Estimated trading volume of existing houses in the market – a brief summary by region
Reported by the association of real estate agents of Japan (Fudosan Ryutsu Keiei Kyokai or FRK) December 2019

1. Objective and method of the study

FRK conducted its own statistical surveys to estimate the trading volume of existing houses and calculate the trading ratio of existing houses on a national scale again this fiscal year. As with the past surveys, the survey is made on a prefectural basis, for each ward in Tokyo, 16 areas from selected cities in the Tokyo metropolitan area (Tokyo metropolis and three surrounding prefectures), each ward in Yokohama, 22 areas in the Kansai region (Osaka and Hyogo Prefectures), 14 areas in the Chukyo region (Aichi Prefecture), and 4 regional urban areas (Sapporo, Sendai, Hiroshima, and Fukuoka areas).

2. Difference between traded volume of existing houses by the Housing and Land Survey and estimate by FRK

Volume of traded existing houses reported by the housing and land survey: 169,000 in 2013
The housing and land survey is conducted every five years, and it reflects the number of houses with residents actually living in them at the time of the survey from among those houses obtained as owned houses upon relocation.

Estimated volume of traded existing houses reported by FRK: 514,000 in 2013
This figure is calculated based on the number of houses whose ownership was transferred after trading. As the diagram on the right indicates, the number of such houses includes all ownership transfers, regardless of usage by owners after trading. It also includes trading among corporations, while the housing and land survey's method does not.
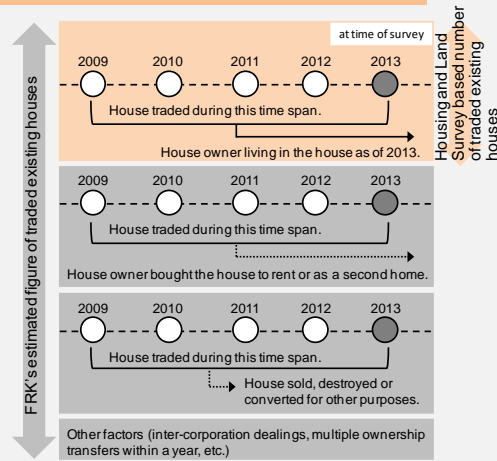
- ○ Number of traded existing houses by the housing and land survey: Number of houses where buyers continue to live upon relocation after purchasing as house owners.
- ○ Number of traded existing houses by FRK: Expresses the total number of traded existing houses in the market.

3. Estimation method

FRK estimation method and data used for estimated trading volume of existing houses

The estimated trading volume of existing houses is obtained by dividing the registered number of ownership transfers, regardless of personal or corporate real estate trading, by the Ministry of Internal Affairs and Communications (MIC) number of existing residential houses estimated based on the housing and land survey, to which is added the MIC number of existing non-residential houses[1] based on the summary report of fixed asset taxes.

(1) The prefecture-basis data missing from the MIC brief investigation of the fixed asset price list were obtained through an information disclosure request

$$\text{FRK's estimated figure of traded existing houses} = \text{Number of houses whose ownership was transferred after trading} \times \frac{\text{number of existing residential houses}_{(2)} \text{ (Housing and land survey)}}{\substack{\text{number of existing non-residential houses (Summary report of fixed asset taxes)}} + \substack{\text{number of existing residential houses (Housing and land survey)}}}$$

The ratio of traded existing houses is estimated based on the right formula.

$$\text{Rated of traded existing house} = \frac{\text{FRK's estimated figure of traded existing houses}}{\text{FRK's estimated figure of traded existing houses} + \text{Total number of new housing starts}_{(3)}}$$

(2) The number of existing residential houses (housing and land survey) is obtained by adding the net increment of each year calculated based upon statistical surveys of new constructions of buildings (new housing starts) and the loss of buildings by Ministry of Land, Infrastructure, Transport and Tourism (MLIT), in addition to the latest number of existing residential houses surveyed by the housing and land survey every 5 years.

(3) The total number of new housing starts is the total number of newly built residential houses (constructions of newly established residential houses—including rented houses/issued houses) from among the construction classes listed in the statistical surveys of new constructions of buildings (statistics of newly started residential housing constructions).

Intended use categories of existing non-residential houses (End of 2017)

(unit: No. of building unit)

number of existing non-residential houses (National totals in 2017)			7,790,771
Wooden houses		**Non-wooden houses**	**Total wooden and non-wooden houses**
Items by Usage	Office, Bank, Store	669,666	Office, Store, Department store, Bank	1,381,457	2,051,123
	Japanese inn, Restaurant, Hotel	79,701	Hospital, Hotel	129,969	243,041
	Theater, Hospital	33,371			
	Factory, Warehouse, Public bath	1,152,588	Factory, Warehouse, Market	3,325,540	4,478,128
Tax-exempt houses					1,018,479

The above table is prepared from data obtained from the summary report of fixed asset taxes of 2018, while the data of the summary report of fixed asset taxes reflect the values as of January 1 each year. Therefore the above data are regarded as the values from the end of the previous year (2017) in this report.

The building usage categories shown in the summary report of fixed asset taxes include usages not applicable as the subjects of registration by themselves, and usages with a small trading volume in the real estate market. For example, the number of wooden accessory structures from among the number of existing non-residential houses listed in the summary report of fixed asset taxes, is excluded here because it is generally registered as part of the main house and it is not counted as a case of registration transfer—even if it is traded along with the main house. Furthermore, wooden structure go-down style warehouses, and other simple non-wooden frame structures such as cocooneries, greenhouses, stockrooms, compost houses, garages, toilets, or such buildings as power station facilities not applicable in the others category, are also excluded as wooden accessory structures.

4. National scale statistic estimation results

The estimated number of traded existing houses on the national scale in the 2018 flash report is 598,000 units (up 105 units from the previous year), showing a 7th year of consecutive growth since 2011.The trading volume has increased approximately 1.39 times that of 2009 (430,000 units). The trading ratio of existing houses for 2018 (flash report) increased 0.5 percentage points to 38.8% compared to 2017, due to a decrease in the total number of new housing starts (a decline of 22,300 units compared to the previous year) following a wafer thin increase in the trading volume of existing houses.

	Category	Unit	Reference	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A	Total number of new housing starts(including houses for rent, company subsidized)	(number of houses)	Statistical surveys of new constructing of buildings	788,410	813,126	834,117	882,797	980,025	892,261	909,299	967,237	964,641	942,370
(Reference)	Number of registrations for ownership transfer	(number of registration)	Statistical on number of registrations by the Ministry of Justice (MOJ)	487,885	532,383	513,444	533,506	579,455	584,753	623,488	650,485	669,903	669,270
B	FRK's estimated figure of traded existing houses	(number of cases)	Estimation based on the number of registrations for ownership transfer	430,315	469,562	454,398	472,686	513,977	518,676	554,281	578,932	597,553	*597,658*
	Ratio of traded existing houses (B/(A+B))			35.3%	36.6%	35.3%	34.9%	34.4%	36.8%	37.9%	37.4%	38.3%	*38.8%*

*FRK's estimated trading volume of existing houses in 2018 is a provisional figures, made using the ratio of residential houses from among the number of existing buildings, where the number of existing non-residential houses uses the value for 2017 (In this report, the value taken as of January 1, 2018 is seen as the value as of the end of 2017.)
*Regarding the results of the 2018 estimate of the trading volume of existing houses, the same applies hereinafter unless otherwise specifically noted.
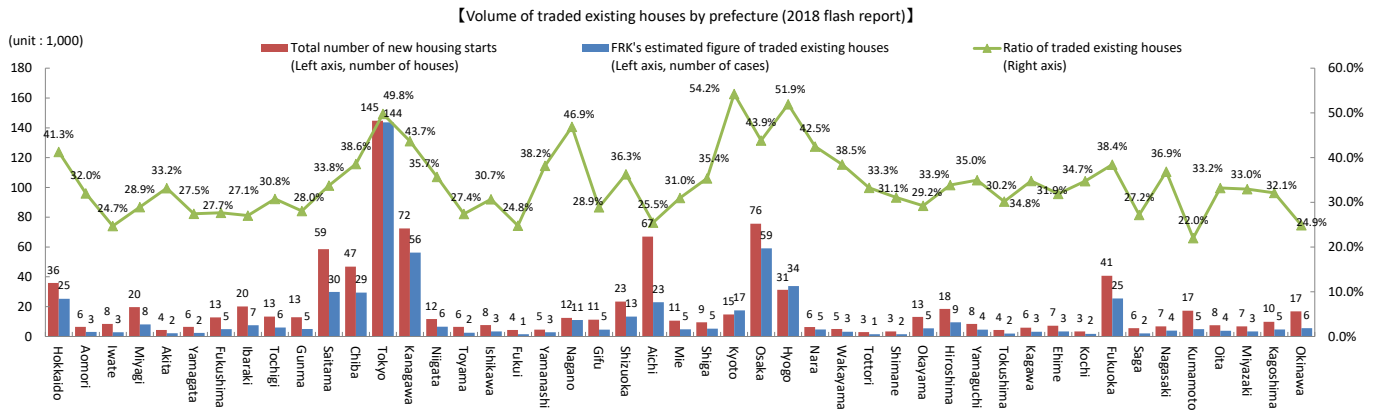
5. Prefectural scale statistic estimation results

According to the 2018 flash report on prefecture-based estimations of traded existing houses, Tokyo has the largest number at 144,000 units (up 3,000 units from the previous year), Osaka comes next with 56,000 units (down 3,000 units), then Kanagawa Prefecture with 56,000 units (down 3,000 units). The 2018 flash report on the ratio of traded existing houses shows Kyoto as the highest with 54.2% (down 1.1 percentage points from the previous year), with Tokyo next at 49.8% (up 1.3 percentage points).

< Estimated figures in 2018 (flash report) >

(National scale statistic estimation 2018 flash report)
・FRK's estimated figure of traded existing houses: 598,000 ・Ratio of traded existing houses: 38.8%

【Volume of traded existing houses by prefecture (2018 flash report)】

< Estimated figures in 2017 >

(National scale statistic estimation 2016)
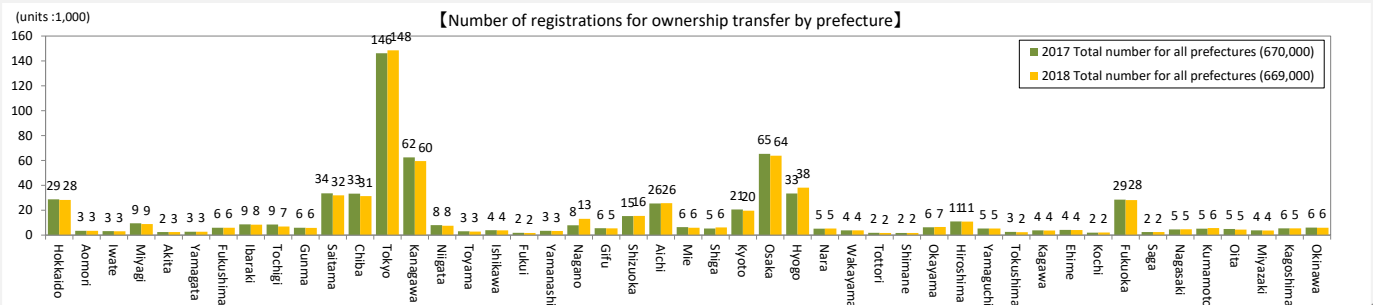・FRK's estimated figure of traded existing houses: 598,000 ・Ratio of traded existing houses: 38.3%

【Volume of traded existing houses by prefecture (2017)】

<Reference: 2017, 2018 Number of registrations for ownership transfer by prefecture>

【Number of registrations for ownership transfer by prefecture】
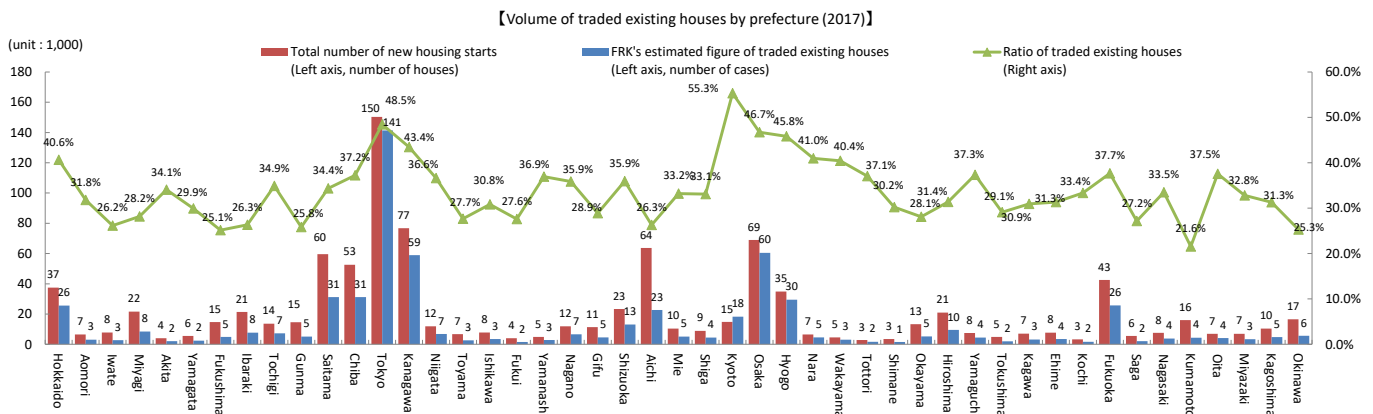
6. Statistical estimate of Tokyo's 23 wards

Examination of the growth trend in the trading volume of existing houses, as surveyed by FRK, shows four years of consecutive growth since 2014. In the 2018 flash estimation report, the FRK estimates the trading volume of existing houses in Tokyo's 23 wards is 123,000 units, accounting for about 85% of the total for Tokyo (144,000 units, refer to 5.). The trading ratio of existing houses (2018 flash report) is 52.3%, growing 1.8 percentage points over 2017. This ratio is more than 2.5 percentage points above the 2018 trading ratio for the whole of Tokyo (49.8%, refer to 5.).
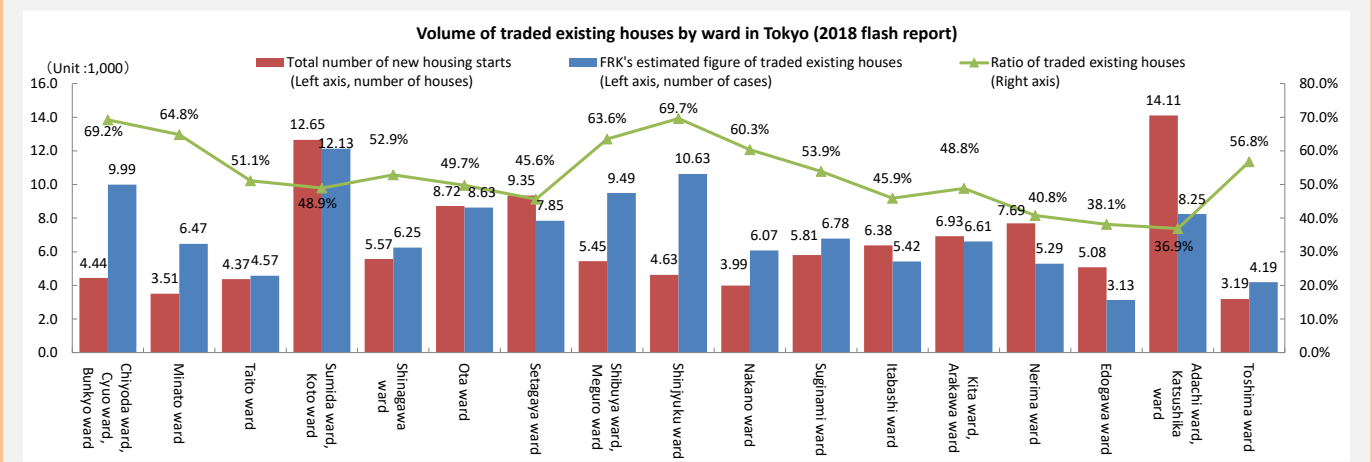
	Category	Unit	Reference	2009	2010	2011	2012	2013	2014	2015	2016	2017	2018
A	Total number of new housing starts(including houses for rent, company subsidized)	(number of houses)	Statistical surveys of new constructing of buildings	79,734	90,761	95,274	108,668	106,997	109,343	107,524	115,926	117,616	111,852
B	FRK's estimated figure of traded existing houses	(number of cases)	Estimation based on the number of registrations for ownership transfer	66,489	77,597	77,919	87,004	100,687	97,970	109,861	113,708	120,215	*122,704*
	Ratio of traded existing houses (B/(A+B))			45.5%	46.1%	45.0%	44.5%	48.5%	47.3%	50.5%	49.5%	50.5%	*52.3%*

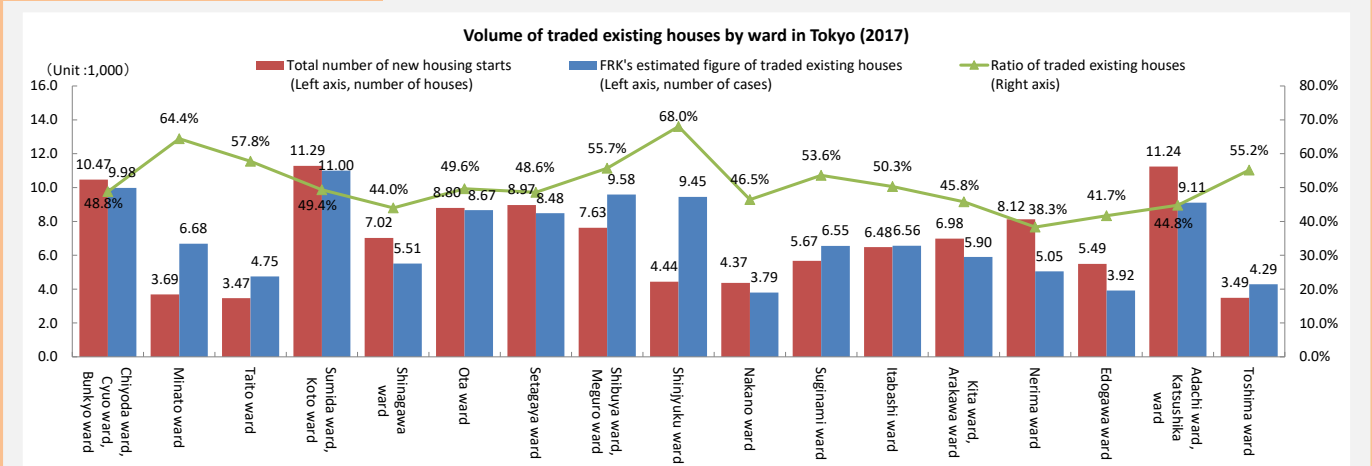## 7. Statistical estimate of Tokyo by ward (2018 flash report)

Examination of the results of FRK's estimates for Tokyo on a ward by ward basis (2018 flash report) shows that the Shinjyuku ward has the largest trading volume of existing houses (10,630 units; a year on year increase of 1,180 units), followed by the Ota ward (8,630 units, a year on year decrease of 40 units). It also shows that the Shinjyuku ward has the highest trading ratio of existing houses (69.7%; up 1.7 percentage points, year on year), followed by the Minato ward (64.8%; up 0.4 percentage points, year on year) and the Nakano ward (60.3%; up 13.8 percentage points, year on year).

In terms of the total trading volume of existing houses in combined areas of multiple wards (2018 flash report), the Sumida and Koto ward areas have the largest trading volume (12,130 units; a year on year increase of 1,130 units), followed by the Chiyoda, Chuo, and Bunkyo ward areas and then the Shibuya and Meguro ward area. In terms of the total trading ratio of existing houses in combined areas of multiple wards (2018 flash report), the Chiyoda, Chuo, and Bunkyo ward areas has the highest trading ratio (69.2%; up 20.4%, year on year).

Estimated figures in 2018 flash report

Volume of traded existing houses by ward in Tokyo (2018 flash report)

Estimated figures in 2017

Volume of traded existing houses by ward in Tokyo (2017)

※1 The data on ownership transfer registrations for the trading of buildings are gathered at branch office level of the Legal Affairs Bureau, because the unit level for gathering data is the branch office of the Bureau.

※2 The aggregated figures for data on registered fixed asset taxables disclosed by Tokyo are compiled only for taxable houses. Because of this, the number of existing non-residential houses includes the estimated number of tax-exempt houses by ward (by branch office level of the Bureau), which is calculated by dividing the number of tax-exempt houses in Tokyo's wards by the ratio of the number of ownership transfer registrations of each ward in Tokyo (by branch office level of the Bureau).

※3 Although the summary values of data for the number of non-wooden structures by building purposes can be obtained from the various wards in Tokyo, the summary value of data for the number of wooden structures by purpose can be obtained only for the 23 wards as a whole, rather than by ward. Thus, the estimation is made for accessory buildings and storehouses by ward, by dividing the data on the number of accessory buildings and storehouses in the 23 wards as a whole by the ratio of the total number of wooden buildings (non-residential), and excluding the number of existing non-residential houses for the final estimation.

※4 The estimate for Tokyo, as surveyed by ward level, is calculated by first obtaining an estimate for the ratio of residential houses among the existing building stock of each area for estimation, and based on this ratio, the trading volume of existing houses (the number of registrations for ownership transfer by trading) is estimated. Because of this method, FRK's estimated number of existing houses in each area for estimation is not necessarily consistent with that of the 23 wards as a whole, as shown in Item 6 above.

8. Transitions by ward in Tokyo

Examination of the growth rate of the trading volume for existing houses in 2018 (flash report) compared to the previous year shows that growth was the most significant in Nakano ward at 60.1%, while decline was greatest in Edogawa ward at -20.2%.

As for the trading volume of existing houses, examination of the last six years of the Sumida and Koto ward area, having the highest trading volume in 2018, reveals a continuing trend of growth since 2014, when there was a significant decline in the trading volume.

With the exception of Sumida ward and Koto ward, areas that have comparatively large trading volumes in 2018 and have exhibited growth trends in recent years are Ota ward, Adachi ward and Katsushika ward, but these remained steady or declined slightly. In addition, of Shinagawa ward and Minato ward, which border Ota ward, Shinagawa ward continues to exhibit an upward growth trend, and this confirms the expansion of the distribution markets in the Tokyo bay areas.

<Volume of traded existing houses in 2018 (flash report) and fluctuation from 2017>

Rank	Area for estimation	(Unit :1,000 houses)	Rank	Area for estimation	(%)
1	Sumida, Koto ward	12.1	1	Nakano ward	60.1%
2	Shinjyuku ward	10.6	2	Shinagawa ward	13.4%
3	Chiyoda, Cyuo, Bunkyo ward	10.0	3	Shinjyuku ward	12.5%
4	Shibuya, Meguro ward	9.5	4	Kita, Arakawa ward	12.2%
5	Ota ward	8.6	5	Sumida, Koto ward	10.3%
6	Adachi, Katsushika ward	8.2	6	Nerima ward	4.8%
7	Setagaya ward	7.8	7	Suginami ward	3.5%
8	Suginami ward	6.8	8	Chiyoda, Cyuo, Bunkyo ward	0.1%
9	Kita, Arakawa ward	6.6	9	Ota ward	−0.5%
10	Minato ward	6.5	10	Shibuya, Meguro ward	−0.9%
11	Shinagawa ward	6.3	11	Toshima ward	−2.4%
12	Nakano ward	6.1	12	Minato ward	−3.2%
13	Itabashi ward	5.4	13	Taito ward	−3.8%
14	Nerima ward	5.3	14	Setagaya ward	−7.5%
15	Taito ward	4.6	15	Adachi, Katsushika ward	−9.5%
16	Toshima ward	4.2	16	Itabashi ward	−17.4%
17	Edogawa ward	3.1	17	Edogawa ward	−20.2%

< Ref. Total number of new housing starts in 2018 and fluctuation from 2017>

Rank	Area for estimation	(Unit :1,000 cases)	Rank	Area for estimation	(%)
1	Adachi, Katsushika ward	14.1	1	Taito ward	25.8%
2	Sumida, Koto ward	12.7	2	Adachi, Katsushika ward	25.5%
3	Setagaya ward	9.4	3	Sumida, Koto ward	12.1%
4	Ota ward	8.7	4	Shinjyuku ward	4.3%
5	Nerima ward	7.7	5	Setagaya ward	4.2%
6	Kita, Arakawa ward	6.9	6	Suginami ward	2.4%
7	Itabashi ward	6.4	7	Kita, Arakawa ward	−0.8%
8	Suginami ward	5.8	8	Ota ward	−0.9%
9	Shinagawa ward	5.6	9	Itabashi ward	−1.5%
10	Shibuya, Meguro ward	5.4	10	Minato ward	−4.9%
11	Edogawa ward	5.1	11	Nerima ward	−5.4%
12	Shinjyuku ward	4.6	12	Edogawa ward	−7.5%
13	Chiyoda, Cyuo, Bunkyo ward	4.4	13	Toshima ward	−8.5%
14	Taito ward	4.4	14	Nakano ward	−8.7%
15	Nakano ward	4.0	15	Shinagawa ward	−20.7%
16	Minato ward	3.5	16	Shibuya, Meguro ward	−28.6%
17	Toshima ward	3.2	17	Chiyoda, Cyuo, Bunkyo ward	−57.6%

Growth trend over the last 6 years in areas exhibiting an upward growth trend in the trading volume of existing houses

【Sumida Ward, Koto Ward】
Transition in Volume of traded existing houses(2013-2018)

【Adachi Ward, Katsushika Ward】
Transition in Volume of traded existing houses(2013-2018)

【Ota Ward】
Transition in Volume of traded existing houses(2013-2018)

【Minato Ward】
Transition in Volume of traded existing houses(2013-2018)

【Shinagawa Ward】
Transition in Volume of traded existing houses(2013-2018)
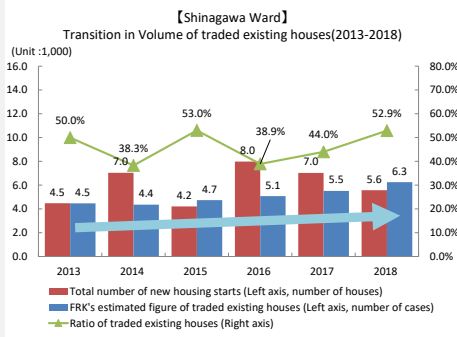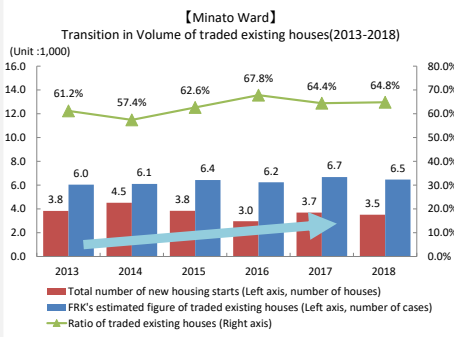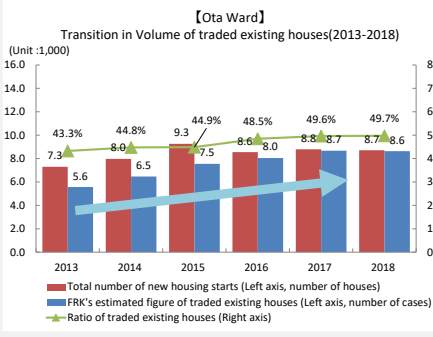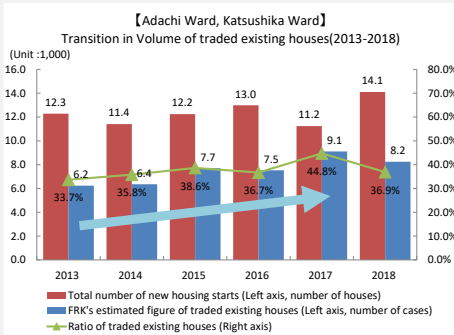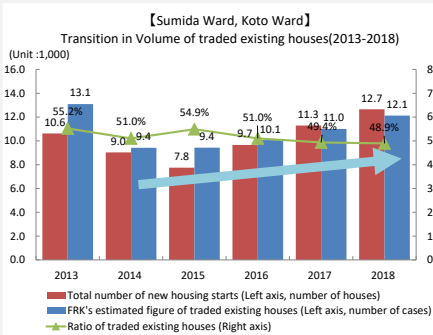
Growth trend over the last 6 years for other areas having large trading volume

【Chiyoda Ward, Cyuo Ward, Bunkyo Ward】
Transition in Volume of traded existing houses(2013-2018)

【Shibuya Ward, Meguro Ward】
Transition in Volume of traded existing houses(2013-2018)

【Shinjyuku Ward】
Transition in Volume of traded existing houses(2013-2018)
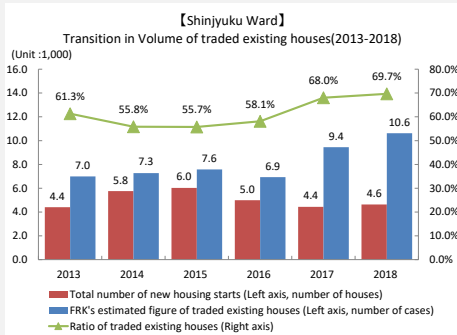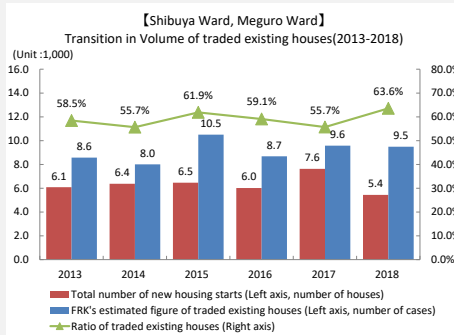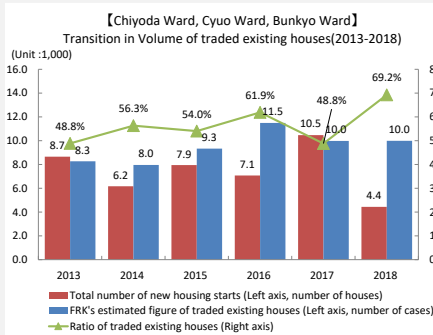
9. Statistical estimate of 16 areas of the Tokyo metropolitan area excluding Tokyo's 23 wards

According to FRK's estimation results of 16 areas regarding traded existing houses (2018 flash report), the Yokohama area in Kanagawa Prefecture shows the largest number with 26,400 units, followed by the Kawasaki area in Kanagawa Prefecture with 10,100 units, the Fuchu area in Tokyo Prefecture with 7,200 units, and the Saitama area in Saitama Prefecture with 7,100 units.

The trading volume of existing houses for the Yokohama area accounts for just under half of that of the whole of Kanagawa Prefecture (56,000 units, refer to 5.), and is larger by around 1,000 units than that of the entirety of Hokkaido (25,000 units, refer to 5.).

Examination of the trading ratio of existing houses for 2018 (flash report) shows that growth was highest in the Yokohama (45.5%) and Kawasaki (45.5%) areas, followed by the Chiba area (43.6%). Examination of the trading volume of existing houses for 2018 (flash report) shows that the Tachikawa, Fujisawa and Nishitokyo areas posted increases of 5% or higher in trading volume, compared to 2017. Further, of these areas, only the Nishitokyo area showed an increase in the total number of new housing starts from 2017 to 2018.

※The municipalities included in the subject areas are as listed in the table to the right.
※As to the data on the number of registrations of ownership transfer by the trading of houses, Samukawa Town is included in the Fujisawa area because a branch office of the Legal Affairs Bureau is the minimum unit scale available for data collection. For the purpose of estimating existing house volume in a municipality, however, an estimation of the traded volume of existing houses is made based on the ratio of residential houses among the number of existing buildings in city areas excluding Samukawa Town because data for the decreased number of buildings statistics survey were not available to estimate the number of existing residential houses during a year for which the housing and land survey does not conduct a survey. This ratio is obtained by an equation: the number of existing houses/the number of non-residential houses + the number of existing residential houses).

	Area for estimation	Prefecture	Municipality
1	Saitama Area	Saitama	Saitama city, Toda city, Warabi city
2	Kawaguchi Area		Kawaguchi city
3	Shiki Area		Shiki city, Asaka city, Wako city, Niiza city, Fujimi city
4	Tokorozawa Area		Tokorozawa city, Sayama city, Iruma city
5	Chiba Area	Chiba	Chiba city, Narashino city
6	Matsudo Area		Matsudo city, Nagareyama city
7	Funabashi Area		Funabashi city, Yachiyo city
8	Kashiwa Area		Kashiwa city, Abiko city, Noda city
9	Ichikawa Area		Ichikawa city, Kamagaya city, Urayasu city
10	Machida Area	Tokyo	Machida city
11	Fuchu Area		Musashino city, Mitaka city, Fuchu city, Chofu city, Koganei city, Komae city, Tama city, Inagi city
12	Nishitokyo Area		Kodaira city, Higashimurayama city, Nishitokyo city, Kiyose city, Higashikurume city
13	Tachikawa Area		Tachikawa city, Akishima city, Musashimurayama city, Higashiyamato city, Kokubunji city, Kunitachi city, Hino city
14	Yokohama Area	Kanagawa	Yokohama city
15	Kawasaki Area		Kawasaki city
16	Fujisawa Area		Kamakura city, Fujisawa city, Chigasaki city, Samukawa town

Estimated figures in 2018 flash report

Volume of traded existing houses of 16 areas on the Tokyo metropolitan area (2018 flash report)
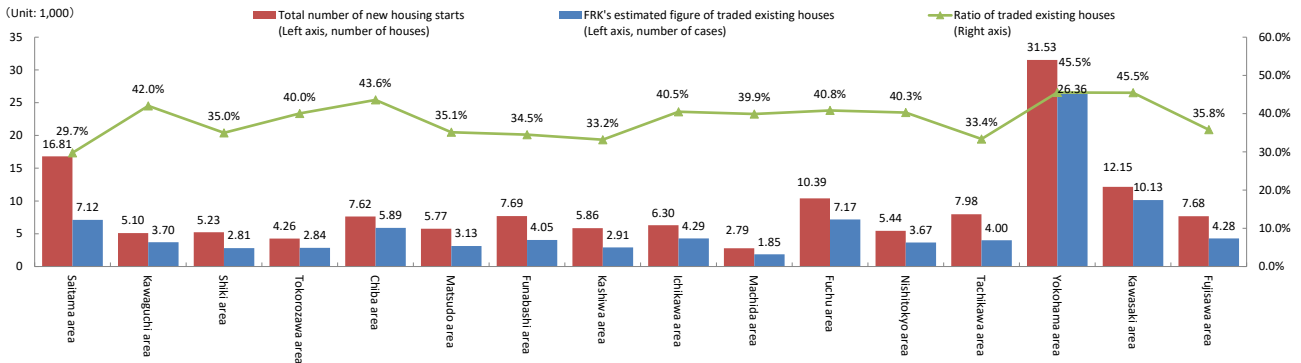
Estimated figures in 2017

Volume of traded existing houses of 16 areas on the Tokyo metropolitan area (2017)

<Volume of traded existing houses in 2018 (flash report) and fluctuation from 2017>

Rank	Area for estimation	(Unit: 1000 houses)
1	Yokohama area	26.3
2	Kawasaki area	10.1
3	Fuchu area	7.2
4	Saitama area	7.1
5	Chiba area	5.9
6	Ichikawa area	4.3
7	Fujisawa area	4.3
8	Funabashi area	4.0
9	Tachikawa area	4.0
10	Kawaguchi area	3.7
11	Nishitokyo area	3.7
12	Matsudo area	3.1
13	Kashiwa area	2.9
14	Tokorozawa area	2.8
15	Shiki area	2.8
16	Machida area	1.9

Rank	Area for estimation	(%)
1	Tachikawa area	7.0%
2	Fujisawa area	6.4%
3	Nishitokyo area	5.0%
4	Kawasaki area	1.9%
5	Machida area	1.4%
6	Matsudo area	0.5%
7	Tokorozawa area	−3.1%
8	Shiki area	−3.5%
9	Yokohama area	−4.2%
10	Kawaguchi area	−5.7%
11	Fuchu area	−5.8%
12	Chiba area	−7.5%
13	Saitama area	−7.7%
14	Ichikawa area	−7.8%
15	Kashiwa area	−11.1%
16	Funabashi area	−17.0%

<Ref. Total number of new housing starts in 2018 and fluctuation from 2017>

Rank	Area for estimation	(Unit: 1000 cases)
1	Yokohama area	31.5
2	Saitama area	16.8
3	Kawasaki area	12.2
4	Fuchu area	10.4
5	Tachikawa area	8.0
6	Funabashi area	7.7
7	Fujisawa area	7.7
8	Chiba area	7.6
9	Ichikawa area	6.3
10	Kashiwa area	5.9
11	Matsudo area	5.8
12	Nishitokyo area	5.4
13	Shiki area	5.2
14	Kawaguchi area	5.1
15	Tokorozawa area	4.3
16	Machida area	2.8

Rank	Area for estimation	(%)
1	Shiki area	17.2%
2	Saitama area	10.4%
3	Fuchu area	5.8%
4	Machida area	4.9%
5	Tachikawa area	4.4%
6	Funabashi area	1.1%
7	Tokorozawa area	−2.0%
8	Fujisawa area	−2.5%
9	Yokohama area	−4.6%
10	Kawasaki area	−5.8%
11	Ichikawa area	−6.3%
12	Kashiwa area	−7.8%
13	Nishitokyo area	−14.6%
14	Matsudo area	−17.7%
15	Kawaguchi area	−19.0%
16	Chiba area	−33.4%

5

10. Trends in significant locations in 16 areas in the Tokyo metropolitan area

Examination of the growth data for the trading volume of existing houses for the last six years in the top four areas given in the previous slide shows that only the Kawasaki area was able to maintain a growth trend, while the Saitama, Yokohama and Fuchu areas all trended downwards slightly from 2017. Next, of the areas shown in the previous slide that have exhibited particularly high growth rates in the trading volume of existing houses since 2017, while the growth rate in the Nishitokyo area slowed from 2013 to 2014, it has since been picking up gradually. In the Tachikawa area, the trading volume of existing houses has continued to grow at a modest pace since 2013, with the figures for 2018 (flash report) around 2.5 times those of 2013, indicating that the existing house trading market in this area is expanding steadily. The figures for the Kawasaki and the Fujisawa areas have been growing at a modest pace for the past six years, indicating that the trading volume of existing houses is growing at a steady pace in these areas.

Growth trend over the last 6 years in the top four areas with the highest trading volume

【Yokohama Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	32.1	24.4	28.1	29.6	33.1	31.5
FRK's estimated figure	24.7	23.2	25.7	27.2	27.5	26.4
Ratio of traded existing houses	43.5%	48.7%	47.8%	47.8%	45.4%	45.5%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Fuchu Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	12.5	10.7	11.0	9.9	9.8	10.4
FRK's estimated figure	5.3	5.7	7.0	7.7	7.6	7.2
Ratio of traded existing houses	29.6%	34.9%	38.9%	43.7%	43.7%	40.8%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)
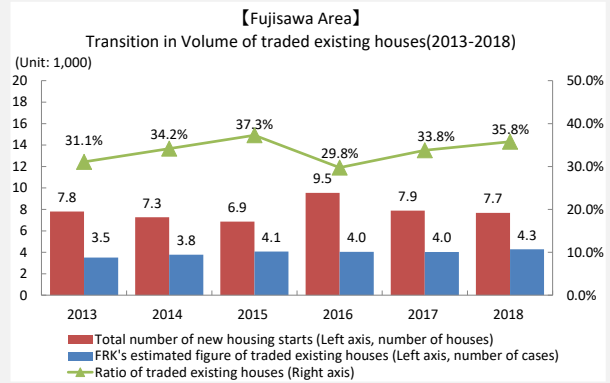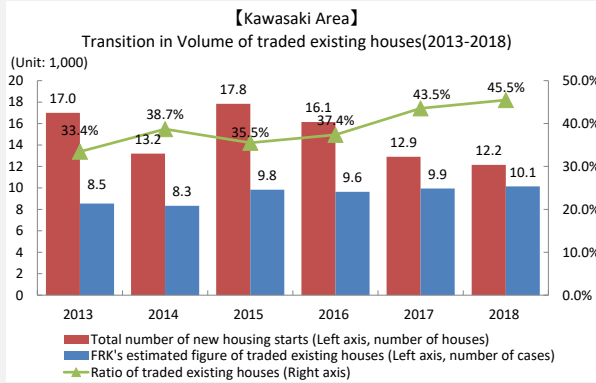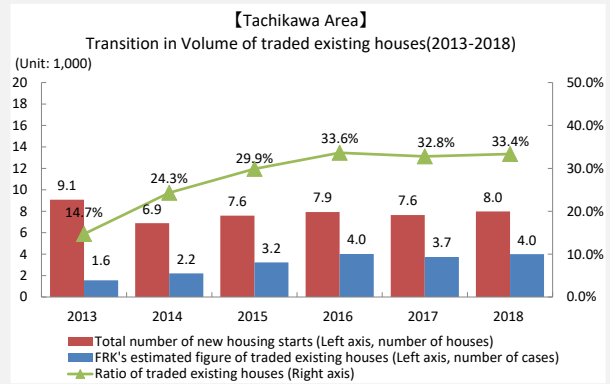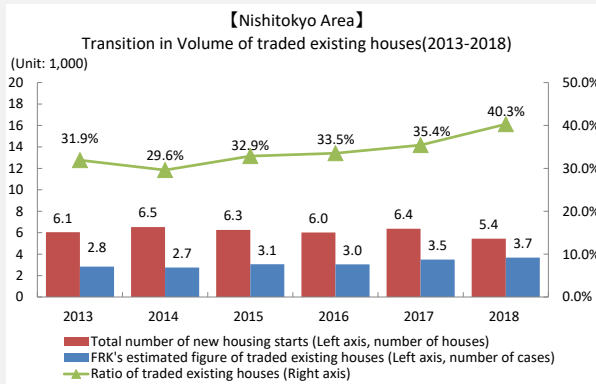
【Kawasaki Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	17.0	13.2	17.8	16.1	12.9	12.2
FRK's estimated figure	8.5	8.3	9.8	9.6	9.9	10.1
Ratio of traded existing houses	33.4%	38.7%	35.5%	37.4%	43.5%	45.5%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Saitama Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	14.6	13.0	14.7	15.8	15.2	16.8
FRK's estimated figure	7.1	6.2	7.1	7.6	7.7	7.1
Ratio of traded existing houses	32.6%	32.2%	32.4%	32.6%	33.6%	29.7%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

Growth trend over the last 6 years in areas exhibiting strong growth in the trading volume since 2018

【Nishitokyo Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	6.1	6.5	6.3	6.0	6.4	5.4
FRK's estimated figure	2.8	2.7	3.1	3.0	3.5	3.7
Ratio of traded existing houses	31.9%	29.6%	32.9%	33.5%	35.4%	40.3%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Tachikawa Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	9.1	6.9	7.6	7.9	7.6	8.0
FRK's estimated figure	1.6	2.2	3.2	4.0	3.7	4.0
Ratio of traded existing houses	14.7%	24.3%	29.9%	33.6%	32.8%	33.4%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Kawasaki Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	17.0	13.2	17.8	16.1	12.9	12.2
FRK's estimated figure	8.5	8.3	9.8	9.6	9.9	10.1
Ratio of traded existing houses	33.4%	38.7%	35.5%	37.4%	43.5%	45.5%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Fujisawa Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	2013	2014	2015	2016	2017	2018
Total number of new housing starts	7.8	7.3	6.9	9.5	7.9	7.7
FRK's estimated figure	3.5	3.8	4.1	4.0	4.0	4.3
Ratio of traded existing houses	31.1%	34.2%	37.3%	29.8%	33.8%	35.8%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

11. Statistical estimate of Yokohama City and wards

Estimation was made for each ward based on the trading volume of existing houses, particularly in Yokohama City, which had a large traded volume among the estimations of traded volume of existing houses in 16 Tokyo metropolitan areas (Tokyo Prefecture and 3 other prefectures).

In estimated figures (2018 flash report), the results show that Naka Ward, Nishi Ward and Minami Ward had the largest volume with 6,020 units; followed by Hodogaya Ward, Tsurumi Ward and Kanagawa Ward (5,650 units) and Kohoku Ward and Tsuzuki Ward (3,380 units). Of these, the top two areas also rank highest in terms of the total number of new housing starts.
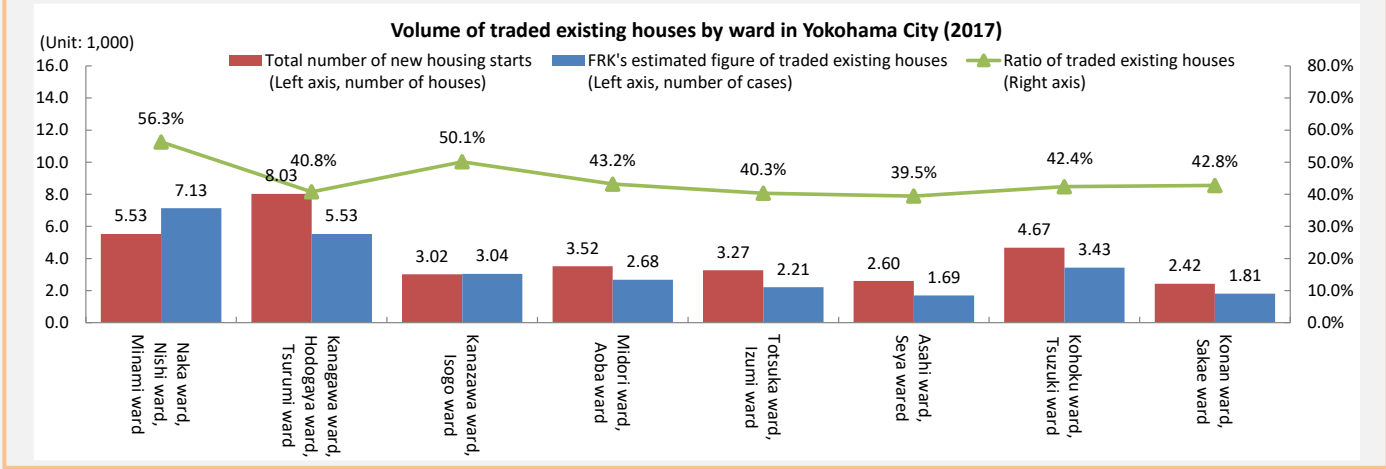
Being conveniently located with easy access to central Tokyo, these three areas also top the list in terms of the total number of new housing starts. The trading ratios of existing houses for 2018 are relatively high—over 40%—in almost all of these areas, although they are lower than those of Tokyo's 23 wards. The trading volume (2018 flash report) for the Kanazawa ward, and Isogo ward areas is 57.4%—over the 50% mark.

Looking at the growth of the trading volume of existing houses in each area, in comparison with 2017, Naka ward, Nishi ward, and Minami ward have all exhibited downward trends, while Kanagawa ward, Hodogaya ward and Tsurumi ward have all remained flat, and Kanazawa ward and Isogo ward have posted increases.
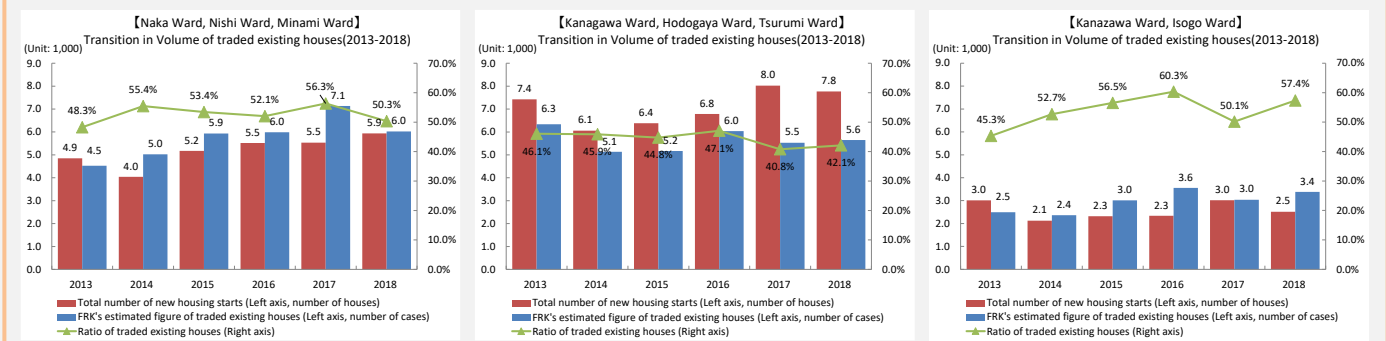
Estimated figures in 2018 flash report

Volume of traded existing houses by ward in Yokohama City (2018 flash report)

Estimated figures in 2017
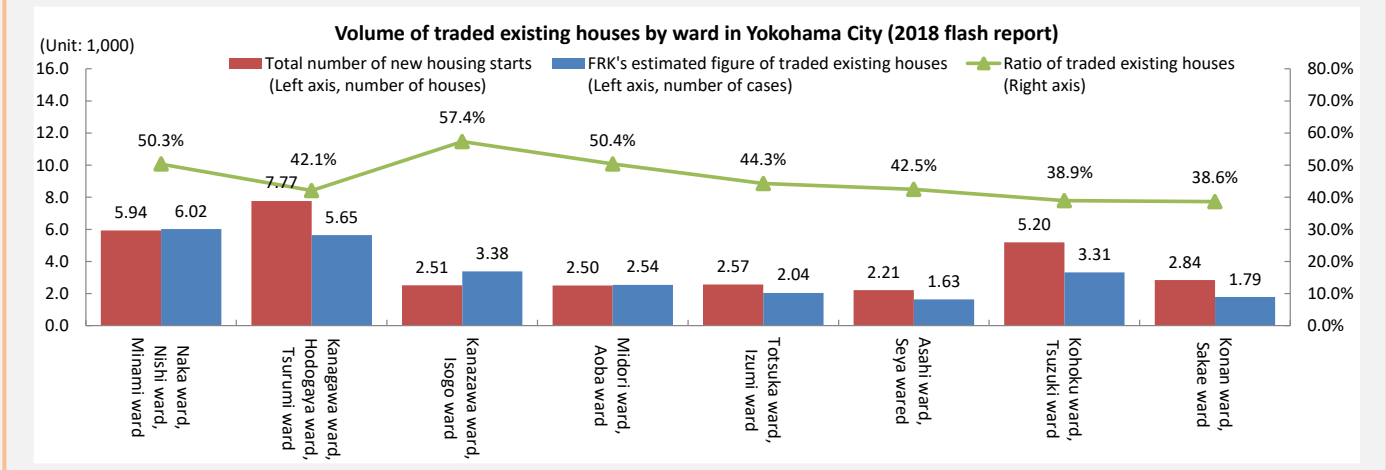
Volume of traded existing houses by ward in Yokohama City (2017)

Growth trend over the last 6 years for the top three areas with the highest trading volume of existing houses

【Naka Ward, Nishi Ward, Minami Ward】 Transition in Volume of traded existing houses(2013-2018)

【Kanagawa Ward, Hodogaya Ward, Tsurumi Ward】 Transition in Volume of traded existing houses(2013-2018)

【Kanazawa Ward, Isogo Ward】 Transition in Volume of traded existing houses(2013-2018)

※1 The data on ownership transfer registrations for the trading of buildings are gathered at branch office level of the Legal Affairs Bureau, because the unit level for gathering data is the branch office of the Bureau.

※2 The aggregated figures for data on registered fixed asset taxables disclosed by Yokohama City are compiled only for taxable houses. Because of this, the number of existing non-residential houses includes the estimated number of tax-exempt houses by ward (by branch office level of the Bureau), which is calculated by dividing the number of tax-exempt houses in Kanagawa Prefecture as a whole by the ratio of the number of ownership transfer registrations of each ward in Yokohama City.

※3 The estimate for Yokohama City, as surveyed by ward level, is calculated by first obtaining an estimate for the ratio of residential houses among the existing building stock of each area for estimation, and based on this ratio, the trading volume of existing houses (the number of registrations for ownership transfer by trading) is estimated. Because of this method, FRK's estimated figure of traded existing houses in each area for estimation is not necessarily consistent with that of Yokohama City as a whole, as shown in Item 9 above.

12. Estimated results in 22 Kansai areas (Osaka and Hyogo prefectures)

The estimate for the trading volume of existing houses was compiled by dividing the Kansai area (Osaka and Hyogo prefectures) into 22 areas. According to the estimated results (2018 flash report) of FRK's estimated figure of traded existing houses, the Osaka area in Osaka Prefecture had the largest trading volume with 28,100 units, followed by the Kobe area in Hyogo Prefecture with 20,100 units, then the Kitaosaka area in Osaka Prefecture with 5,800 units. In terms of the ratio of traded existing houses (2018 flash report), the Kobe area in Hyogo Prefecture had the highest ratio at 65.1%, followed by the Sumoto area in Hyogo Prefecture at 60.4%, and the Moriguchi area in Osaka Prefecture at 55.2%. The trading volume of existing houses for the Osaka area (2018 flash report) accounts for about half of the whole of Osaka Prefecture (59,000 units), and is about the same as that of the whole of Chiba Prefecture (29,000 units).

※The municipalities included in the subject area for estimation are as listed in the table on the right.

※As to the data on the number of registrations of ownership transfer by the trading of houses, towns and villages are included in multiple areas because a branch office of the Legal Affairs Bureau is the minimum unit scale available for data collection. For the purpose of estimating existing house volume in those municipalities, however, estimation of the traded volume of existing houses is made based on the ratio of residential houses among the number of existing buildings in city areas by excluding those towns and villages, because data for the decreased number of buildings statistic survey were not available for the time to estimate the number of existing residential houses during a year in which housing and land survey does not conduct a survey. This ratio is obtained by an equation: the number of existing houses/(the number of existing non-residential houses + the number of existing residential houses).

※As for the Osaka area and the Kobe area, the estimate was prepared based on the table on the right since summary documents of fixed asset taxes by ward were not available although there are multiple branch offices of the Legal Affairs Bureau in each of the cities.

	Area for estimation	Prefecture	Municipality
1	Osaka Area	Osaka	Osaka city
2	Ikeda Area		Ikeda city, Toyonaka city, Mino city, Toyono town, Nose town
3	Hirakata Area		Hirakata city, Neyagawa city, Katano city
4	Moriguchi Area		Moriguchi city, Kadoma city
5	Kitaosaka Area		Suita city, Takatsuki city, Ibaraki city, Settsu city, Shimamoto town
6	Higashiosaka Area		Higashiosaka city, Daito city, Shijonawate city, Yao city, Kashiwara city
7	Sakai Area		Sakai city, Matsubara city, Takaishi city, Osakasayama city
8	Tondabayashi Area		Tondabayashi city, Kawachinagano city, Habikino city, Fujiidera city, Taishi town, Kanan town, Chihayaakasaka village
9	Kishiwada Area		Kishiwada city, Izumiotsu city, Kaizuka city, Izumisano city, Izumi city, Sennan city, Hannan city, Tadaoka town, Kumatori town, Tajiri town, Misaki town
10	Kobe Area	Hyogo	Kobe city, Ashiya city, Akashi city, Miki city
11	Nishinomiya Area		Nishinomiya city
12	Itami Area		Itami city, Kawanishi city, Inagawa town, Takarazuka city
13	Sanda Area		Sanda city
14	Amagasaki Area		Amagasaki city
15	Kaibara Area		Tamba city, Sasayama city
16	Himeji Area		Himeji city, Kamikawa town, Ichikawa town, Fukusaki town
17	Kakogawa Area		Kakogawa city, Takasago city, Inami town, Harima town
18	Yashiro Area		Nishiwaki city, Kasai city, Ono city, Kato city, Taka town
19	Tatsuno Area		Tatsuno city, Shiso city, Aioi city, Ako city, Taishi town
20	Toyooka Area		Toyooka city, Kami town, Shinonsen town
21	Yoka Area		Yabu city, Asago city
22	Sumoto Area		Sumoto city, Awaji city, Minamiawaji city

Estimated figures in 2018 flash report

(Prefectural scale statistic estimation 2018 flash report)
Osaka Prefecture: ・FRK's estimated figure of traded existing houses: 59,000 ・Ratio of traded existing houses: 43.9%
Hyogo Prefecture: ・FRK's estimated figure of traded existing houses: 34,000 ・Ratio of traded existing houses: 51.9%

Volume of traded existing houses in 22 areas in the Kansai area (Osaka and Hyogo prefecture 2018 flash report)
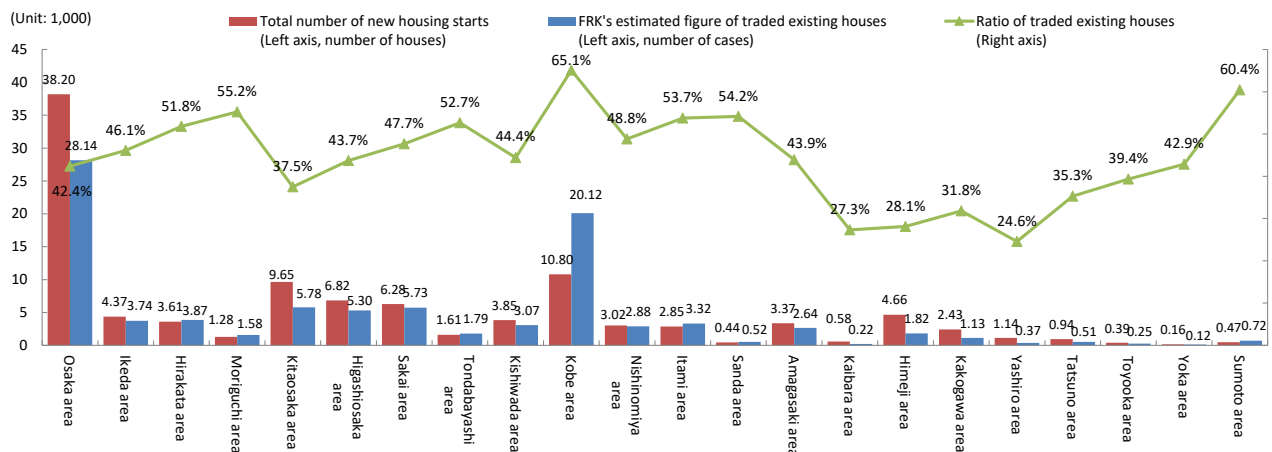
Estimated figures in 2017

(Prefectural scale statistic estimation 2017)
Osaka Prefecture: ・FRK's estimated figure of traded existing houses: 60,000 ・Ratio of traded existing houses: 46.7%
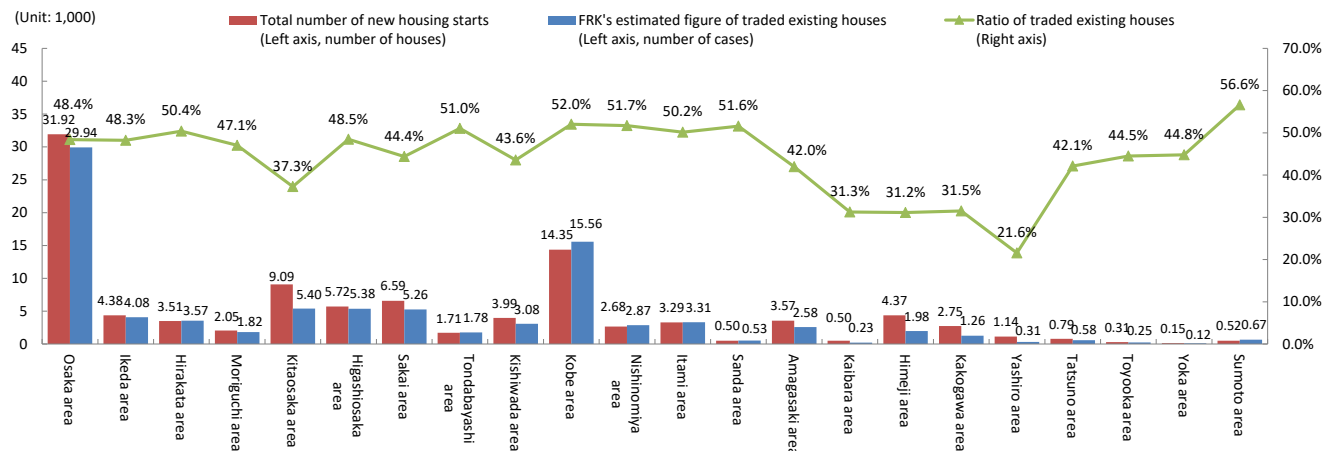Hyogo Prefecture: ・FRK's estimated figure of traded existing houses: 30,000 ・Ratio of traded existing houses: 45.8%

Volume of traded existing houses in 22 areas in the Kansai area (Osaka and Hyogo prefecture 2017)

13. Transitions in trading volume in significant areas

Here is the growth trend over the last ten years for the Osaka and Kobe areas, both of which have the largest trading volume of existing houses in the Kansai region.
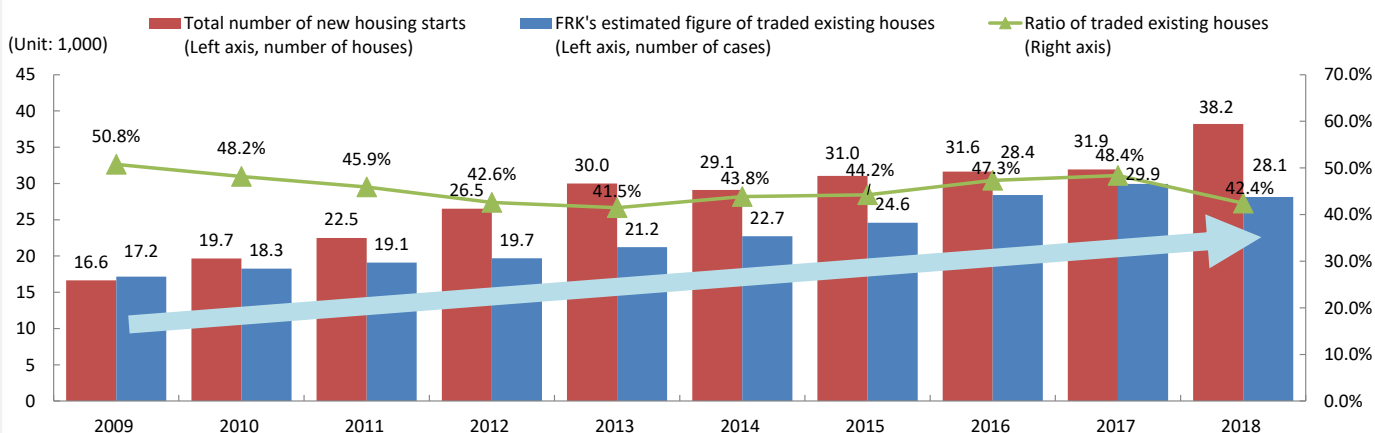
Osaka Area

Examination of the growth trend in the trading volume of existing houses, shows that there was a gentle downward trend over 2017 to 2018, but that a gradual increase has been observed since 2009. The trading volume for 2018 (flash report) is 28,100 units, roughly 1.6 times the figures for 2009 (17,200 units), indicating a continuing growth trend in the trading market for existing houses in those areas. Further, the trading ratio of existing houses for 2018 (flash report) is 42.4%, which is a higher level than the national average (38.8%, refer to 4.).
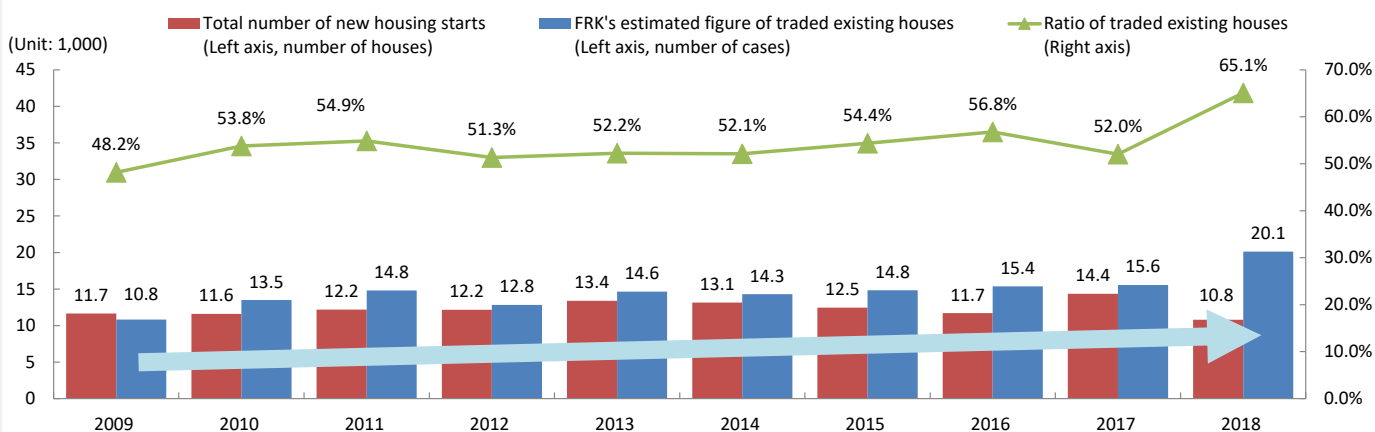
Kobe Area

As for the growth trend in the trading volume of existing houses, despite some fluctuation there was a slight growth trend up until 2017, followed by a strong growth surge in 2018. The trading volume for 2018 (flash report) is 20,100 units, just under double the figures for 2009 (10,800 units). The trading ratio of existing houses for 2018 (flash report) is 65.1%, considerably higher than that of the Osaka area.

Growth trend over the last 10 years for the Osaka and Kobe areas

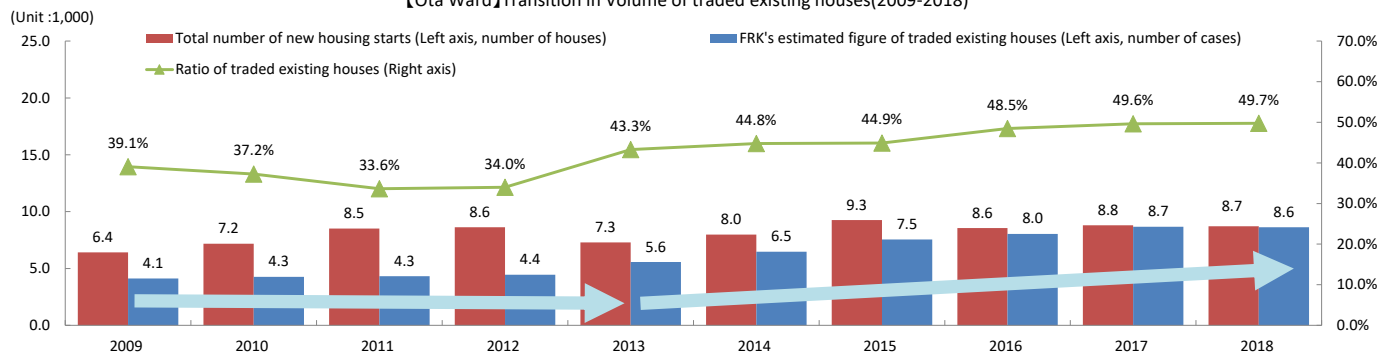【Osaka Area】Transition in Volume of traded existing houses(2009-2018)

(Unit: 1,000)

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

Year	New housing starts	Traded existing houses	Ratio
2009	16.6	17.2	50.8%
2010	19.7	18.3	48.2%
2011	22.5	19.1	45.9%
2012	26.5	19.7	42.6%
2013	30.0	21.2	41.5%
2014	29.1	22.7	43.8%
2015	31.0	24.6	44.2%
2016	31.6	28.4	47.3%
2017	31.9	29.9	48.4%
2018	38.2	28.1	42.4%

【Kobe Area】Transition in Volume of traded existing houses(2009-2018)

(Unit: 1,000)

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

Year	New housing starts	Traded existing houses	Ratio
2009	11.7	10.8	48.2%
2010	11.6	13.5	53.8%
2011	12.2	14.8	54.9%
2012	12.2	12.8	51.3%
2013	13.4	14.6	52.2%
2014	13.1	14.3	52.1%
2015	12.5	14.8	54.4%
2016	11.7	15.4	56.8%
2017	14.4	15.6	52.0%
2018	10.8	20.1	65.1%

< Ref. Growth trend over the last 10 years for the Ota ward in Tokyo >

【Ota Ward】Transition in Volume of traded existing houses(2009-2018)

(Unit :1,000)

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

Year	New housing starts	Traded existing houses	Ratio
2009	6.4	4.1	39.1%
2010	7.2	4.3	37.2%
2011	8.5	4.3	33.6%
2012	8.6	4.4	34.0%
2013	7.3	5.6	43.3%
2014	8.0	6.5	44.8%
2015	9.3	7.5	44.9%
2016	8.6	8.0	48.5%
2017	8.8	8.7	49.6%
2018	8.7	8.6	49.7%

14. Estimated results in 14 areas in the Chukyo area (Aichi Prefecture)

Estimate of the trading volume of existing houses was compiled by dividing the Chukyo area (Aichi Prefecture) into 14 areas.
According to the estimated results (2018 flash report) of the volume of traded existing houses, ward areas of Nagoya City, namely, the Chuo area in Aichi Prefecture, the Atsuta area in Aichi Prefecture, and the Meito area in Aichi Prefecture showed a large trading volume. The total trading volume of existing houses for these three areas is 12,700 units, accounting for roughly half of the trading volume for the whole of Aichi Prefecture (23,000 units, refer to 5.), but only about 40% of the trading volume for the Osaka area (28,100 units, refer to 12.).
Examination of the trading ratio of existing houses (2018 flash report) shows that the ratio for the Meito area, which is the highest of the three areas in Nagoya city, is about the same as the national average (38.8%, refer to 4.), and is lower than that of other major metropolitan and urban areas such as Tokyo's 23 wards (52.3%, refer to 6.), Yokohama (45.5%, refer to 9.), and Osaka (42.4%, refer to 12.).
The trading ratio of existing houses in the majority of the areas other than Nagoya city is 30% or lower. This indicates that the Chukyo region as a whole accounts for lower shares of the housing trading market in terms of trading ratio of existing houses.

※The municipalities included in the subject areas are as listed in the table to the right.
※As to the data on the number of registrations of ownership transfer by the trading of houses, towns and villages are included in multiple areas because a branch office of the Legal Affairs Bureau is the minimum unit scale available for data collection. For the purpose of estimating existing house volume in those municipalities, however, estimation of the traded volume of existing houses is made based on the ratio of residential houses among the number of existing buildings in city areas by excluding those towns and villages, because data for the decreased number of buildings statistic survey were not available for the time to estimate the number of existing residential houses during a year in which housing and land survey does not conduct a survey. This ratio is obtained by an equation: the number of existing houses/(the number of existing non-residential houses + the number of existing residential houses).
※The aggregated figures on data for registered fixed asset taxables disclosed by Nagoya City is compiled only for taxable houses. Because of this, the number of existing non-residential houses includes the estimated number of tax-exempt houses by ward (by each branch office of the Legal Affairs Bureau), which is calculated by dividing the number data for tax-exempt houses in Aichi Prefecture as a whole by the ratio of the number of ownership transfer registrations of each ward in Nagoya City (by each branch office of the Legal Affairs Bureau).
※The estimate for Nagoya City, surveyed by ward level, is calculated by first obtaining an estimate for the ratio of residential houses among existing building stock of each area for estimation, and based on this ratio, the trading volume of the existing houses (the number of registrations for ownership transfer by trading) is estimated. Because of this method, FRK's estimated number of traded existing house in each area for estimation is not necessarily consistent with that of Nagoya City as a whole.

	Area for estimation	Prefecture	Municipality
1	Chuo Area		Nagoya city(Naka ward , Higashi ward , Kita ward , Nakamura ward , Chikusa ward , Showa ward) , Toyoyama town , Kiyosu city , Kitanagoya city
2	Atsuta Area		Nagoya city(Atsuta ward , Minami ward , Nkagawa ward , Minato ward , Mizuho ward , Midori ward) , Toyoake city
3	Meito Area		Nagoya city(Meito ward , Moriyama ward , Tenpaku ward) , Nisshin city , Nagakute city , Togo town
4	Kasugai Area		Kasugai city , Seto city , Inuyama City , Komaki city , Owariasahi city , Okuchi town , Fuso town
5	Tsushima Area		Tsushima city , Aisai city , Yatomi city , Ama city , Kanie town , Tobishima village , Oharu town
6	Ichinomiya Area	Aichi	Ichinomiya city , Inazawa city , Konan city , Iwakura city
7	Handa Area		Handa city , Tokoname city , Obu city , Tokai city , Chita city , Agui town , Taketoyo town , Minamichita town , Mihama town , Higashiura town
8	Okazaki Area		Okazaki city , Kota town
9	Kariya Area		Kariya city , Chiryu city , Anjo city , Hekinan city , Takahama city
10	Toyota Area		Toyota city , Miyoshi city
11	Nishio Area		Nishio city
12	Toyohashi Area		Toyohasi city , Tahara city
13	Toyokawa Area		Toyokawa city , Gamagori city
14	Shinshiro Area		Shinshiro city , Shitara town , Toei town , Toyone village

Estimated figures in 2018 flash report

FRK's estimated figure of traded existing houses in the areas including Nagoya City: 12,700 units

(Prefectural scale statistic estimation 2018 flash report)
Aichi Prefecture: ・FRK's estimated figure of traded existing houses: 23,000 ・Ratio of traded existing houses: 25.5%

Volume of traded existing houses in 14 areas in the Chukyo area (2018 flash report)

(Unit: 1,000)

Estimated figures in 2017

FRK's estimated figure of traded existing houses in the areas including Nagoya City: 12,600 units
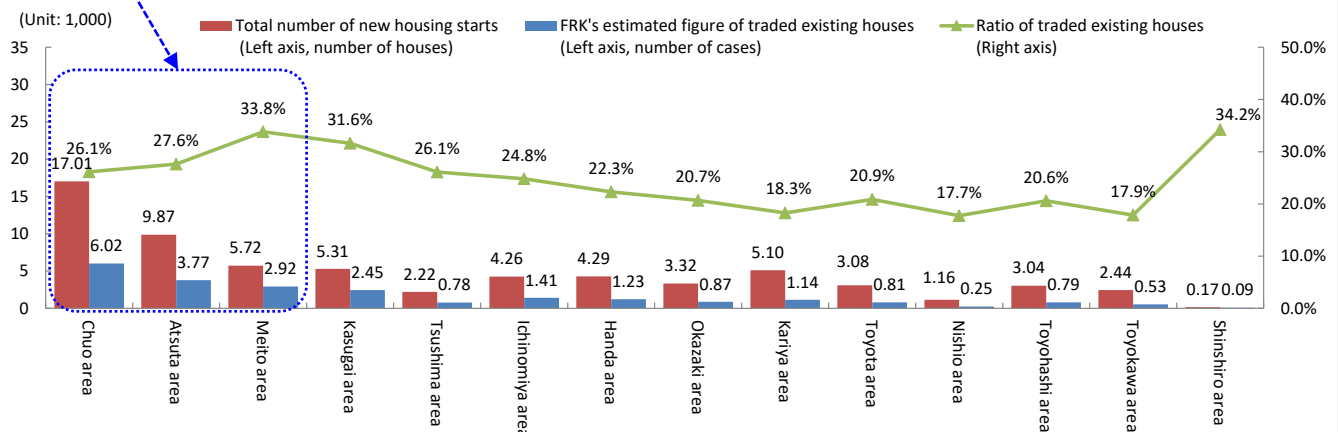
(Prefectural scale statistic estimation 2017)
Aichi Prefecture: ・FRK's estimated figure of traded existing houses: 23,000 ・Ratio of traded existing houses: 26.3%

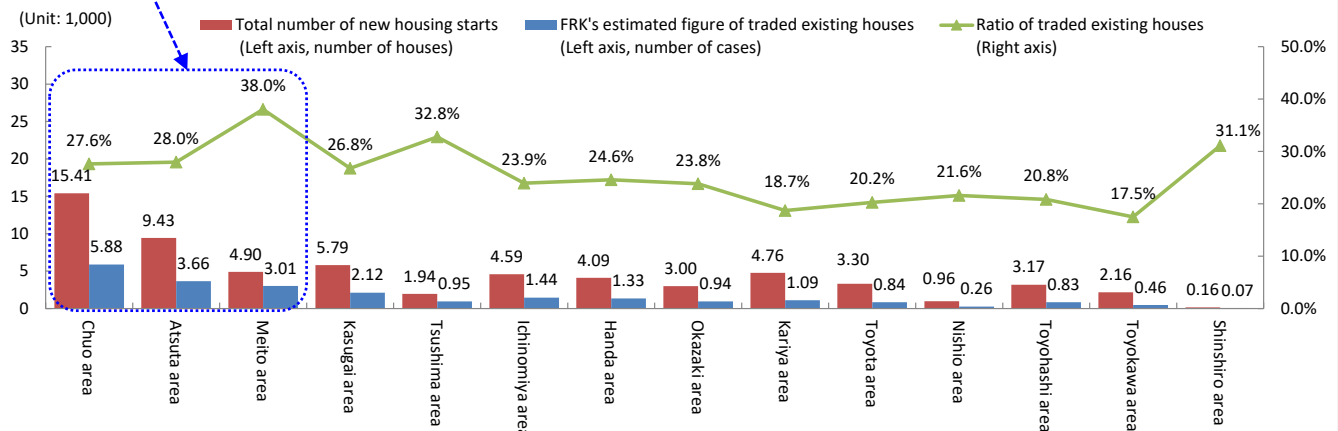Volume of traded existing houses in 14 areas in the Chukyo area (2017)

(Unit: 1,000)

15. Transition of trading volume in significant areas

Here is the growth trend of the trading volume for the three areas in Nagoya city.
The trading volume for the Chuo area, which has the largest trading volume of existing houses, declined slightly from 2010 to 2012, and has since been in a slight upward trend. In estimated figures (2018 flash report), the area has a trading volume of 6,000 units.
The trading volume for the Atsuta area has flattened out since 2010. The trading volume for the Meito area increased slightly in 2013, but has exhibited a slightly downward trend since 2015.
New housing starts have been growing for four consecutive years since 2014 in the Chuo and Atsuta areas.

Growth trend over the last 10 years for the three areas in Nagoya city

*With the closing in 2008 of the Showa office, of those areas which had been under its administration, the jurisdiction of the Showa and Chikusa wards were transferred to Chuo, the jurisdiction of the Mizuho ward was transferred to Atsuta, and the jurisdiction of the Tenpaku ward, Nisshin city, and Togo-cho was transferred to Meito. Therefore, the available estimate results from 2009 are summarized on the latest Legal Affairs Bureau branch basis.

【Chuo Area】Transition in Volume of traded existing houses(2009-2018)
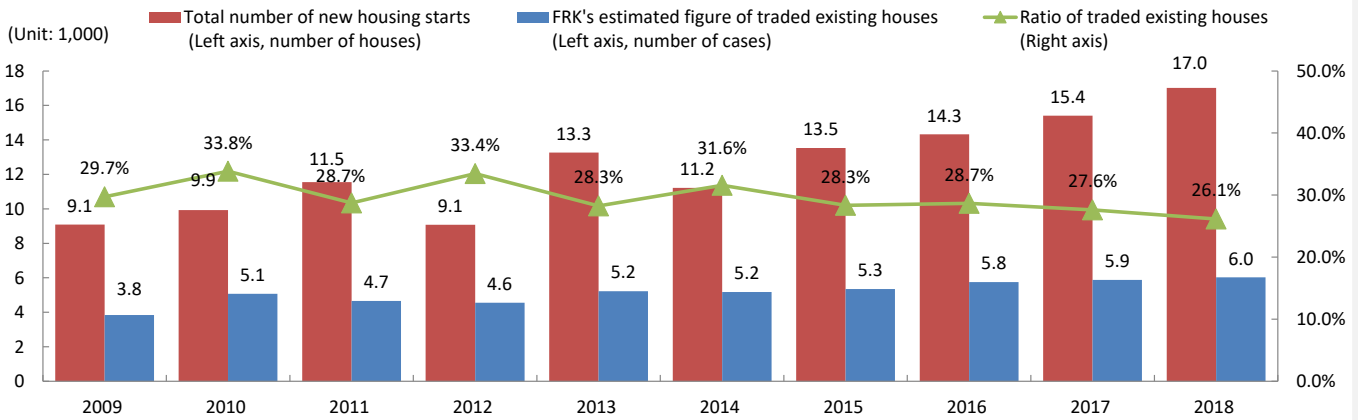
【Atsuta Area】Transition in Volume of traded existing houses(2009-2018)
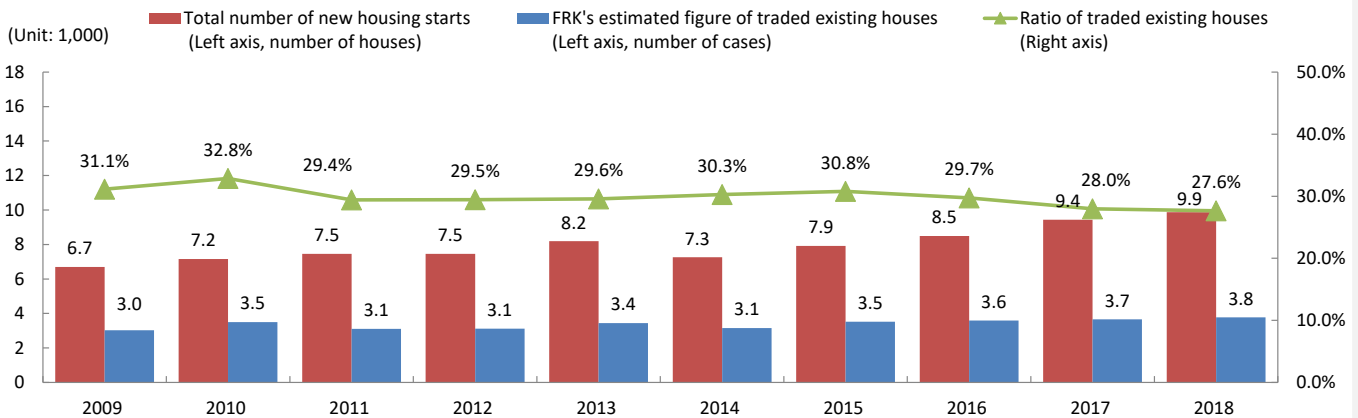
【Meito Area】Transition in Volume of traded existing houses(2009-2018)

11

16. Estimate results for 4 regional urban areas

The trading volume in the four regional urban areas (Sapporo, Sendai, Hiroshima and Fukuoka area) has been estimated.
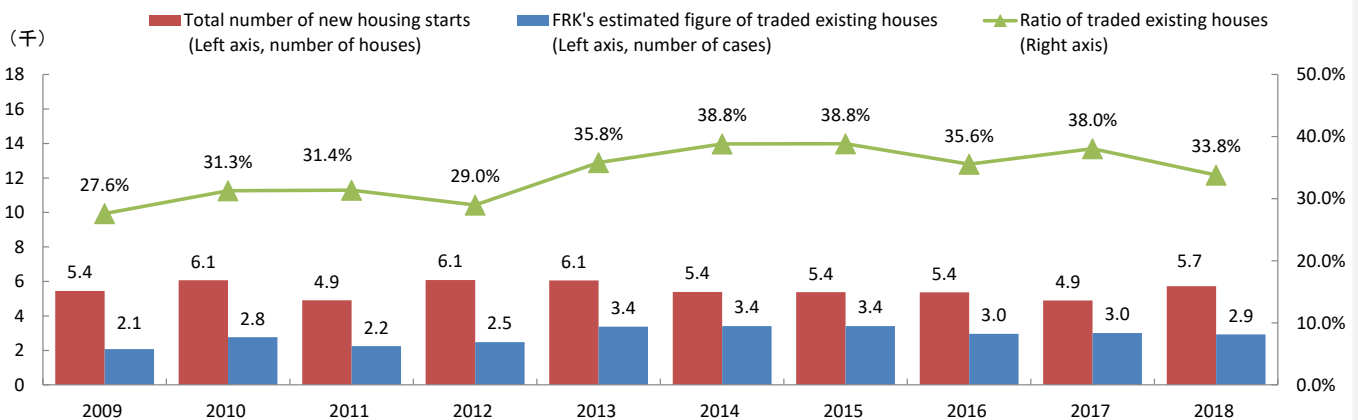The estimate results for 2018 (flash report) show that the highest trading volume of existing houses of the four areas was in the Fukuoka area (13,800 units), followed by the Sapporo area (12,400 units).
In terms of the trading ratios for existing houses, in 2018 (flash report), that of the Fukuoka and Sapporo areas was around 40%, and that of the Sendai and Hiroshima areas around 30%. These are fairly low levels in comparison with the Osaka (42.4%) and Yokohama (45.5%) areas.

※The municipalities included in the subject areas are as listed in the table to the right.
※As to the data on the number of registrations of ownership transfer by the trading of houses, Samukawa Town is included in the Fujisawa area because a branch office of the Legal Affairs Bureau is the minimum unit scale available for data collection. For the purpose of estimating existing house volume in a municipality, however, an estimation of the traded volume of existing houses is made based on the ratio of residential houses among the number of existing buildings in city areas excluding Samukawa Town because data for the decreased number of buildings statistics survey were not available to estimate the number of existing residential houses during a year for which the housing and land survey does not conduct a survey. This ratio is obtained by an equation: the number of existing houses/the number of non-residential houses + the number of existing residential houses).

	Area of estimation	Prefecture	Municipality
1	Sapporo Area	Hokkaido	Sapporo city , Ishikari city , Kitahiroshima city
2	Sendai Area	Miyagi	Sendai city , Tomiya city , Taiwa town , Osato town , Ohira village
3	Hiroshima Area	Hiroshima	Hiroshima city , Kaita town , Fuchu town , Saka town , Kumano town , Kitahiroshima town , Akiota town , Hatsukaichi city , Otake city
4	Fukuoka Area	Fukuoka	Fukuoka city , Nakagawa city , Itoshima city

Estimated figures in 2018 flash report
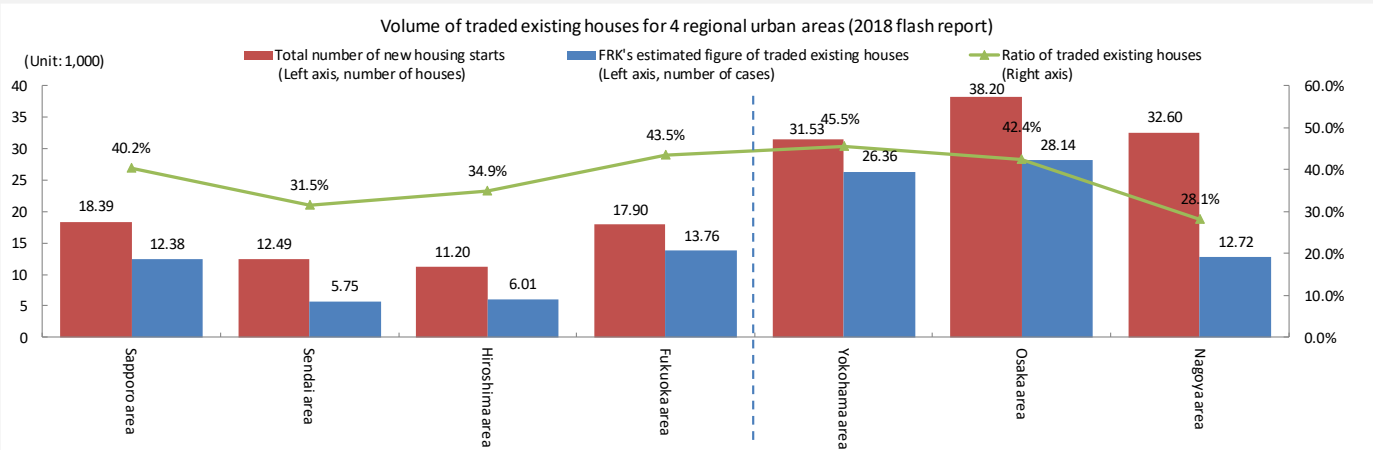
Volume of traded existing houses for 4 regional urban areas (2018 flash report)

*The volume of Nagoya is the total of the three areas: Chuo, Atsuta, and Meito, calculated in section 14.

Estimated figures in 2017
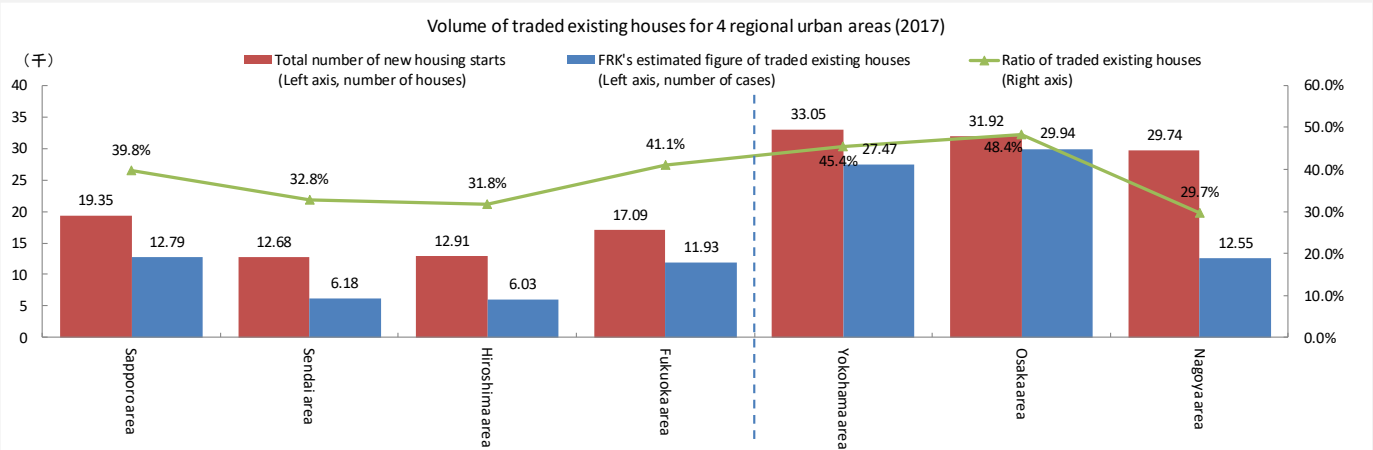
Volume of traded existing houses for 4 regional urban areas (2017)

*The volume of Nagoya is the total of the three areas: Chuo, Atsuta, and Meito, calculated in section 14.

<Ref. Differences in the growth trend of the trading ratio of existing housing in three major urban areas and major regional urban areas>
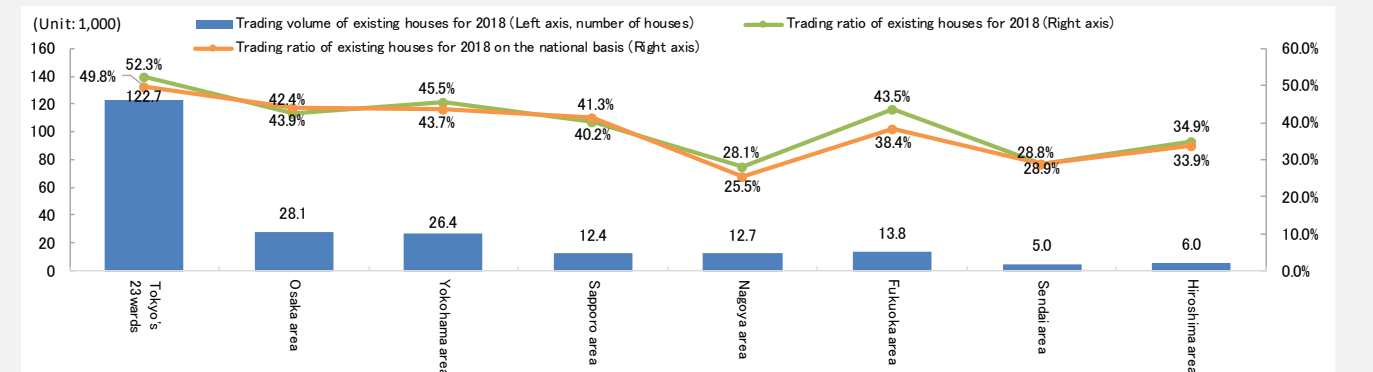
17. Growth trend of the trading volume of existing houses in 4 regional urban areas

Here is the growth trend of the trading volume for each area over the last six years.

Sapporo area
Examination of the growth trend in the trading volume of existing houses shows that there was an upward trend until 2016, but that a slight decline has continued since then. The trading ratio of existing houses for 2018 (flash report) is 40.2%.

Sendai area
Similar to the Sapporo area, the trading volume of existing houses had been growing at a modest pace up until 2017, but then converted to a decline, with 5,800 units in 2018 (flash report), approximately 0.9 times the growth in 2017. Additionally, the trading ratio of existing houses for 2018 (flash report) is 31.5%, the lowest of the four regional urban areas.
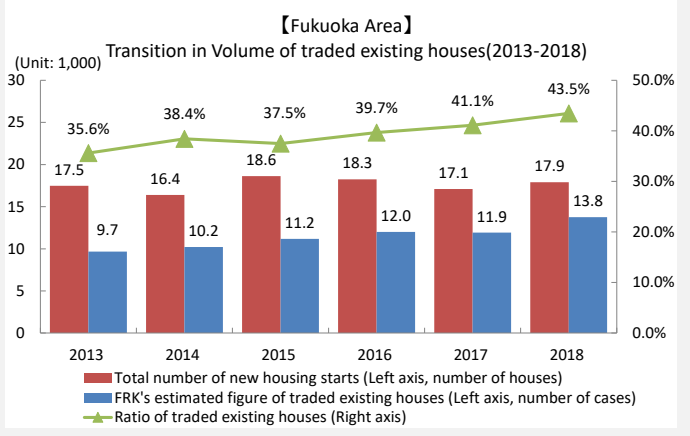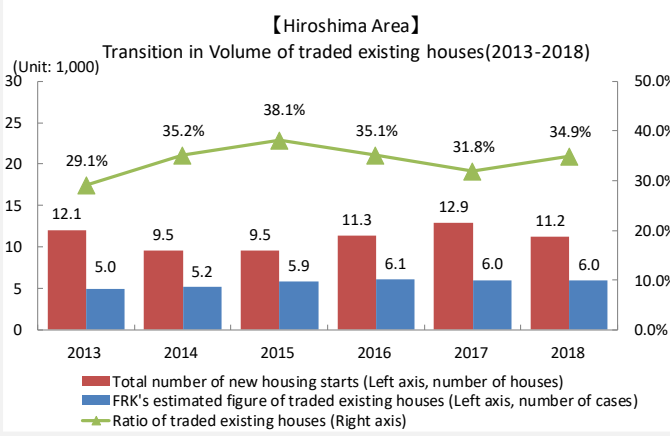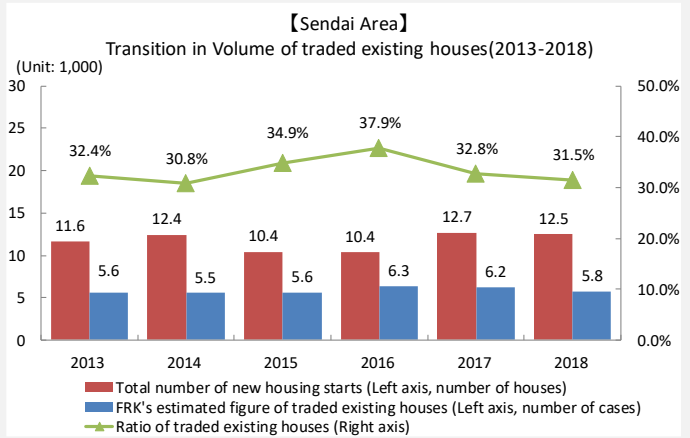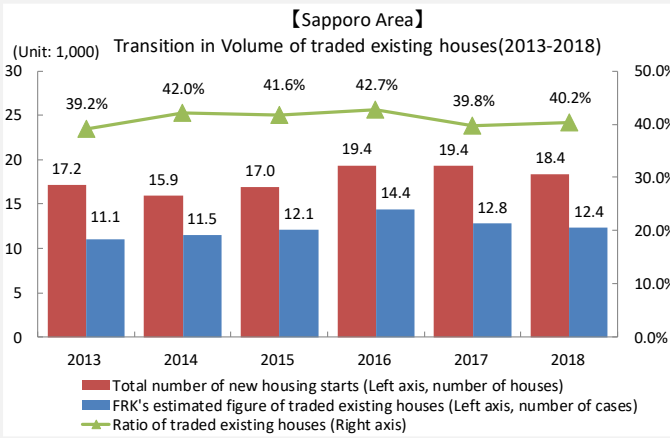
Hiroshima area
The trading volume of existing houses has been in a gradual upward trend for the past six years. In 2018 (flash report), there were 6,000 units, around 1.2 times that of 2013. The trading ratio of existing houses for 2018 (flash report) is 34.9%.

Fukuoka area
The trading volume of existing houses continues to grow at a modest pace, and stood at 13,800 units for 2018 (flash report), roughly 1.4 times that of 2013. The trading ratio of existing houses for 2018 (flash report) is 43.5%, having continued to grow within the 30% range until 2016.

Growth trend over the last 6 years for 4 regional urban areas

【Sapporo Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2013	17.2	11.1	39.2%
2014	15.9	11.5	42.0%
2015	17.0	12.1	41.6%
2016	19.4	14.4	42.7%
2017	19.4	12.8	39.8%
2018	18.4	12.4	40.2%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Sendai Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2013	11.6	5.6	32.4%
2014	12.4	5.5	30.8%
2015	10.4	5.6	34.9%
2016	10.4	6.3	37.9%
2017	12.7	6.2	32.8%
2018	12.5	5.8	31.5%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Hiroshima Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2013	12.1	5.0	29.1%
2014	9.5	5.2	35.2%
2015	9.5	5.9	38.1%
2016	11.3	6.1	35.1%
2017	12.9	6.0	31.8%
2018	11.2	6.0	34.9%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

【Fukuoka Area】
Transition in Volume of traded existing houses(2013-2018)
(Unit: 1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2013	17.5	9.7	35.6%
2014	16.4	10.2	38.4%
2015	18.6	11.2	37.5%
2016	18.3	12.0	39.7%
2017	17.1	11.9	41.1%
2018	17.9	13.8	43.5%

- Total number of new housing starts (Left axis, number of houses)
- FRK's estimated figure of traded existing houses (Left axis, number of cases)
- Ratio of traded existing houses (Right axis)

< Ref. Breakdown by usage of new housing starts for each major urban area in 2018 >

Area	Owner-occupied houses (2018)	Rented houses (2018)	Company-provided houses (2018)	Built-for-sale houses (2018)
Tokyo's 23 wards	8.6%	54.9%		35.7%
Osaka city	3.7%	48.5%		47.6%
Yokohama city	12.8%	38.1%		49.1%
Nagoya city	13.0%	54.9%		31.9%
Fukuoka city	9.6%	59.1%		30.9%
Sendai city	16.4%	56.7%		26.9%
Hiroshima city	18.0%	47.5%		32.2%
Sapporo city	20.8%	63.5%		15.6%