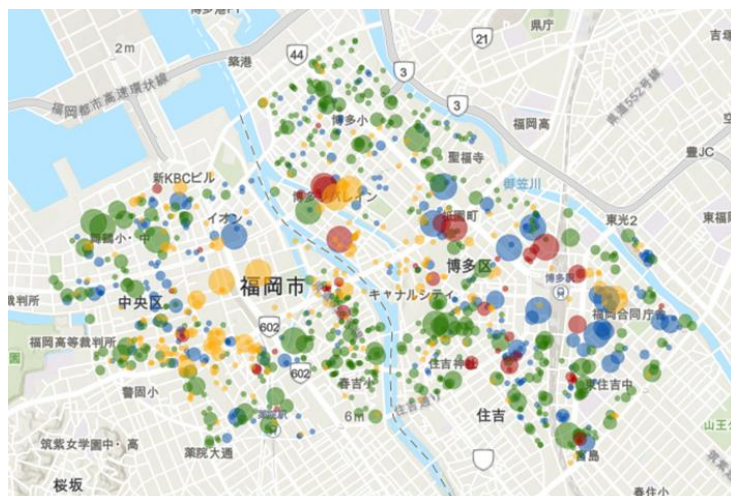


Figure 10: Buildings Built on Vacant Land (Illustration)



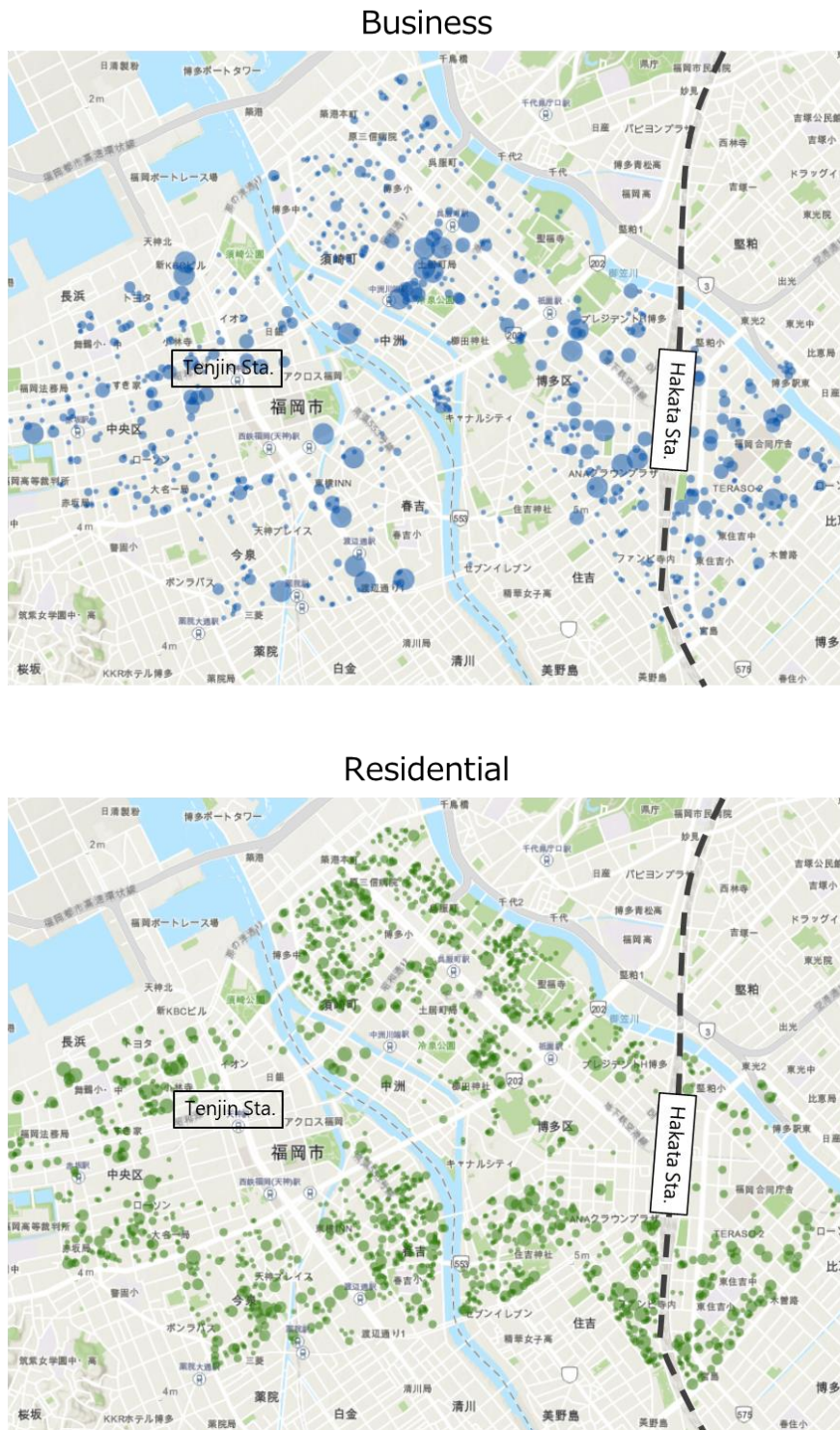
● : Business ● : Commercial ● : Accommodation ● : Residential

(The size of ● indicates the size of the building)

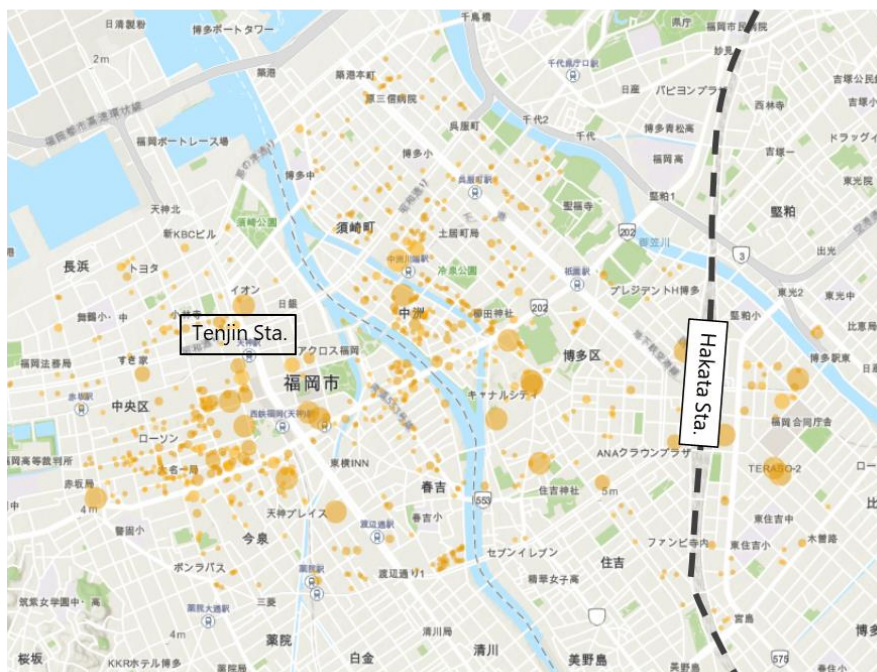
④ Newly Built Buildings

We plotted buildings that were newly built (re-built buildings and buildings built on vacant land) between 1997 and 2017 by usage on a map and examined the characteristics (**Figure 11**).

Figure 11: Newly Built Buildings (Re-built Buildings and Buildings Built on Vacant Land)



Commercial



Accommodation



Concerning business facilities, relatively large buildings have been built around Hakata and Tenjin stations, with smaller buildings scattered across the entire area. Large buildings have been constructed near the two exits of JR Hakata station due to redevelopment of the surrounding area following the re-building of the station. Construction has continued since the last survey year. Residences are scattered about the periphery of the area, with buildings built on vacant land tending to be larger than those that were re-built. For commercial facilities, large buildings are concentrated near Hakata and Tenjin stations, with smaller buildings scattered between the

two railway stations. Small buildings are also spread across the southwest of Tenjin station, with a concentration of new commercial facilities in a former residential area. Accommodation facilities are spread throughout the area. Although we could not confirm in our survey, the hotel business applications with Fukuoka’s public health center show that there were many cases in which condominiums and buildings have had some sections converted into an accommodation facility, including private lodging.

The Tenjin/Hakata/Gofukumachi area had mostly housed business and commercial facilities, with some residences. In recent years, foreigners entering Japan via Fukuoka have been increasing year after year—2.6 times from 1.2 million in 2014 to 3.09 million in 2018—and accounting for around 60% of foreigners who entered Japan in Kyushu. Construction of accommodation facilities has also increased due to this rise in inbound tourism. Commercial facilities are also on a rising trend, with the commercial area expanding and moving as small shops increase in the area surrounding Tenjin station and toward the southwest of the station.

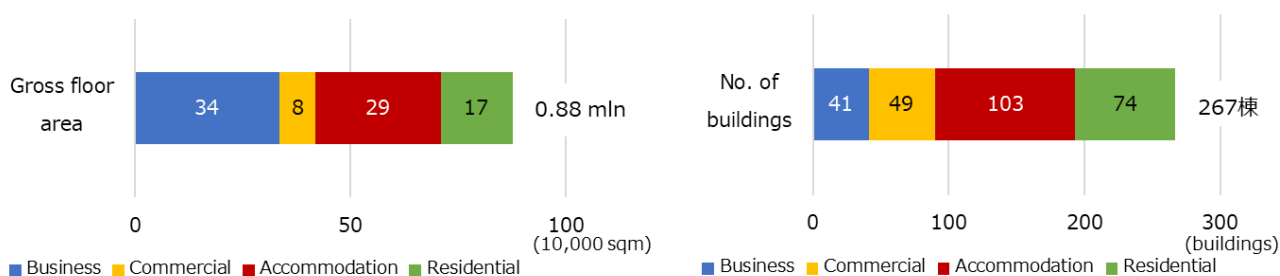
Business facilities had not grown in size even when existing buildings were re-built, due to the height restrictions of the Civil Aeronautics Act enforced in 1952. Large-scale reconstructions were not carried out either for investment profitability reasons. However, the height restrictions of the Civil Aeronautics Act were alleviated as the city was designated as a National Strategic Zone, enabling projects that required more relaxed floor-area ratio regulations. This has led to numerous plans to re-build old business facilities into large buildings, such as the Tenjin Big Bang project that was launched in 2015 (aims to re-build 30 buildings by 2024) and the Hakata Connected project that was announced in 2019 (aims to re-build 20 buildings over ten years). Infrastructure such as extended subway lines has also been developed, leading us to expect this area to be further revitalized on the back of a diversification of usages and size increases of buildings.

⑤ Supply Subsequent to the Survey

We examined the supply of buildings after the survey year of 2017.*² Buildings expected to be completed after the survey year were 0.88 million sqm in gross floor area and 267 in number (**Figure 12**). In terms of gross floor area, business facilities were the largest, followed by accommodation facilities. In terms of the number of buildings, accommodation facilities accounted for the largest number.

*² Unlike the survey data for ① to ④, buildings that were filed in and after January 2016 were extracted from the Kensetsu Databank.

Figure 12: Buildings Built after the Survey Year (Gross Floor Area, Number of Buildings)



Furthermore, we looked at the percentage of each usage for buildings that were filed between 2017 and 2018 and in and after 2019 (**Figure 13**). In business facilities, although gross floor area increased from 29% until 2018 to 61% after 2019, the number of buildings did not see a large increase (from 13% to 22%). Accommodation facilities accounted for as much as 30% or more in terms of both gross floor area and number of buildings. In particular, they account for around half of total in terms of the number of buildings after 2019. When we look at the gross floor area per building in **Figure 14**, it increases from 7,046 sqm to 9,940 sqm in business facilities, indicating that there will be a further supply of large buildings.

Figure 13: Buildings after the Survey Year (Comparison by Year Filed)

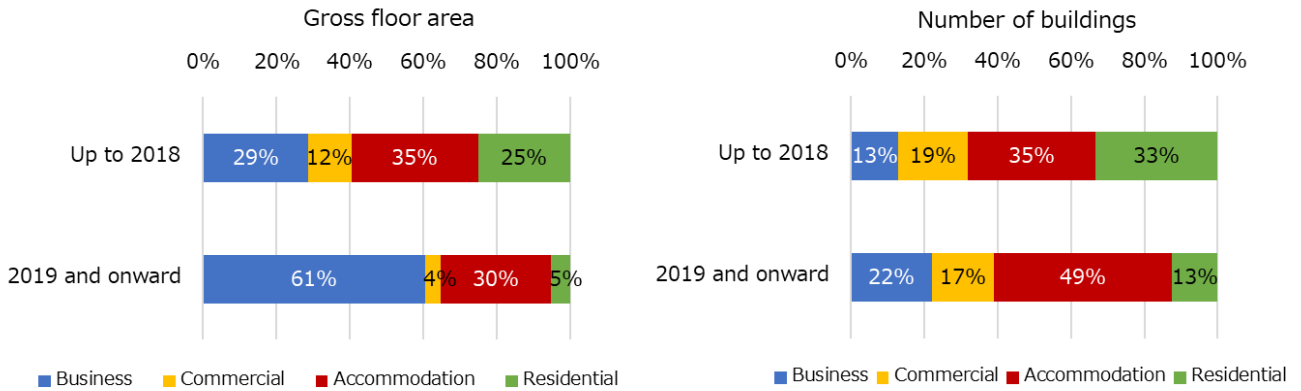


Figure 14: Buildings after the Survey Year (Gross Floor Area per Building)

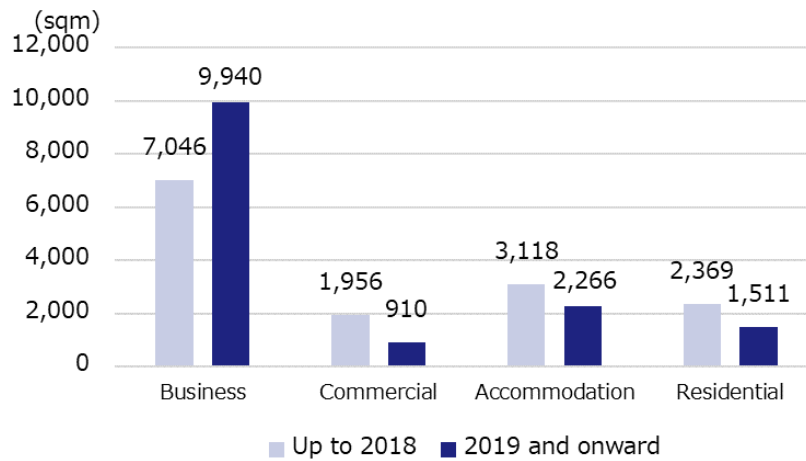


Figure 15: Buildings after the Survey Year (Illustration)



● : Business ● : Commercial ● : Accommodation ● : Residential

(The size of ● indicates the size of the building)

Conclusion

In this survey we looked at the changes in real estate use in central Fukuoka (Tenjin/Hakata/Gofukumachi area). The central area has seen an increase in accommodation and commercial facilities to meet the surge in inbound tourism demand, and their usages have diversified. Business facilities, few of which had been re-built, should see more development due to the city’s designation as a special zone and the deregulation of the city’s policies.

Real estate forms the basis of our lives and activities, as well as being a limited resource. The usefulness of real estate used for certain purposes in different times will change due to changes in the environment. We believe that foreseeing how real estate will be used in the future will be an extremely important theme for real estate utilization and business strategies. We hope this survey will facilitate a wide range of people, including not only the owners, users, and investors of individual properties but also policy makers, in considering the ways of using real estate.

Xymax REI intends to continue studying and analyzing themes surrounding real estate with the aim of releasing useful information.

Survey Overview

Period	1997–2020
Geographical Areas	61 municipal blocks in Chuo and Hakata wards of Fukuoka city, Fukuoka Prefecture
Survey data	<ul style="list-style-type: none"> ●Fukuoka city’s Land Use Survey [Usage] <u>Business</u>: Business facilities such as offices and finance/insurance outlets <u>Commercial</u>: Merchandise sale outlets, restaurants, entertainment/play facilities, etc. (excludes commercial complexes) <u>Residential</u>: Houses, apartment houses, apartment houses containing stores, apartment houses containing workspaces, etc. <u>Accommodation</u>: Hotels and all other types of accommodation [Gross floor area] Since the Land Use Survey lacks buildings’ gross floor area data, “building area x number of floors” is substituted as the gross floor area for convenience. Therefore, buildings with no data of building area size or the number of floors have not been subject to the analysis. [Criteria for re-building] We compared the GIS data of the Land Use Survey for 1997 and 2017, and deemed buildings with a less than 80% overlap of building area in 2017 compared to the building area of 1997as re-built buildings. For buildings with an overlap of 80% or more and a floor number difference of two or more, we visually checked through Google map to determine whether they had been re-built or not. ●Kensetsu Databank’s Information of Construction Plan Signage Buildings that were filed for construction between January 1, 2016 and January 31, 2020. Buildings completed in and after 2017 were aggregated by deeming the construction period as one year. ●Newly supplied building data independently gathered by Xymax REI

Note: The figures indicated in the charts contained in this report are rounded to the first decimal place and therefore the changes in floor area may not match the difference in the number of years passed.

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