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 2018

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), and 14 areas in the Chukyo region (Aichi Prefecture). Starting this year, the survey will cover 4 regional urban areas (Sapporo, Sendai, Hiroshima, and Fukuoka) too.

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.
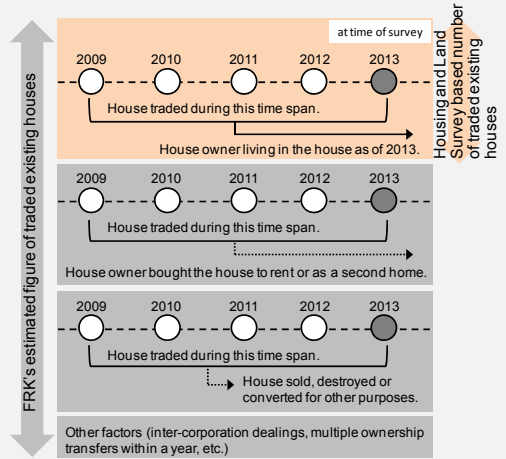
○ Number of traded existing houses by the housing and land survey: Number of houses where buyers continue to live upon relocation after purchasing as house owners.
○ Number of traded existing houses by FRK: Expresses the total number of traded existing houses in the market.

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

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

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 2016)

(unit:No. of building unit)

number of existing non-residential houses (National totals in 2016)				7,813,731
	Wooden houses		Non-wooden houses	Total wooden and non-wooden houses
Items by Usage	Office, Bank, Store	667,004	Office, Store, Department store, Bank	1,382,243	2,049,247
	Japanese inn, Restaurant, Hotel	79,558	Hospital, Hotel	129,169	241,581
	Theater, Hospital	32,854			
	Factory, Warehouse, Public bath	1,158,960	Factory, Warehouse, Market	3,310,216	4,469,176
	Tax-exempt houses				1,053,727

The above table is prepared from data obtained from the summary report of fixed asset taxes of 2017, 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 (2016) 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 2017 flash report is 597,000 units (up 18,000 units from the previous year), showing a 6th year of consecutive growth since 2011.The trading volume has increased approximately 1.36 times that of 2008 (439,000 units). The trading ratio of existing houses (in the 2017 flash report) is 38.2%, an increase of 0.8 percentage points over 2016, as a result of an increase in the trading volume of existing houses and a slight decrease in the total number of new housing starts (a decline of 2,600 units compared to the previous year).

	Category	Unit	Reference	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A	Total number of new housing starts(including houses for rent, company subsidized)	(number of houses)	Statistical surveys of new constructions of buildings	1,093,485	788,410	813,126	834,117	882,797	980,025	892,261	909,299	967,237	964,641
(Reference)	Number of registrations for ownership transfer	(number of registration)	Statistics on number of registrations by the Ministry of Justice (MOJ)	498,040	487,885	532,383	513,444	533,506	579,455	584,753	623,488	650,485	669,903
B	FRK's estimated figure of traded existing houses	(number of cases)	Estimation based on the number of registrations for ownership transfer	438,773	430,315	469,562	454,398	472,686	513,977	518,676	554,281	578,932	_596,884_
	Ratio of traded existing houses (B/(A+B))			28.6%	35.3%	36.6%	35.3%	34.9%	34.4%	36.8%	37.9%	37.4%	_38.2%_

*FRK's estimated trading volume of existing houses in 2017 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 2016 (In this report, the value taken as of January 1, 2017 is seen as the value as of the end of 2016.)
*Regarding the results of the 2017 estimate of the trading volume of existing houses, the same applies hereinafter unless otherwise specifically noted.
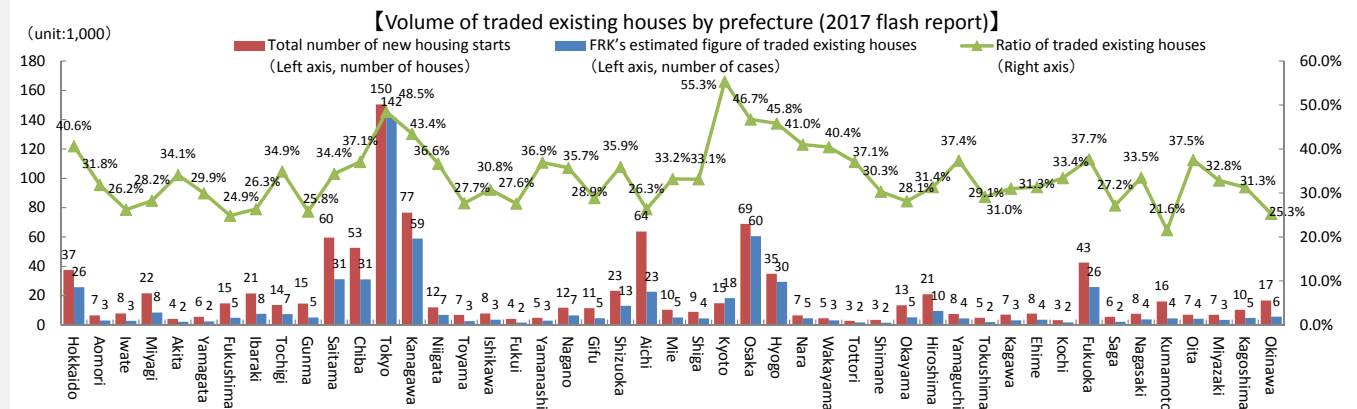
5. Prefectural scale statistic estimation results

According to the 2017 flash report on prefecture-based estimations of traded existing houses, Tokyo has the largest number at 142,000 units (up 7,000 units from the previous year), Osaka comes next with 60,000 units (up 1,000 units), then Kanagawa Prefecture with 59,000 units (up 3,000 units).
The 2017 flash report on the ratio of traded existing houses shows Kyoto as the highest with 55.3% (up 4.9 percentage points from the previous year), with Tokyo next at 48.5% (up 0.9 percentage points).

< Estimated figures in 2017 (flash report) >

(National scale statistic estimation 2017)
・FRK's estimated figure of traded existing houses: 597,000　・Ratio of traded existing houses: 38.2%

【Volume of traded existing houses by prefecture (2017 flash report)】
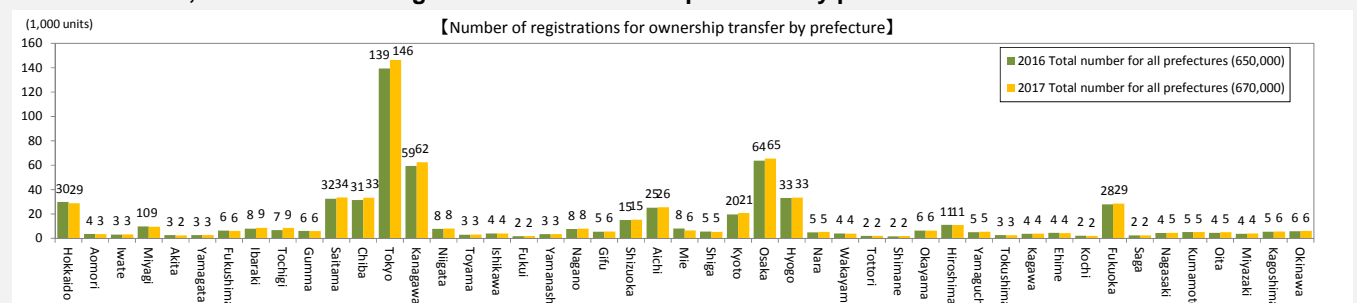
<Estimated figures in 2016>

(National scale statistic estimation 2016)
・FRK's estimated figure of traded existing houses: 579,000　・Ratio of traded existing houses: 37.4%

【Volume of traded existing houses by prefecture (2016)】

<Reference: 2016, 2017 Number of registrations for ownership transfer by prefecture>
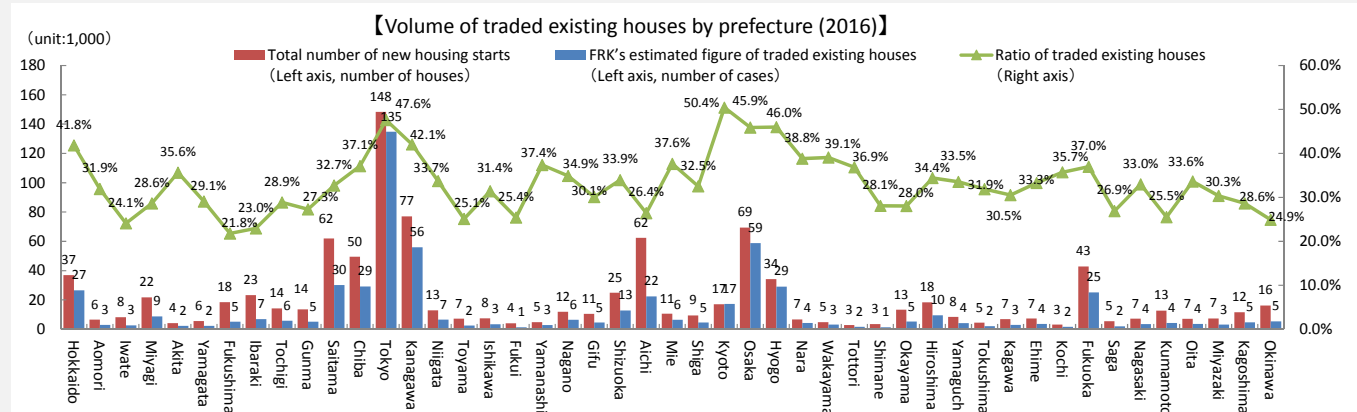
【Number of registrations for ownership transfer by prefecture】
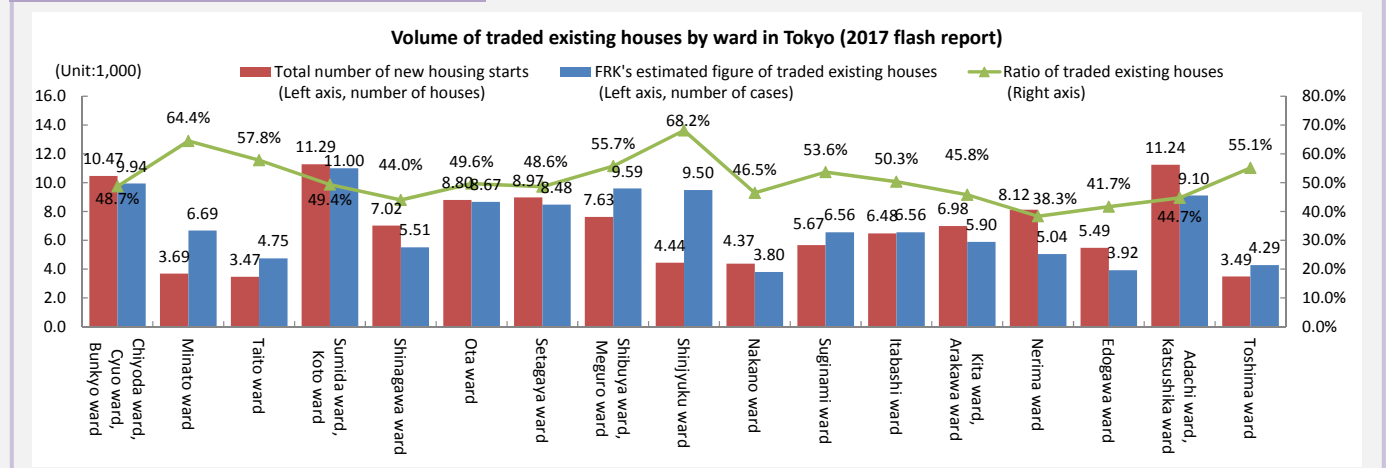
2

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 three years of consecutive growth since 2014.
In the 2017 flash estimation report, the FRK estimates the trading volume of existing houses in Tokyo's 23 wards is 120,000 units, accounting for about 85% of the total for Tokyo (142,000 units, refer to 5.). The trading ratio of existing houses (2017 flash report) is 50.6%, growing 1.1 percentage points over 2016. This ratio is more than 2 percentage points above the 2017 trading ratio for the whole of Tokyo (48.5%, refer to 5.).

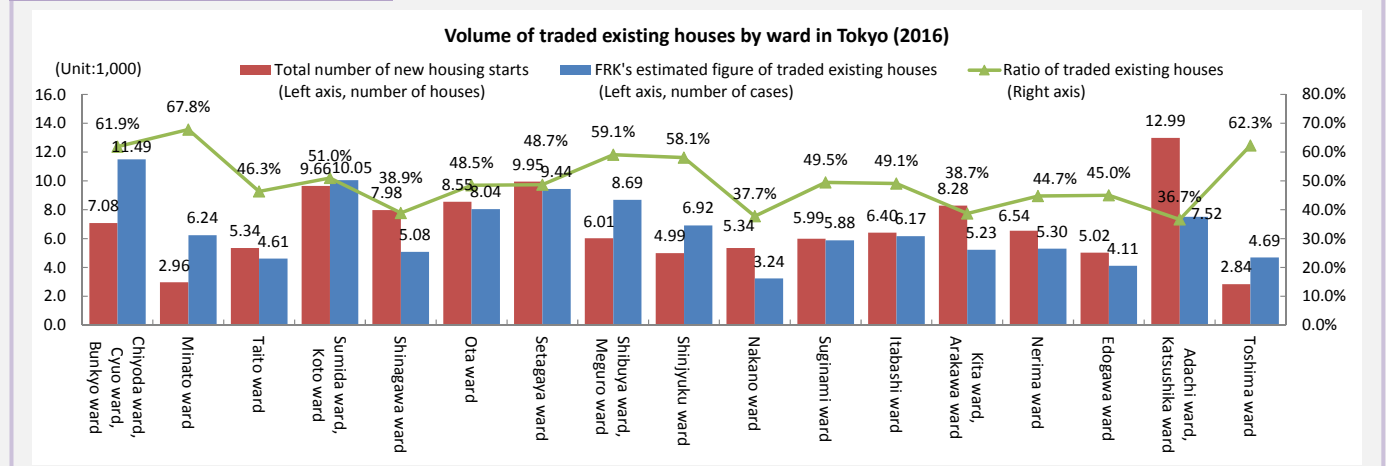|	Category	Unit	Reference	2008	2009	2010	2011	2012	2013	2014	2015	2016	2017
A	Total number of new housing starts (including houses for rent, company subsidized)	(number of houses)	Statistical surveys of new constructions of buildings	119,249	79,734	90,761	95,274	108,668	106,997	109,343	107,524	115,926	117,616
B	FRK's estimated figure of traded existing houses	(number of cases)	Estimation based on the number of registrations for ownership transfer	69,969	66,489	77,597	77,919	87,004	100,687	97,970	109,861	113,708	*120,339*
	Ratio of traded existing houses (B/(A+B))			37.0%	45.5%	46.1%	45.0%	44.5%	48.5%	47.3%	50.5%	49.5%	*50.6%*

7. Statistical estimate of Tokyo by ward (2017 flash report)

Examination of the results of FRK's estimates for Tokyo on a ward by ward basis (2017 flash report) shows that the Shinjyuku ward has the largest trading volume of existing houses (9,500 units; a year on year increase of 2,580 units), followed by the Ota ward (8,670 units, a year on year increase of 630 units). It also shows that the Shinjyuku ward has the highest trading ratio of existing houses (68.2%; up 10.1 percentage points, year on year), followed by the Minato ward (64.4%; down 3.4 percentage points, year on year) and the Taito ward (57.8%; up 11.5 percentage points, year on year).
In terms of the total trading volume of existing houses in combined areas of multiple wards (2017 flash report), the Sumida and Koto ward areas have the largest trading volume (11,000 units; a year on year increase of 950 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 (2017 flash report), the Shibuya and Meguro ward areas has the highest trading ratio (55.7%; down 3.4%, year on year).

Estimated figures in 2017 flash report

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

Estimated figures in 2016

Volume of traded existing houses by ward in Tokyo (2016)

※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 (2017 flash report) shows an increase in the trading volume in most areas in comparison with 2016. The Shinjyuku ward has the highest growth rate (37.2%), and the Chiyoda, Chuo, and Bunkyo ward areas have the lowest growth rate (minus 13.5%).

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 2017, reveals a continuing trend of growth since 2014, when there was a significant decline in the trading volume. Other than the Sumida and Koto ward area, there are areas that have larger trading volumes in 2017 and have continued to increase their trading volume over the last six years: The Ota ward and the Adachi and Katsushika ward area. Comparison of their respective growth rates for 2012 and 2017 (flash report) shows 2 times growth for the Ota ward, and 1.6 times for the Adachi and Katsushika ward area. The Shinagawa ward and the Minato ward, which border the Ota ward, have exhibited an upward growth trend. This indicates the expansion of the trading markets in the Tokyo bay areas.
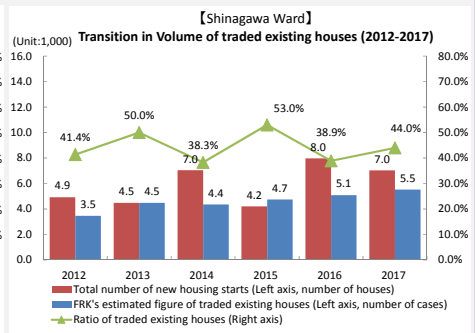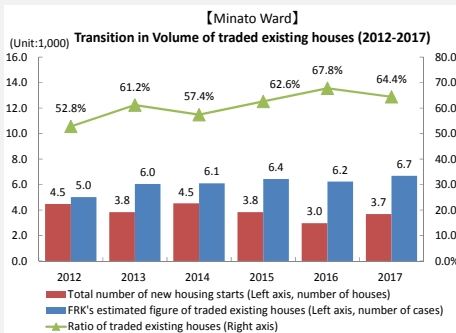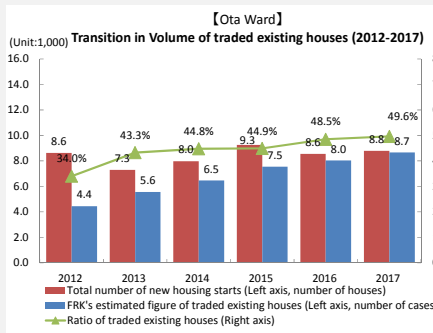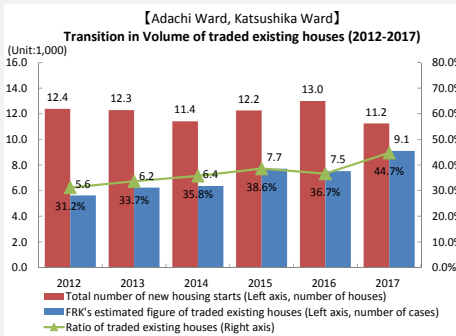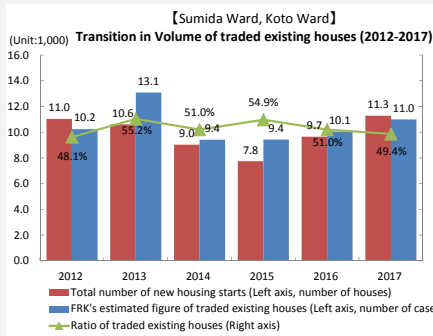
<Volume of traded existing houses in 2017 (flash report) and fluctuation from 2016>

Rank	Area for estimation	(Unit:1000 houses)	Rank	Area for estimation	(%)
1	Sumida, Koto ward	11.0	1	Shinjyuku ward	37.2%
2	Chiyoda, Cyuo, Bunkyo ward	9.9	2	Adachi, Katsushika ward	21.1%
3	Shibuya, Meguro ward	9.6	3	Nakano ward	17.4%
4	Shinjyuku ward	9.5	4	Kita, Arakawa ward	12.8%
5	Adachi, Katsushika ward	9.1	5	Suginami ward	11.6%
6	Ota ward	8.7	6	Shibuya, Meguro ward	10.5%
7	Setagaya ward	8.5	7	Sumida, Koto ward	9.4%
8	Minato ward	6.7	8	Shinagawa ward	8.6%
9	Itabashi ward	6.6	9	Ota ward	7.8%
10	Suginami ward	6.6	10	Minato ward	7.2%
11	Kita, Arakawa ward	5.9	11	Itabashi ward	6.3%
12	Shinagawa ward	5.5	12	Taito ward	3.0%
13	Nerima ward	5.0	13	Edogawa ward	−4.6%
14	Taito ward	4.7	14	Nerima ward	−4.8%
15	Toshima ward	4.3	15	Toshima ward	−8.6%
16	Edogawa ward	3.9	16	Setagaya ward	−10.2%
17	Nakano ward	3.8	17	Chiyoda, Cyuo, Bunkyo ward	−13.5%

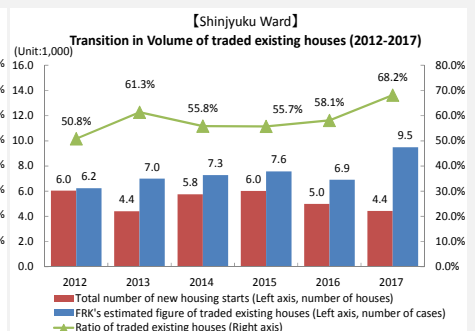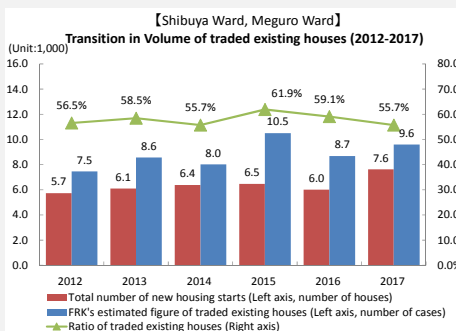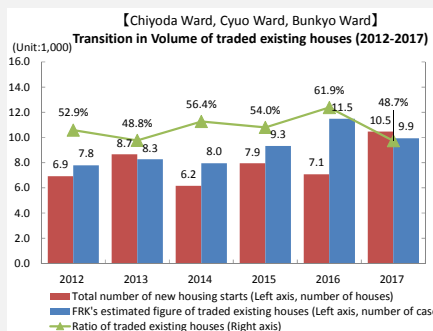### < Ref. Total number of new housing starts in 2017 and fluctuation from 2016>

Rank	Area for estimation	(Unit:1000 cases)	Rank	Area for estimation	(%)
1	Sumida, Koto ward	11.3	1	Chiyoda, Cyuo, Bunkyo ward	47.9%
2	Adachi, Katsushika ward	11.2	2	Shibuya, Meguro ward	26.8%
3	Chiyoda, Cyuo, Bunkyo ward	10.5	3	Minato ward	24.5%
4	Setagaya ward	9.0	4	Nerima ward	24.1%
5	Ota ward	8.8	5	Toshima ward	22.9%
6	Nerima ward	8.1	6	Sumida, Koto ward	16.9%
7	Shibuya, Meguro ward	7.6	7	Edogawa ward	9.3%
8	Shinagawa ward	7.0	8	Ota ward	2.8%
9	Kita, Arakawa ward	7.0	9	Itabashi ward	1.2%
10	Itabashi ward	6.5	10	Suginami ward	−5.4%
11	Suginami ward	5.7	11	Setagaya ward	−9.8%
12	Edogawa ward	5.5	12	Shinjyuku ward	−11.1%
13	Shinjyuku ward	4.4	13	Shinagawa ward	−11.9%
14	Nakano ward	4.4	14	Adachi, Katsushika ward	−13.5%
15	Minato ward	3.7	15	Kita, Arakawa ward	−15.7%
16	Toshima ward	3.5	16	Nakano ward	−18.1%
17	Taito ward	3.5	17	Taito ward	−35.0%

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 (2012-2017)

【Adachi Ward, Katsushika Ward】 Transition in Volume of traded existing houses (2012-2017)

【Ota Ward】 Transition in Volume of traded existing houses (2012-2017)

【Minato Ward】 Transition in Volume of traded existing houses (2012-2017)

【Shinagawa Ward】 Transition in Volume of traded existing houses (2012-2017)

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 (2012-2017)

【Shibuya Ward, Meguro Ward】 Transition in Volume of traded existing houses (2012-2017)

【Shinjyuku Ward】 Transition in Volume of traded existing houses (2012-2017)
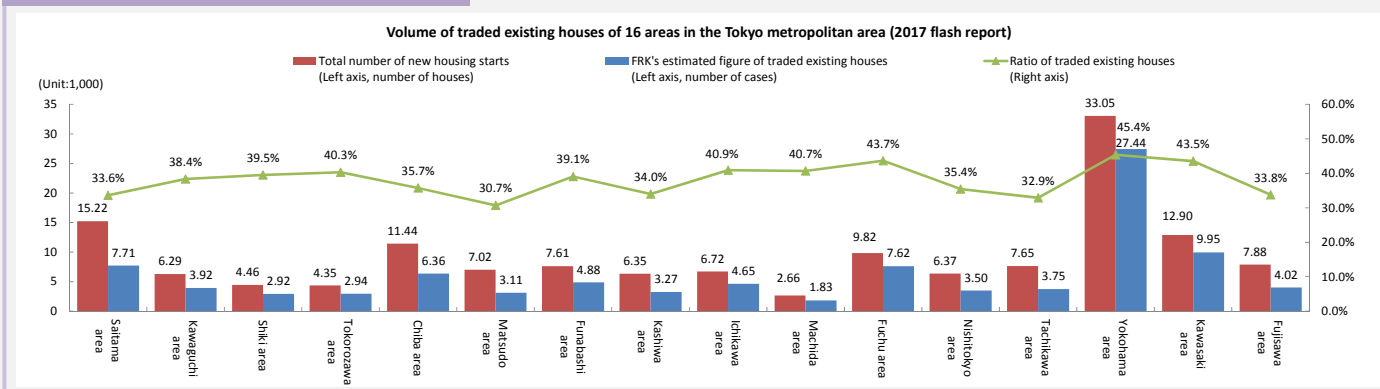
9. Statistical estimate of 16 areas of the Tokyo metropolitan area excluding Tokyo's 23 wards

According to FRK's estimation results of 16 areas regarding traded existing houses (2017 flash report), the Yokohama area in Kanagawa Prefecture shows the largest number with 27,400 units, followed by the Kawasaki area in Kanagawa Prefecture with 9,900 units, the Saitama area in Saitama Prefecture with 7,700 units, and the Fuchu area in Tokyo Prefecture with 7,600 units.

The trading volume of existing houses for the Yokohama area accounts for just under half of that of the whole of Kanagawa Prefecture (59,000 units, refer to 5.), and is larger by around 1,000 units than that of the entirety of Hokkaido (26,000 units, refer to 5.). As for the trading ratio of existing houses (2017 flash report), the Yokohama area has the highest trading ratio (45.4%), followed by the Fuchu area (43.7%) and the Kawasaki area (43.5%).

There are areas whose trading volume of existing houses (2017 flash report) increased more than 10% compared to 2016: The Kawaguchi area in Saitama Prefecture, the Nishitokyo area in Tokyo, and the Ichikawa and Chiba area in Chiba Prefecture. These areas also exhibits an upward trend in terms of the total number of new housing starts from 2016 to 2017.
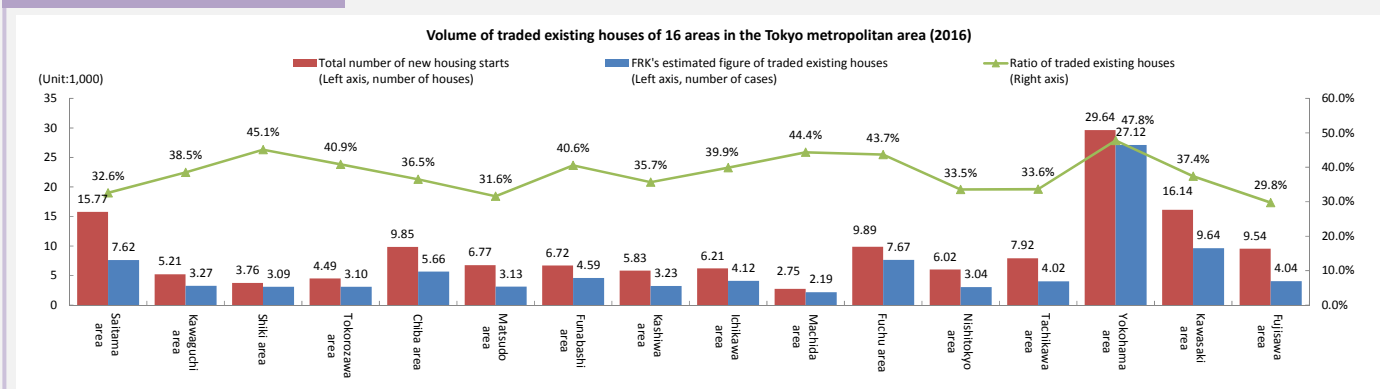
※The municipalities included in the subject areas are as listed in the table to the right.
※As to the data on the number of registrations of ownership transfer by the trading of houses, Samukawa Town is included in the Fujisawa area because a branch office of the Legal Affairs Bureau is the minimum unit 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 , 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 2017 flash report

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

Estimated figures in 2016

Volume of traded existing houses of 16 areas in the Tokyo metropolitan area (2016)

<Volume of traded existing houses in 2017 (flash report) and fluctuation from 2016>

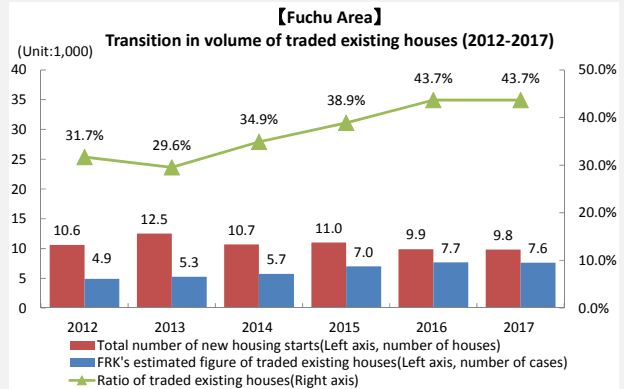|	Area for estimation	Unit: 1000 houses		Area for estimation	（%）
1	Yokohama area	27.4	1	Kawaguchi area	19.9%
2	Kawasaki area	9.9	2	Nishitokyo area	15.1%
3	Saitama area	7.7	3	Ichikawa area	12.8%
4	Fuchu area	7.6	4	Chiba area	12.4%
5	Chiba area	6.4	5	Funabashi area	6.4%
6	Funabashi area	4.9	6	Kawasaki area	3.2%
7	Ichikawa area	4.6	7	Yokohama area	1.2%
8	Fujisawa area	4.0	8	Kashiwa area	1.2%
9	Kawaguchi area	3.9	9	Saitama area	1.1%
10	Tachikawa area	3.7	10	Fujisawa area	−0.5%
11	Nishitokyo area	3.5	11	Matsudo area	−0.5%
12	Kashiwa area	3.3	12	Fuchu area	−0.7%
13	Matsudo area	3.1	13	Tokorozawa area	−5.4%
14	Tokorozawa area	2.9	14	Shiki area	−5.6%
15	Shiki area	2.9	15	Tachikawa area	−6.7%
16	Machida area	1.8	16	Machida area	−16.7%

<Ref. Total number of new housing starts in 2017 and fluctuation from 2016>

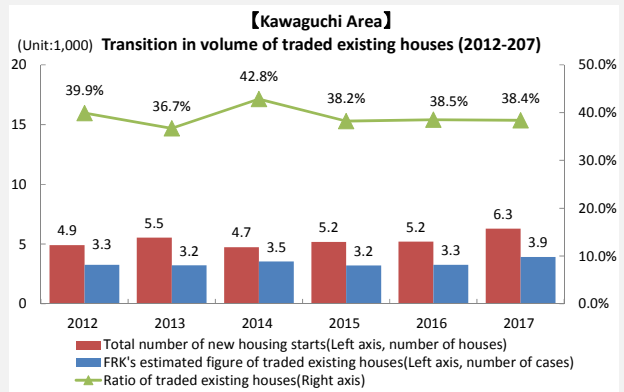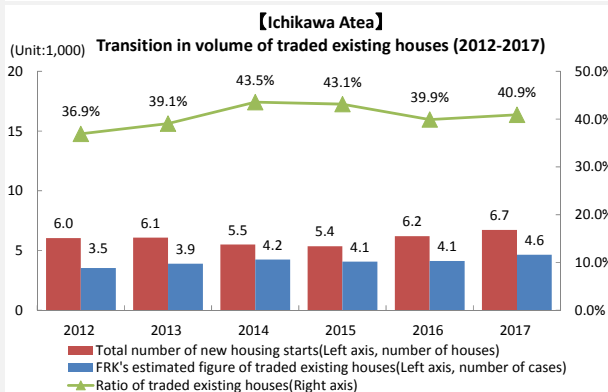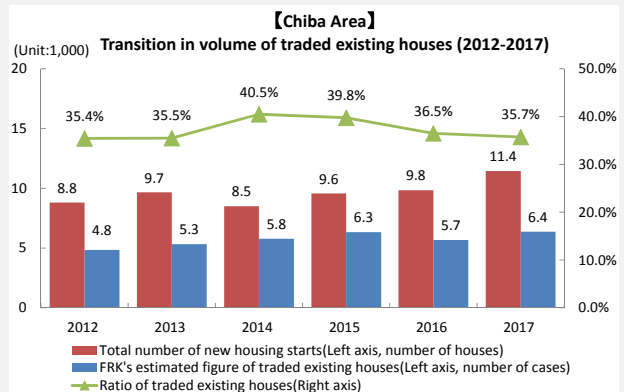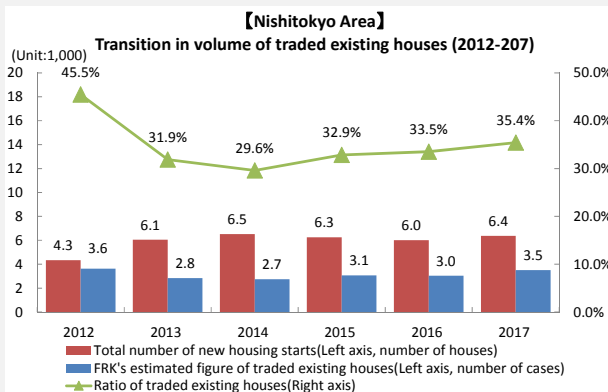|	Area for estimation	Unit: 1000 houses		Area for estimation	（%）
1	Yokohama area	33.1	1	Kawaguchi area	20.6%
2	Saitama area	15.2	2	Shiki area	18.8%
3	Kawasaki area	12.9	3	Chiba area	16.2%
4	Chiba area	11.4	4	Funabashi area	13.1%
5	Fuchu area	9.8	5	Yokohama area	11.5%
6	Funabashi area	7.9	6	Kashiwa area	9.0%
7	Tachikawa area	7.6	7	Ichikawa area	8.2%
8	Funabashi area	7.6	8	Nishitokyo area	5.8%
9	Matsudo area	7.0	9	Matsudo area	3.6%
10	Ichikawa area	6.7	10	Fuchu area	−0.7%
11	Nishitokyo area	6.4	11	Tokorozawa area	−3.2%
12	Kashiwa area	6.4	12	Machida area	−3.2%
13	Kawaguchi area	6.3	13	Saitama area	−3.5%
14	Shiki area	4.5	14	Tachikawa area	−3.5%
15	Tokorozawa area	4.3	15	Fujisawa area	−17.4%
16	Machida area	2.7	16	Kawasaki area	−20.1%

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 6 years in the top four areas, as listed in the preceding section, shows a trend of gentle expansion. In particular, the Yokohama and Saitama areas, since 2014, have exhibited growth in the trading volume of existing houses and also in the total number of new housing starts. This indicates a gentle trend of expansion in the housing market overall.

As for the areas shown in the preceding section where the growth rate in the trading volume of existing houses has been particularly high since 2016, the growth rate in the Nishitokyo area slowed from 2012 to 2013, and then has been growing gradually. In the Chiba and Ichikawa areas, the trading volume of existing houses has been growing at a modest pace since 2012, with their provisional figures for 2017 reaching approximately 1.3 times those of 2012. This indicates the existing house trading market in these areas is growing steadily. The figures for the Kawaguchi area have been in the 3,000 unit range over the last 6 years, and it is an area where the trading volume of existing houses is growing steadily.

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 (2012-2017)

【Saitama Area】
Transition in volume of traded existing houses (2012-2017)

【Kawasaki Area】
Transition in volume of traded existing houses (2012-2017)

【Fuchu Area】
Transition in volume of traded existing houses (2012-2017)
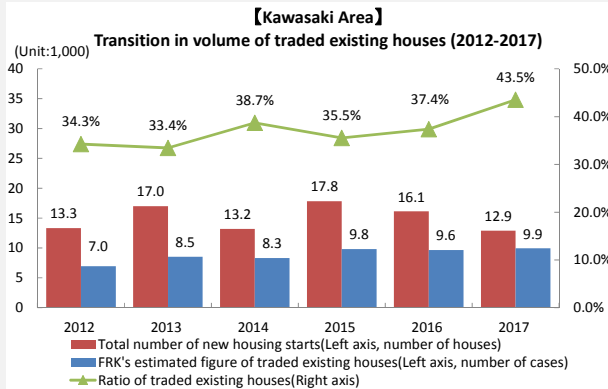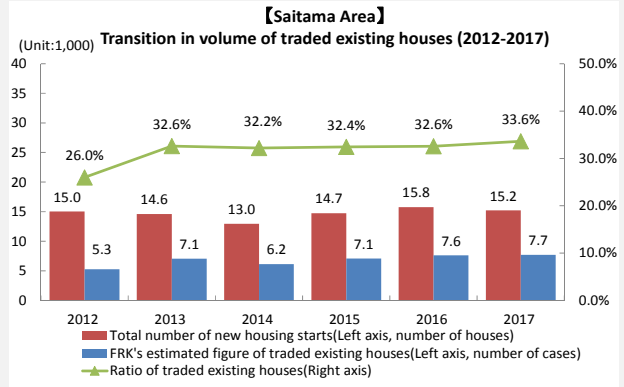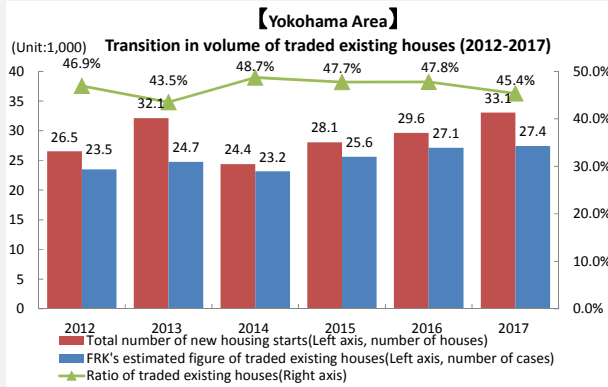
Growth trend over the last 6 years in areas exhibiting strong growth in the trading volume since 2016

【Nishitokyo Area】
Transition in volume of traded existing houses (2012-207)

【Chiba Area】
Transition in volume of traded existing houses (2012-2017)

【Ichikawa Atea】
Transition in volume of traded existing houses (2012-2017)

【Kawaguchi Area】
Transition in volume of traded existing houses (2012-207)

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).
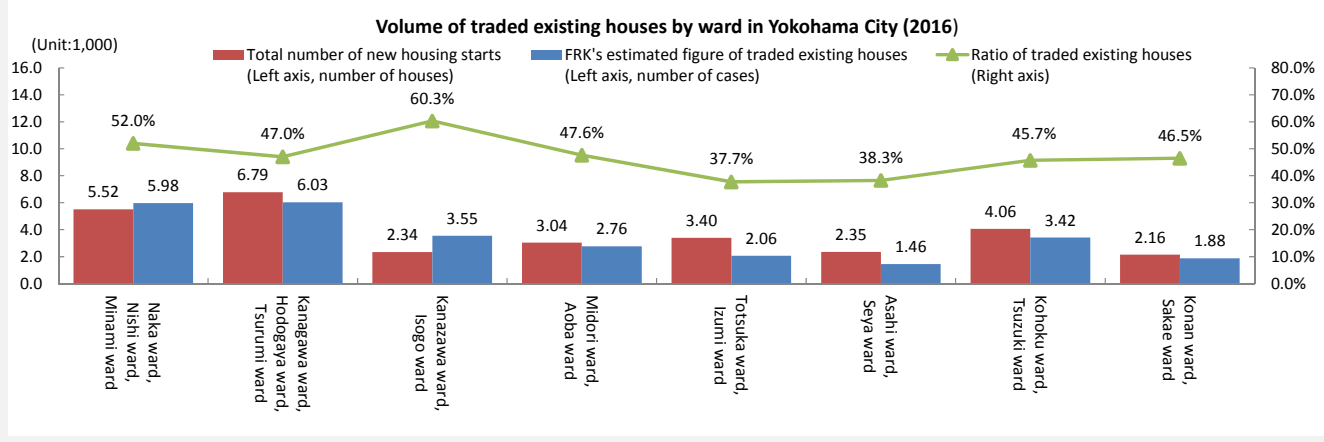
In the 2017 provisional figures, the results show that Naka Ward, Nishi Ward and Minami Ward had the largest volume with 7,130 units; followed by Hodogaya Ward, Tsurumi Ward and Kanagawa Ward (5,550 units) and Kohoku Ward and Tsuzuki Ward (3,430 units). Being conveniently located with easy access to 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 2017 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 (2017 flash report) for the Naka, Nishi, and Minami ward areas is 56.3%—over the 50% mark.

As for the trading volume of existing houses for each area, the Naka, Nishi, and Minami ward areas and the Kohoku and Tsuzuki ward areas have exhibited a gradual growth trend since 2014. These two ward areas and the Kanagawa, Hodogaya, and Tsurumi ward areas are also showing similar signs of growth in the total numbers of new housing starts. This indicates that new housing supply leads the growth in the market for the trading of existing houses in these areas.
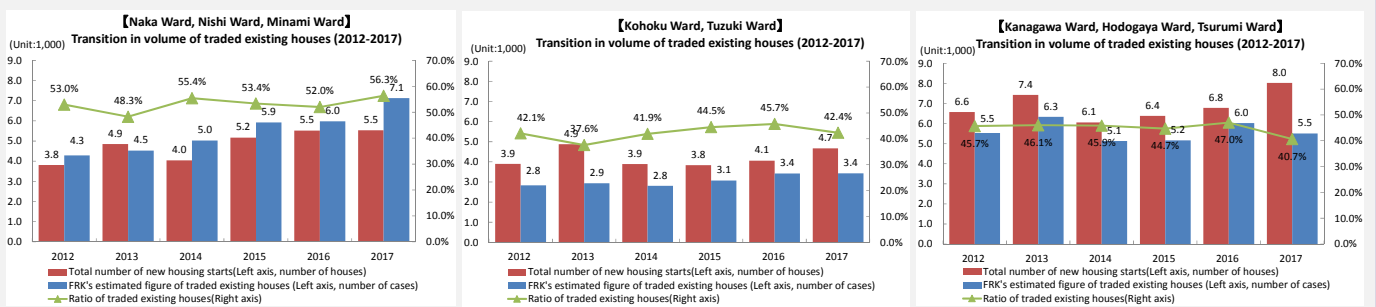
Estimated figures in 2017 flash report

Volume of traded existing houses by ward in Yokohama City (2017 flash report)

Estimated figures in 2016
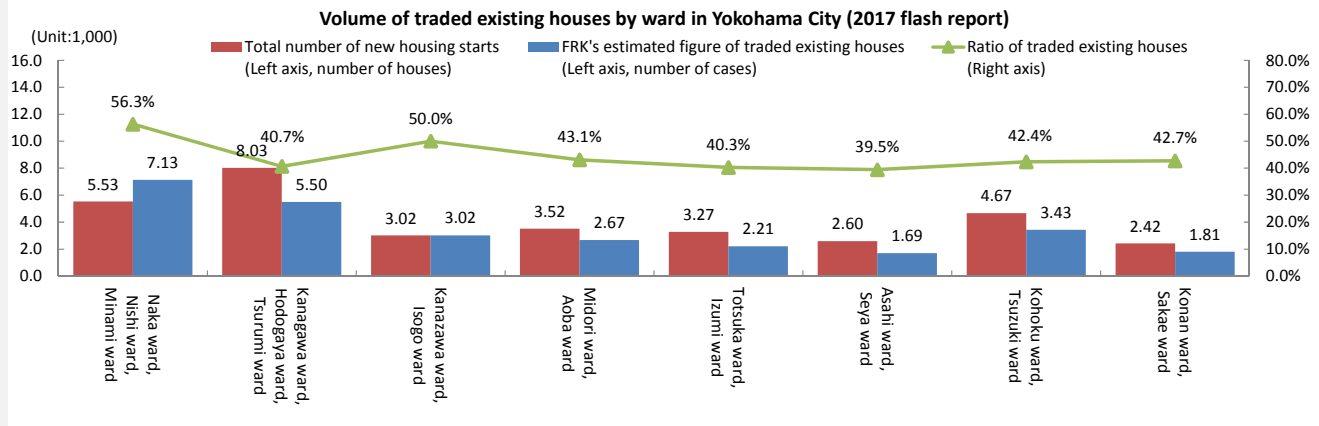
Volume of traded existing houses by ward in Yokohama City (2016)

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 (2012-2017)

【Kohoku Ward, Tuzuki Ward】Transition in volume of traded existing houses (2012-2017)

【Kanagawa Ward, Hodogaya Ward, Tsurumi Ward】Transition in volume of traded existing houses (2012-2017)

※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 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.

7

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 (2017 flash report) of FRK's estimated figure of traded existing houses, the Osaka area in Osaka Prefecture had the largest trading volume with 29,900 units, followed by the Kobe area in Hyogo Prefecture with 15,600 units, then the Kitaosaka area in Osaka Prefecture with 5,400 units. In terms of the ratio of traded existing houses (2017 flash report), the Sumoto area in Hyogo Prefecture had the highest ratio at 55.8%, followed by the Kobe area in Hyogo Prefecture at 52.0%, and the Nishinomiya area in Hyogo Prefecture at 51.7%. The trading volume of existing houses for the Osaka area (2017 flash report) accounts for about half of the whole of Osaka Prefecture (60,000 units), and is about the same as that of the whole of Hyogo Prefecture (30,000 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 , 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 , Kawanisi city , Inagawa town , Tkarazuka city
13	Sanda Area		Sanda city
14	Amagasaki Area		Amagasaki city
15	Kahibara 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 , Taichi 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 2017 flash report

(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 prefectures) (2017 flash report)
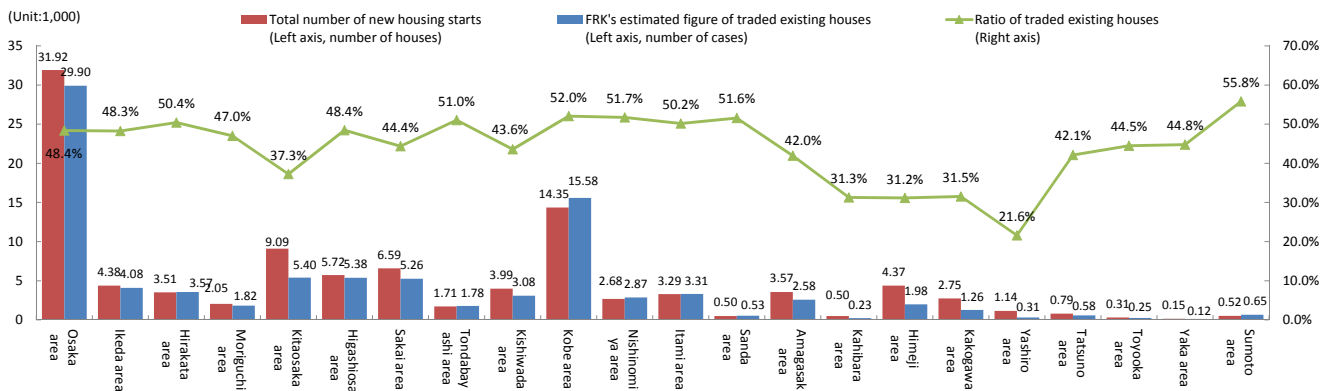
Estimated figures in 2016

(Prefectural scale statistic estimation 2016)
Osaka Prefecture: ・FRK's estimated figure of traded existing houses: 59,000 ・Ratio of traded existing houses: 45.9%
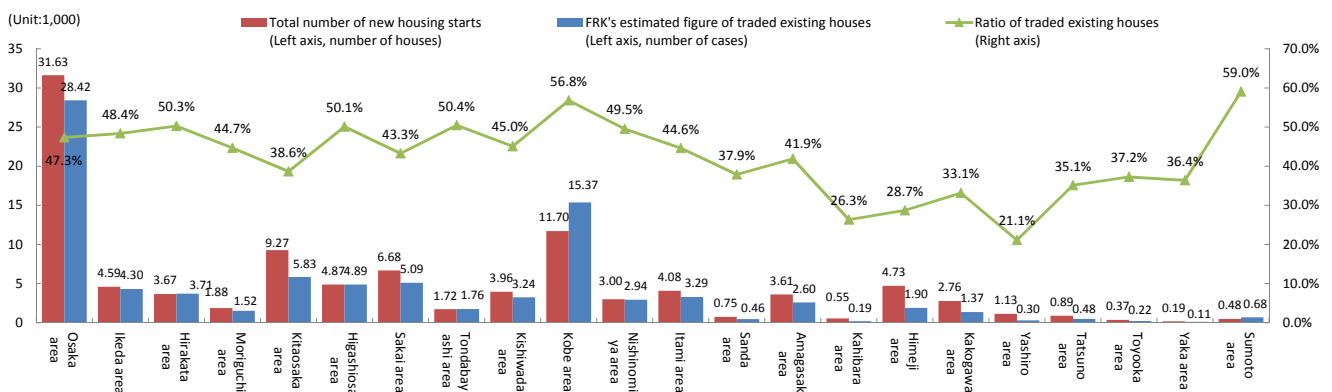Hyogo Prefecture: ・FRK's estimated figure of traded existing houses: 29,000 ・Ratio of traded existing houses: 46.0%

Volume of traded existing houses in 22 areas in the Kansai area (Osaka and Hyogo prefectures) (2016)

8

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.
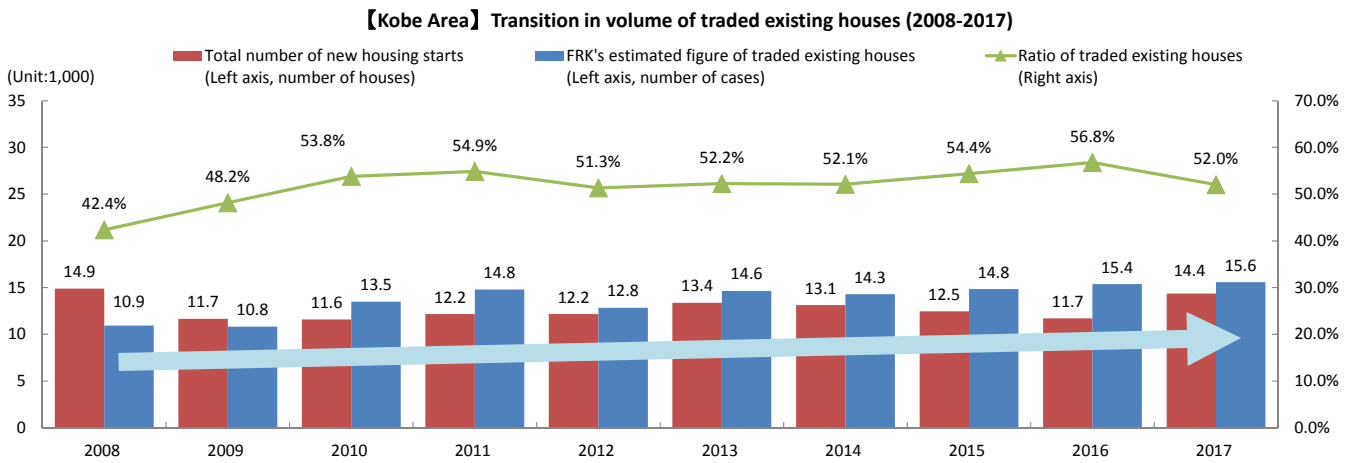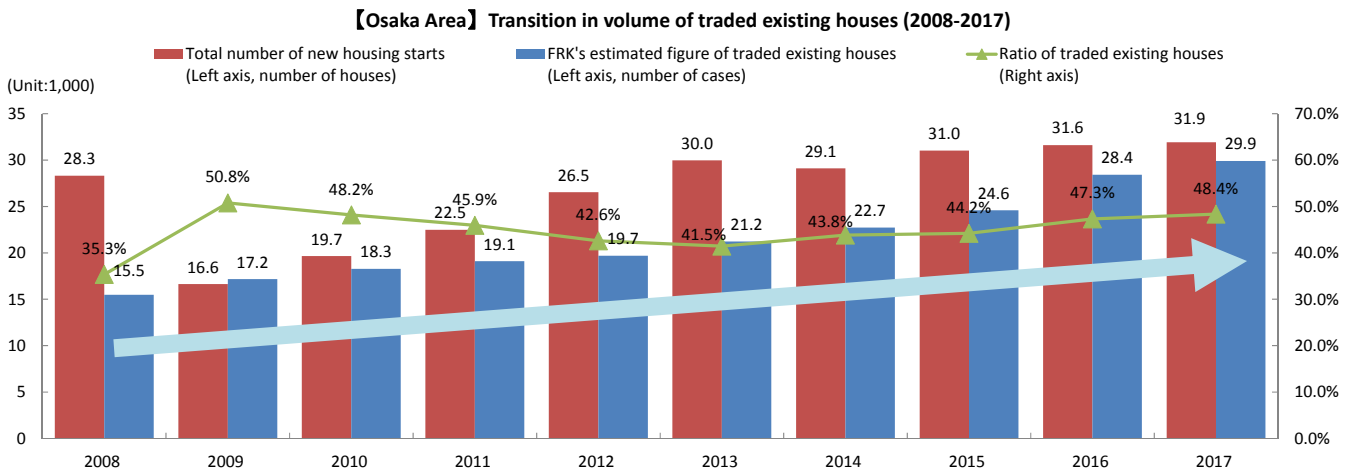
Osaka Area
As for the growth trend in the trading volume of existing houses, there has been a gradual increase since 2008. The trading volume for 2017 (flash report) is 29,900 units, just under double the figures for 2008 (15,500 units). This indicates the trading market for existing houses in the area continues to show a growth trend. The trading ratio of existing houses for 2017 (flash report) is 48.4%, relatively higher than the national average (38.2%, refer to 4.) and the total for Osaka Prefecture (46.7%, refer to 5.).

Kobe Area
As for the growth trend in the trading volume of existing houses, despite some fluctuation, there has been a trend of slight growth since 2008. This indicates the area maintains its trading volume. The trading volume for 2017 (flash report) is 15,600 units, about half the volume for the Osaka area, and roughly 1.4 times the volume for 2008 (10,900 units). The trading ratio of existing houses for 2017 (flash report) is 52.0%, slightly higher than that for 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 (2008-2017)

【Kobe Area】 Transition in volume of traded existing houses (2008-2017)

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

【Ota ward】 Transition in Volume of traded existing houses (2008-2017)
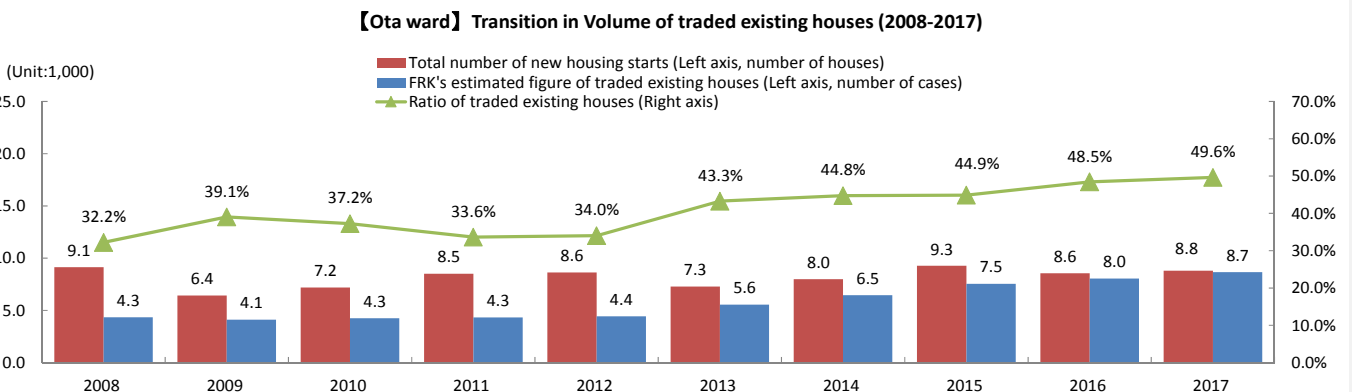
14. Estimated results in 14 areas in the Chukyo area (Aichi Prefecture)

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 (2017 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 12,600 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 (29,900 units, refer to 12.).

Examination of the trading ratio of existing houses (2017 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 (38.2%, refer to 4.), and is lower than that of other major metropolitan and urban areas such as Tokyo's 23 wards (50.6%, refer to 6.), Yokohama (45.4%, refer to 9.), and Osaka (48.4%, 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 + 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 2017 flash report

(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 flash report)
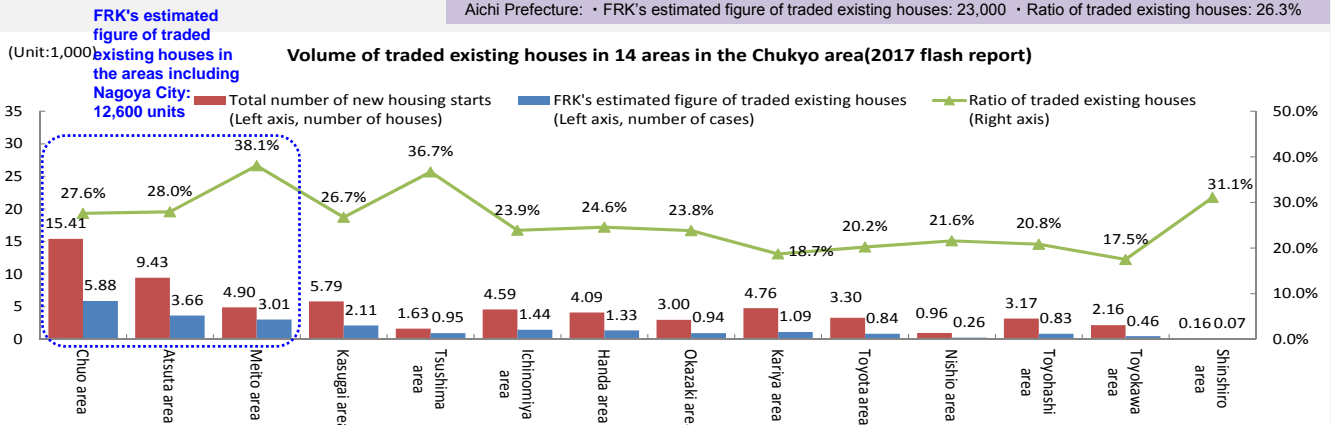
Estimated figures in 2016

(Prefectural scale statistic estimation 2016)
Aichi Prefecture: ・FRK's estimated figure of traded existing houses: 22,000 ・Ratio of traded existing houses: 26.4%

Volume of traded existing houses in 14 areas in Chukyo area(2016)
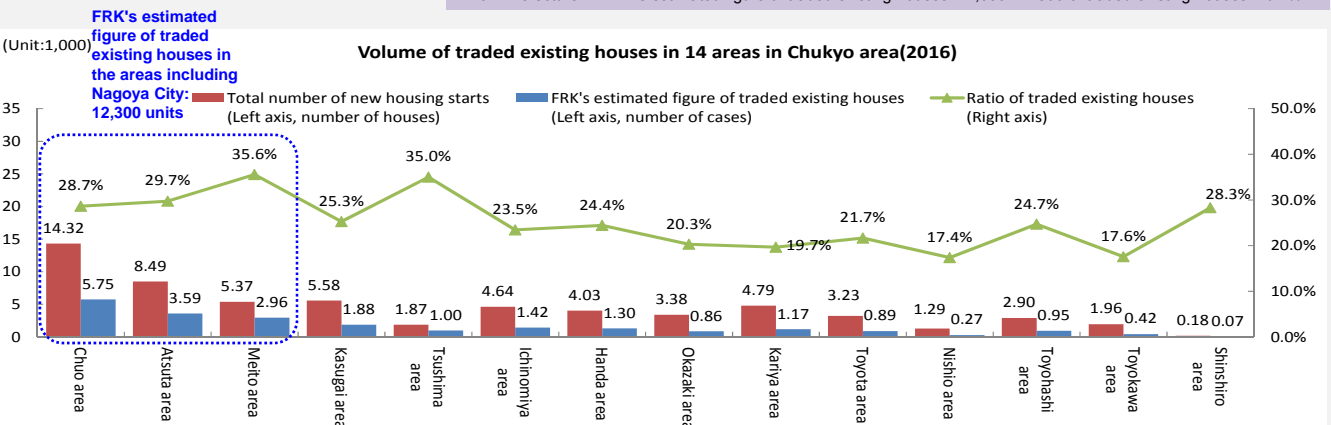
15. Transition of trading volume in significant areas

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 2017, the area has a trading volume of 5,900 units (provisional figures).
The trading volume for the Atsuta area has flattened out since 2009. 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 three consecutive years since 2014 in the Chuo and Atsuta areas.

Growth trend over the last 9 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(2009-2017)
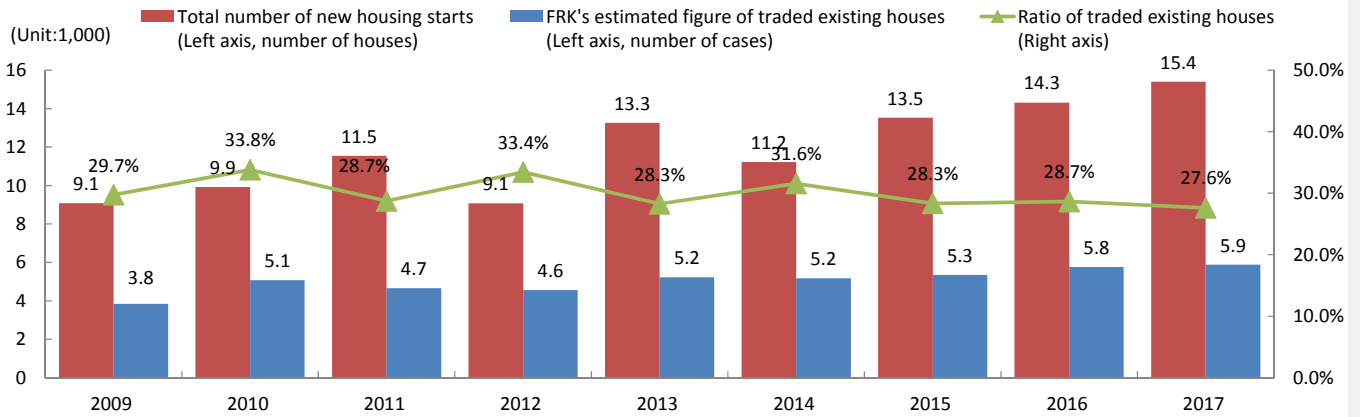
【Atsuta Area】 Transition in volume of traded existing houses(2009-2017)
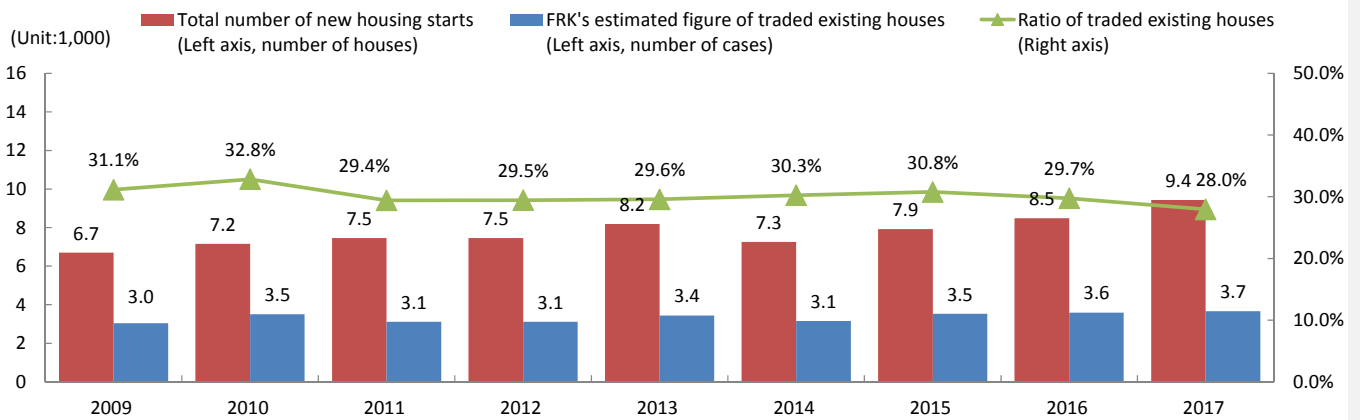
【Meito Area】 Transition in volume of traded existing houses(2009-2017)

11
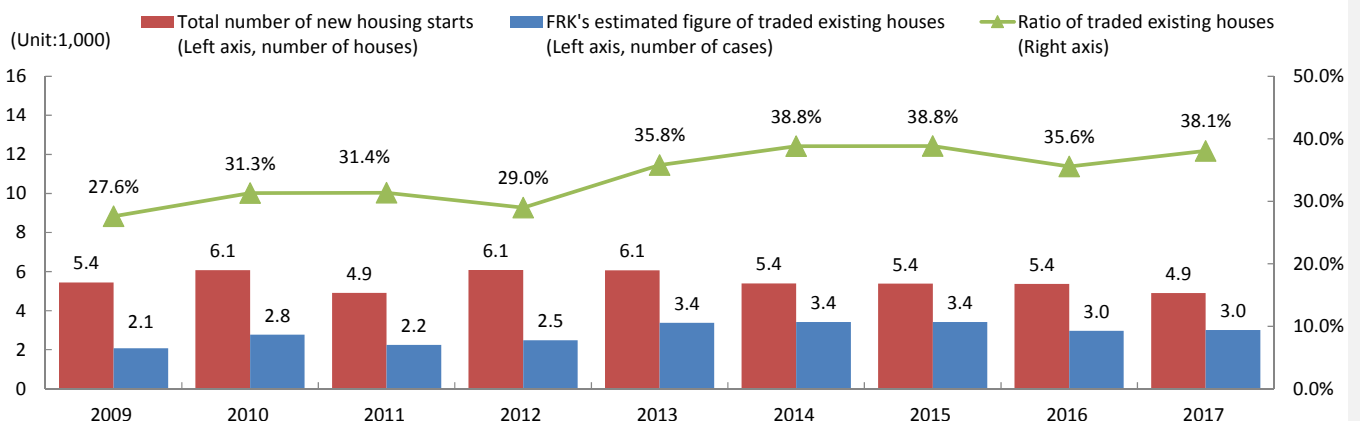
16. Estimate results for 4 regional urban areas

From this fiscal year, FRK started to estimate the trading volume of existing houses for four regional urban areas: Sapporo in Hokkaido Prefecture, Sendai in Miyagi Prefecture, Hiroshima in Hiroshima Prefecture, and Fukuoka in Fukuoka Prefecture.
Examination of the 2017 results (flash report) shows that, of the four areas, Sapporo has the largest trading volume of existing houses (12,800 units), followed by Fukuoka (11,900 units).
The 2017 trading ratio of existing houses for Fukuoka and Sapporo is around 40% (flash report), and the ratio of Sendai and Hiroshima is in the 30% range, lower than that of Osaka (48.4%) and Yokohama (45.4%).

※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 2017 flash report
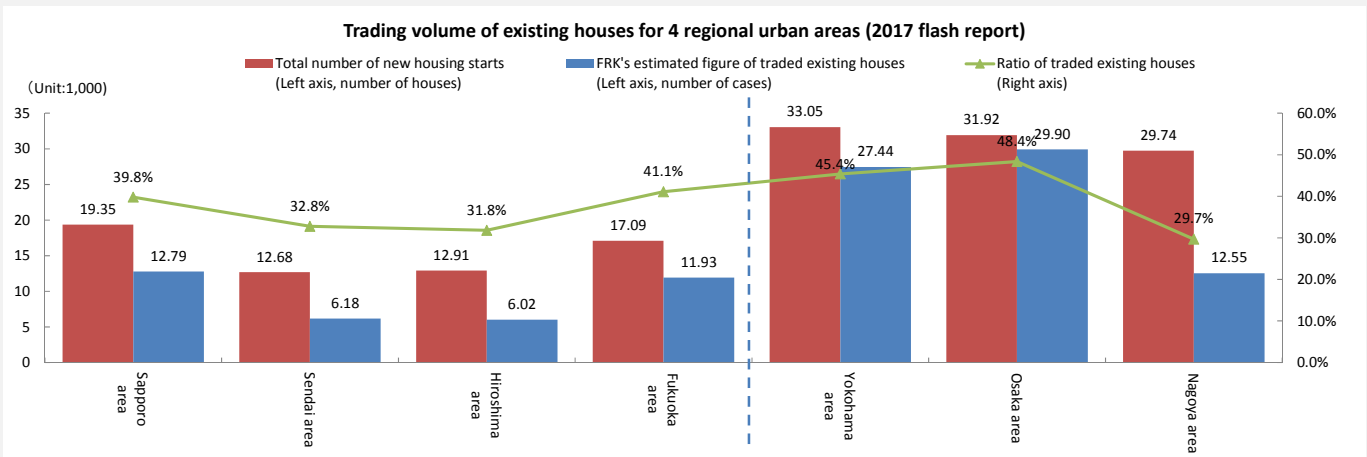
Trading volume of existing houses for 4 regional urban areas (2017 flash report)

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

Estimated figures in 2016
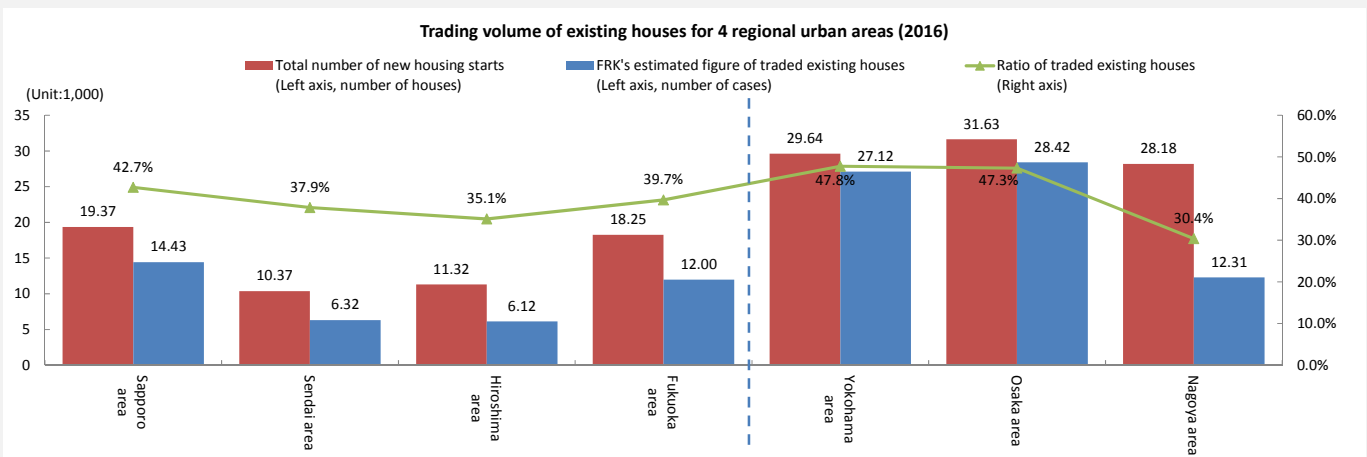
Trading volume of existing houses for 4 regional urban areas (2016)

*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>

Brief summary of statistic estimation results 7 - 4 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 trading volume of existing houses shows a modest upward growth trend over the last six years. The volume for 2017 is 12,800 units (flash report), around 1.3 times that of 2012. The trading ratio of existing houses for 2017 is 39.8% (flash report).

Sendai area
As with Sapporo, the trading volume has been growing at a modest pace, and the volume for 2017 is 6,200 units (flash report), around 1.3 times that of 2012. The trading ratio of existing houses for 2017 is 32.8% (flash report).

Hiroshima area
Examination of the trading volume of existing houses shows a modest upward growth trend over the last six years. The volume for 2017 is 6,000 units (flash report), around 1.2 times that of 2012. The trading ratio of existing houses for 2017 is 31.8% (flash report), which is the lowest among the 4 areas.
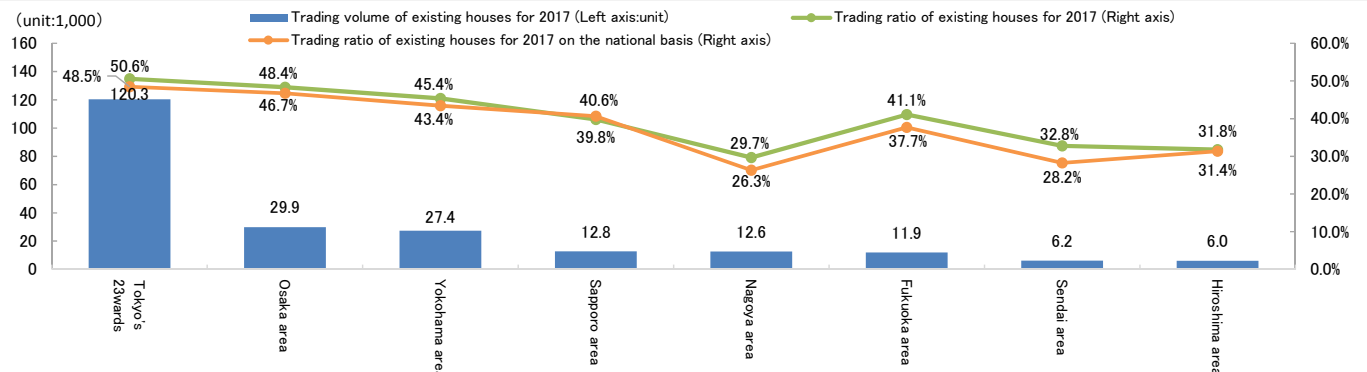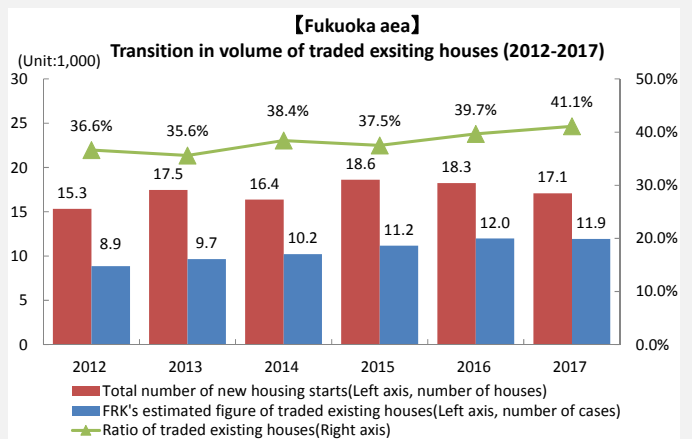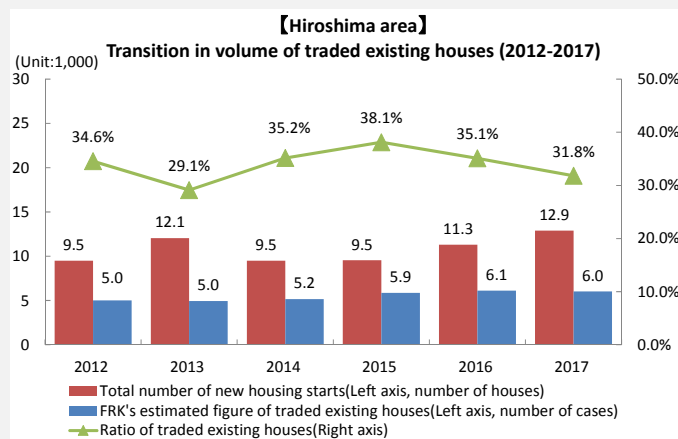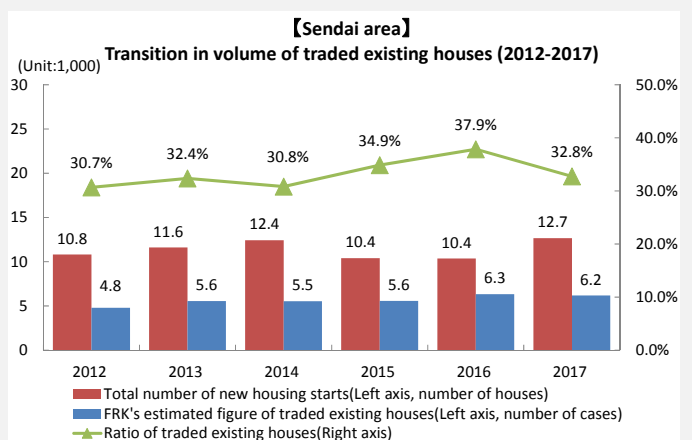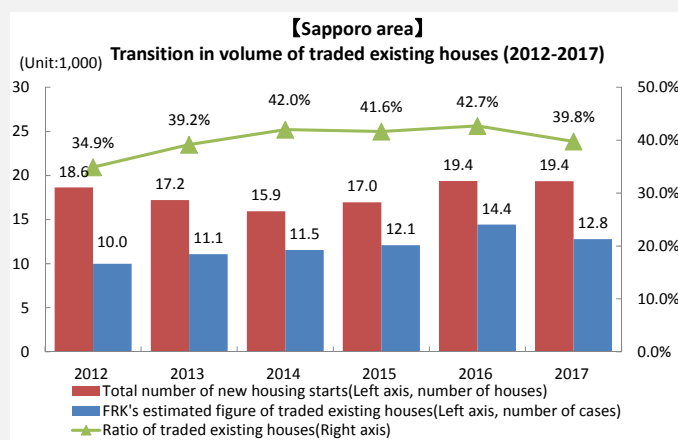
Fukuoka area
The trading volume of existing houses has been growing gently since 2012, and the volume for 2017 is 11,900 units (flash report), around 1.3 times that of 2012. The trading ratio of existing houses, which continued to be within the 30% range until 2016, is 41.1% (2017 flash report).

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

【Sapporo area】
Transition in volume of traded existing houses (2012-2017)
(Unit:1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2012	18.6	10.0	34.9%
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%

- 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 (2012-2017)
(Unit:1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2012	10.8	4.8	30.7%
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%

- 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 (2012-2017)
(Unit:1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2012	9.5	5.0	34.6%
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%

- 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 aea】
Transition in volume of traded exsiting houses (2012-2017)
(Unit:1,000)

Year	Total number of new housing starts	FRK's estimated figure of traded existing houses	Ratio of traded existing houses
2012	15.3	8.9	36.6%
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%

- 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 2017 >

Area	Owner-occupied houses (2017)	Rented houses (2017)	Company-provided houses (2017)	Built-for-sale houses (2017)
Tokyo's 23wards	8.2%	51.6%		39.9%
Osaka area	4.7%	58.9%		36.1%
Yokohama area	13.2%	41.9%		42.9%
Nagoya area	15.0%	55.7%		28.8%
Fukuoka area	10.8%	65.0%		23.4%
Sendai area	17.3%	53.7%		28.5%
Hiroshima area	15.0%	47.2%		37.8%
Sapporo area	19.7%	64.2%		15.9%