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I. Housing in Seoul

1. Housing Stock

1.1. Stock by Housing Type

Classification of housing types

The housing types in Seoul are largely divided into detached houses and multi-unit dwellings. Detached houses are further divided into general detached houses in the form of an isolated residential area and multi-family houses in which multiple families can live. A multi-family house is defined as a detached house with fewer than 3 stories and 19 housing units and a gross floor area of less than 660m². On the other hand, multi-unit dwellings are sub-divided into multi-household houses, tenement houses and apartment buildings. A multi-household house is a multi-unit dwelling of fewer than 4 stories and less than 660m² in gross floor area, while a tenement house is a multi-unit dwelling of fewer than 4 stories and larger than 660m² in gross floor area. An apartment building is a multi-unit dwelling of 5 stories and more.

The housing stock in Seoul as of 2010 is 3.4 million, with apartments accounting for 43.7%

The housing stock in Seoul as of 2010 is nearly 3.4 million. The most common housing type is apartment, which accounts for 43.7% of the total housing stock at 1,486,000 units, followed by multi-family houses at 32.8% (1,114,000 units) and multi-household houses at 13.6% (463,000 units). The housing stock in Seoul increased by 200,000 units from 2005 to 2010. Although the apartment and multi-household house stocks are growing, the detached and multi-family house stocks are declining.

Table 1-1 Housing types

	Definition
Multi-family house	A detached house with fewer than 3 stories and 19 housing units and a gross floor area of less than 660m ² .
Multi-household house	A multi-unit dwelling of fewer than 4 stories and less than 660m ² in gross floor area per building
Tenement house	A multi-unit dwelling of fewer than 4 stories and larger than 660m ² in gross floor area per building
Apartment building	A multi-unit dwelling of 5 stories and more

Source: Article 3-4 of the Enforcement Decree of the Building Act (Kinds of Buildings by Use), National Statistics Portal (<http://kosis.kr/>)

1.2. Housing Supply Rate

The housing supply rate in Seoul was 97.3%

The housing supply rate in Seoul was 97.3% in 2012. There was a dramatic increase in the housing supply rate in Seoul from 77.4% in 2000 to 93.7% in 2005, and this is attributed to the use of a revised method of calculating the housing supply rate since 2005. To be more specific, each unit of the multi-family houses is now included in the calculation, and this method of calculation has increased the total number of housing units.

Table 1-2 Changes in the housing stocks by type

Unit: housing units, (%)

	Detached house	Multi-family house	Apartment	Tenement house	Multi-household house	Housing in a non-residential building	Total
2000	498,346	-	1,011,158	220,866	182,588	60,221	1,973,179
	(25.3)	-	(51.2)	(11.2)	(9.3)	(3.1)	(100)
2005	248,880	987,432	1,258,658	146,877	430,502	30,055	3,102,404
	(8.0)	(31.8)	(40.6)	(4.7)	(13.9)	(1.0)	(100)
2010	165,295	1,114,843	1,485,869	145,914	463,417	24,435	3,399,773
	(4.9)	(32.8)	(43.7)	(4.3)	(13.6)	(0.7)	(100)

Note: The housing stock in 2000 was calculated based on the conventional calculation method
Source: Seoul Metropolitan Government, Seoul statistics website (stat.seoul.go.kr)

Table 1-3 Trends in the housing supply rate

Unit: %

Year	1996	2000	2005	2006	2007	2008	2009	2010	2011	2012
Housing supply rate	69.6	77.4	93.7	94.1	93.2	93.6	93.1	97.0	97.1	97.3

Source: Seoul Metropolitan Government, Seoul statistics website (stat.seoul.go.kr)

1.3. Building Age

7% of all houses are over 30 years old and 46% are over 15 years old

As of 2010, of the 2,447,000 housing units in the housing stock of Seoul, those that are over 30 years of building age account for 7% of the total number of houses and those that are over 15 years of building age account for 46% (1,114,000).

The building age of the detached and multi-family houses tended to be higher than other housing types. For instance, 26% of the detached and multi-family houses were over 30 years

old, and 77% were over 15 years old. In the case of tenement houses, they were relatively older compared to the apartments and multi-household houses, and 66% of tenement houses were built at least 15 years ago.

Table 1-4 Housing stock by building age, 2010

Unit: housing units, (%)

	5 years (After 2005)	5~15 years (1995~2004)	15~30 years (1980~1994)	30 years or more (Before 1979)	Total
Total	324,972 (13.3)	1,007,747 (41.2)	937,233 (38.3)	176,556 (7.2)	2,446,508 (100)
Detached · multi-family house	11,130 (2.8)	79,648 (20.1)	204,642 (51.5)	101,683 (25.6)	397,103 (100)
Apartment	254,107 (17.6)	644,162 (44.7)	485,049 (33.6)	58,451 (4.1)	1,441,769 (100)
Tenement house	4,047 (2.9)	43,182 (30.7)	83,496 (59.4)	9,726 (6.9)	140,451 (100)
Multi-household house	54,350 (12.2)	234,606 (52.9)	151,867 (34.2)	2,955 (0.7)	443,778 (100)
Housing in a non-residential building	1,338 (5.7)	6,149 (26.3)	12,179 (52.0)	3,741 (16.0)	23,407 (100)

Source: Statistics Korea, Population and Housing Census, 2010.

1.4. Public Rental Housing

165,000 public rental housing units in stock, accounting for 5% of the total housing stock

As of 2010, there are 165,000 public rental housing units in stock in Seoul, and this accounts for 5% of the total housing stock. The number of rental houses approved for construction in Seoul between 2001 and 2012 was 74,000, with about 6,000 units being approved annually on average. The number of rental houses approved for construction in the Seoul Metropolitan Area was 540,000, with about 45,000 units being approved annually on average.

The public rental housing supply rate in Seoul and the Seoul Metropolitan Area grew until 2007 and fell thereafter. The public rental housing supply rate reached its peak at 13,000 in 2005 in Seoul and at 72,000 in 2007 in the Seoul Metropolitan Area. The average supply ratio of public rental housing to the total housing units was 10% in Seoul and 17% in the Seoul Metropolitan Area between 2001 and 2012.

Table 1-5 Approval for the construction of public rental housing in Seoul and the Seoul Metropolitan Area (2001-2012)

Unit: housing units, (%)

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Seoul	Public rental	1,579	1,164	6,515	5,598	13,442	7,122	7,281	3,360	8,294	11,018	4,963	3,529
	Ratio to the total housing supply	(1.2)	(0.7)	(5.5)	(7.1)	(25.5)	(17.4)	(11.3)	(6.8)	(21.9)	(15.2)	(5.4)	(3.9)
Seoul Metropolitan Area	Public rental	26,850	33,305	43,362	56,986	49,536	51,886	72,444	47,047	51,952	54,506	30,305	22,015
	Ratio to the total housing supply	(6.9)	(7.7)	(13.2)	(23.3)	(24.3)	(28.6)	(22.9)	(21.9)	(19.1)	(20.1)	(10.2)	(7.5)

Note: The Seoul Metropolitan Area includes Seoul, Incheon and Gyeonggi Province.

Note: "Public rental housing," which includes the "national rental (30 years)" and "public rental (10 years and 5 years)" housing, means rental housing supplied publicly.

The public rental housing project participation and performance of the private sector has been low due to the long-term rental period resulting from the introduction of rental housing in 2004 and 2010.

Source: Ministry of Land, Infrastructure, and Transport - Housing Construction Performance by Year and Sector

2. Housing Supply

2.1. Supply by Housing Type

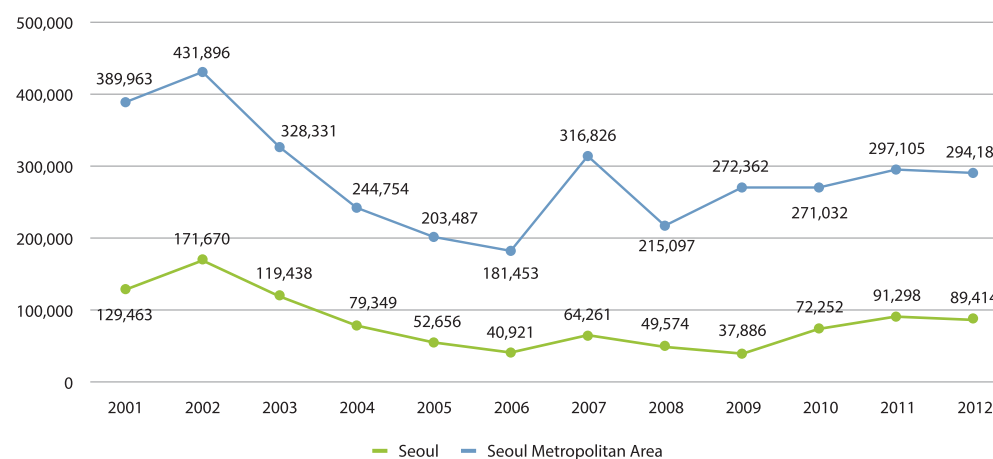
83,000 new housing units supplied annually, while depending on the economic situation

The new housing supply in Seoul as of 2012 was about 89,000 units (calculation based on the number of households). The new housing supply in Seoul decreased from 2002 to 2006, but began increasing in 2009. As for the Seoul Metropolitan Area, the new housing supply decreased following the supply of some 170,000 housing units in 2002, but it has been slightly increasing since 2009.

The ratio of apartments to the new housing supply decreased from 80% to 48%

The ratio of apartments to the new housing supply in Seoul, which had been 30% in 2001, increased significantly until the mid-2000s and reached 84% by 2005. However, it gradually decreased thereafter to about 50%. On the other hand, the ratio of apartments to the new housing supply in the Seoul Metropolitan Area increased from 31% in 2001 to 89% in 2005, but it has since been declining to about 56% by 2012. The reason for the increase in the percentage of multi-household and tenement house supply and the decrease in the percentage of apartments is the increased supply of a new housing type that is literally called, "urban-type housing."

Fig. 1-1 Housing supply in Seoul and the Seoul Metropolitan Area (2001-2012)



Source: Ministry of Land, Infrastructure, and Transport - Housing Construction Performance by Year

Table 1-6 Trends in the housing supply in Seoul and the Seoul Metropolitan Area by housing type (2001-2012)

Unit: housing units, (%)

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Seoul	Detached/ Multi-family	16,471	16,610	5,751	22,210	1,671	2,123	2,193	2,201	3,022	5,195	5,301	4,988
		(12.7)	(9.7)	(4.8)	(28.0)	(3.2)	(5.2)	(3.4)	(4.4)	(8.0)	(7.2)	(5.8)	(5.6)
	Multi-household	70,601	100,418	29,152	7,258	6,631	7,934	11,585	24,730	7,910	15,389	37,845	39,725
		(54.5)	(58.5)	(24.4)	(9.1)	(12.6)	(19.4)	(18.0)	(49.9)	(20.9)	(21.3)	(41.5)	(44.4)
	Tenement	2,971	2,827	924	294	270	513	455	705	328	298	1,045	1,699
		(2.3)	(1.6)	(0.8)	(0.4)	(0.5)	(1.3)	(0.7)	(1.4)	(0.9)	(0.4)	(1.1)	(1.9)
	Apartment	39,420	51,815	83,611	49,587	44,084	30,351	50,028	21,938	26,626	51,370	47,107	43,002
		(30.4)	(30.2)	(70.0)	(62.5)	(83.7)	(74.2)	(77.9)	(44.3)	(70.3)	(71.1)	(51.6)	(48.1)
	Total	129,463	171,670	119,438	79,349	52,656	40,921	64,261	49,574	37,886	72,252	91,298	89,414
		(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)
Seoul Metropolitan Area	Detached/ Multi-family	100,376	71,369	41,562	46,979	11,391	18,293	28,944	33,923	32,827	37,379	41,755	41,610
		(25.7)	(16.5)	(12.7)	(19.2)	(5.6)	(10.1)	(9.1)	(15.8)	(12.1)	(13.8)	(14.1)	(14.1)
	Multi-household	164,945	167,836	47,472	12,002	8,674	10,537	20,105	47,623	20,784	33,223	74,509	83,413
		(42.3)	(38.9)	(14.5)	(4.9)	(4.3)	(5.8)	(6.3)	(22.1)	(7.6)	(12.3)	(25.1)	(28.4)
	Tenement	4,224	3,916	2,018	856	1,793	2,768	2,323	3,130	2,992	3,042	4,605	5,662
		(1.1)	(0.9)	(0.6)	(0.3)	(0.9)	(1.5)	(0.7)	(1.5)	(1.1)	(1.1)	(1.5)	(1.9)
	Apartment	120,418	188,777	237,279	184,917	181,629	149,855	265,454	130,421	215,759	197,388	176,236	163,498
		(30.9)	(43.7)	(72.3)	(75.6)	(89.3)	(82.6)	(83.8)	(60.6)	(79.2)	(72.8)	(59.3)	(55.6)
	Total	389,963	431,898	328,331	244,754	203,487	181,453	316,826	215,097	272,362	271,032	297,105	294,183
		(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)	(100)

Note: Applied the conventional calculation method; Seoul Metropolitan Area includes Seoul, Incheon and Gyeonggi Province
Source: Ministry of Land, Infrastructure, and Transport - Housing Construction Performance by Year and Type

2.2. Supply by Housing Size

Dramatic increase in supply of housing units of 60m² in floor area and smaller in 2012

In 2012, 59,000 small-sized housing units of 60m² in floor area and smaller were newly supplied in Seoul, and this accounted for 69% of total housing supply in the city. On the other hand, about 17,000 medium-sized housing units of 60~85m² in floor area and 10,000 large-sized housing units of 85m² and bigger were supplied, and they accounted for 19% and 12% of the total housing supply, respectively.

In Seoul, the ratio of small-sized housing supply to the total housing supply was 31% in 2001, and it steadily increased to 69% by 2012, whereas the ratio of the large-sized housing supply to the total housing supply decreased from 20% to 12% during the same time period. The ratio of the medium-sized housing supply to the total housing supply remained steady in the 40% range until 2009, but it was greatly reduced following the year 2009 and it reached 19% in 2012. As for the Seoul Metropolitan Area, while the supply of small-sized housing has increased significantly since 2009, the ratio of medium- and large-sized housing supply to the total housing supply has continually dropped from 34% in 2007 to 14% in 2012.

Table 1-7 Trends in the housing supply in Seoul and the Seoul Metropolitan Area by housing size (2001-2012)

Unit: housing units, (%)

		2001	2002	2003	2004	2005	2006	2007	2008	2009	2010	2011	2012
Seoul	60m ² and under	36,038 (30.9)	53,586 (33.5)	31,029 (26.8)	15,929 (27.4)	19,072 (36.8)	12,043 (30.3)	23,861 (38.0)	17,204 (35.5)	14,072 (39.0)	33,183 (48.0)	54,432 (61.8)	59,101 (68.6)
	60~85 and under	56,755 (48.7)	72,371 (45.3)	55,175 (47.7)	27,081 (46.6)	22,760 (43.9)	15,678 (39.5)	27,870 (44.3)	20,914 (43.2)	15,002 (41.6)	21,555 (31.2)	22,172 (25.2)	16,611 (19.3)
	85m ² and over	23,797 (20.4)	33,810 (21.2)	29,551 (25.5)	15,112 (26.0)	9,965 (19.2)	11,973 (30.2)	11,111 (17.7)	10,299 (21.3)	7,016 (19.4)	14,452 (20.9)	11,456 (13.0)	10,411 (12.1)
	Total	116,590 (100)	159,767 (100)	115,755 (100)	58,122 (100)	51,797 (100)	39,694 (100)	62,842 (100)	48,417 (100)	36,090 (100)	69,190 (100)	88,060 (100)	86,123 (100)
Seoul Metropolitan Area	60m ² and under	133,680 (43.9)	144,564 (38.4)	97,048 (32.6)	77,083 (37.5)	61,755 (31.2)	53,929 (31.3)	87,904 (29.1)	75,067 (38.0)	65,509 (25.7)	90,103 (36.0)	125,659 (46.2)	130,338 (48.4)
	60~85m ² and under	123,522 (40.6)	167,634 (44.6)	140,180 (47.2)	87,581 (42.6)	89,594 (45.3)	64,963 (37.8)	112,612 (37.2)	70,839 (35.9)	107,229 (42.0)	103,299 (41.3)	106,144 (39.0)	100,908 (37.5)
	85m ² and over	47,194 (15.5)	64,050 (17.0)	60,061 (20.2)	41,055 (20.0)	46,552 (23.5)	53,166 (30.9)	102,035 (33.7)	51,674 (26.2)	82,420 (32.3)	56,816 (22.7)	40,353 (14.8)	38,044 (14.1)
	Total	304,396 (100)	376,248 (100)	297,289 (100)	205,719 (100)	197,901 (100)	172,058 (100)	302,551 (100)	197,580 (100)	255,158 (100)	250,218 (100)	272,156 (100)	269,290 (100)

Note: Applied the conventional calculation method (number of multi-household housing units); Seoul Metropolitan Area includes Seoul, Incheon and Gyeonggi province
Source: Ministry of Land, Infrastructure, and Transport - Housing Construction Performance by Year and Type

3. Housing Price Trends

3.1. Housing Sales Prices

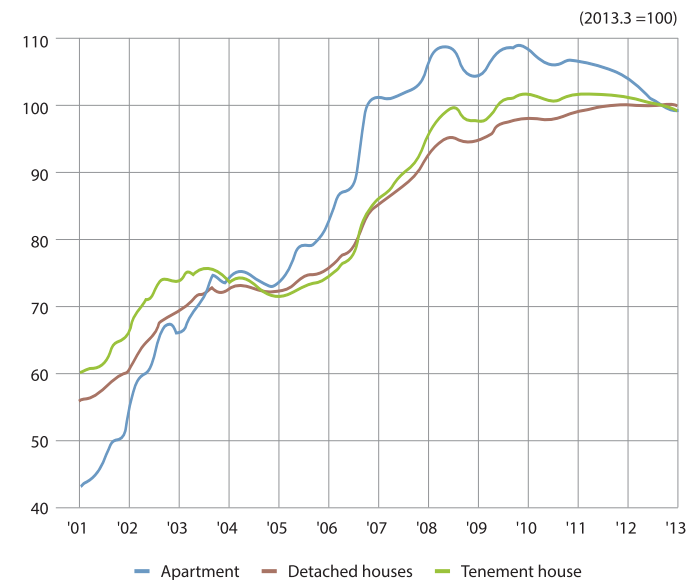
Housing sales prices have doubled between 2001 and 2013, but remained stagnant since the 2008 financial crisis

The housing sales price index doubled from January 2001 to March 2013. The housing sales prices continually climbed up until the 2008 financial crisis, but remained stagnant before taking a downturn in December 2009.

In terms of the housing size, the housing sales price index of large-sized housing units has been declining, while that of

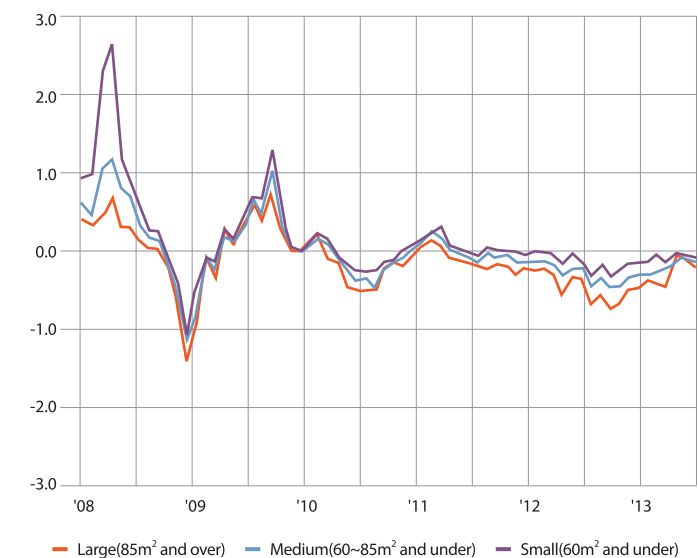
small-sized housing units increased slightly after 2008. This is because the increase rate was smaller and the decrease rate was larger for the large-sized housing, while the opposite was true for small-sized housing.

Fig. 1-2 Housing sales price index by housing type (2001-2013)



Source: Kookmin Bank, house price index time series, 2013.6.

Fig. 1-3 Month-on-month rate of increase in the housing sales price index (2008-2013)



Source: Kookmin Bank, house price index time series, 2013.6.

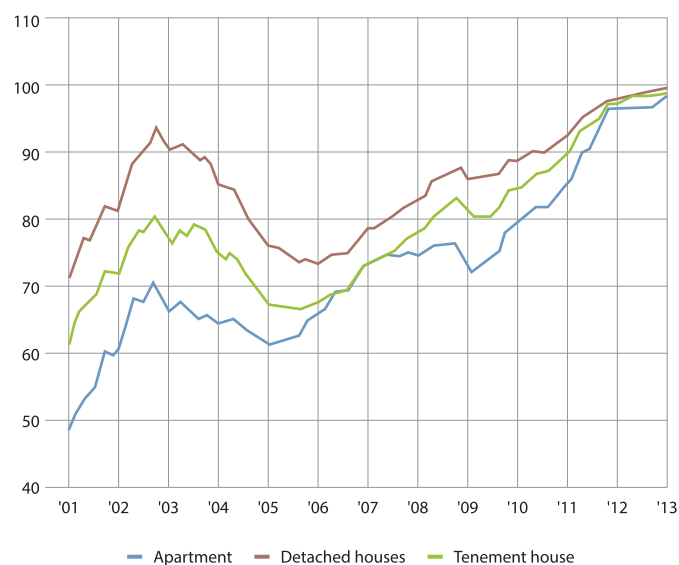
3.2. Jeonse* Prices

The Jeonse prices have continually increased, especially for apartments and small- and medium-sized housing units

The Jeonse price index in Seoul has steadily increased between 2001 and March 2013, except for a 2-year period between 2003 and 2005. In terms of housing size, the month-on-month increase rate was comparatively higher for small- and medium-size housing units than the large-sized housing units. Since 2012, the rate of the Jeonse price increase has been similar, regardless of the housing size.

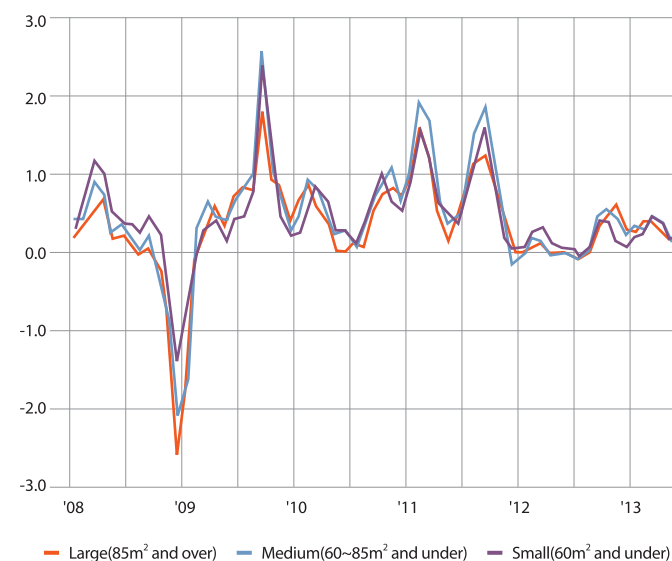
* Jeonse is a process unique to South Korea's rental system. It's does not involve monthly rent payments, instead tenants provide the landlord with a deposit based on the value of the property as an investment during the lease. The property owners keep the returns on the investment and repay the principle deposit once the lease comes to an end.

Fig. 1-4 Housing sales price index by housing type (2001-2013)



Note: March 2013 as reference level (100)
Source: Kookmin Bank, house price index time series, 2013.6.

Fig. 1-5 Month-on-month rate of increase in the Jeonse price index (2008-2013)



Source: Kookmin Bank, house price index time series, 2013.6.

3.3. Ratio of Jeonse Prices to Housing Sales Prices

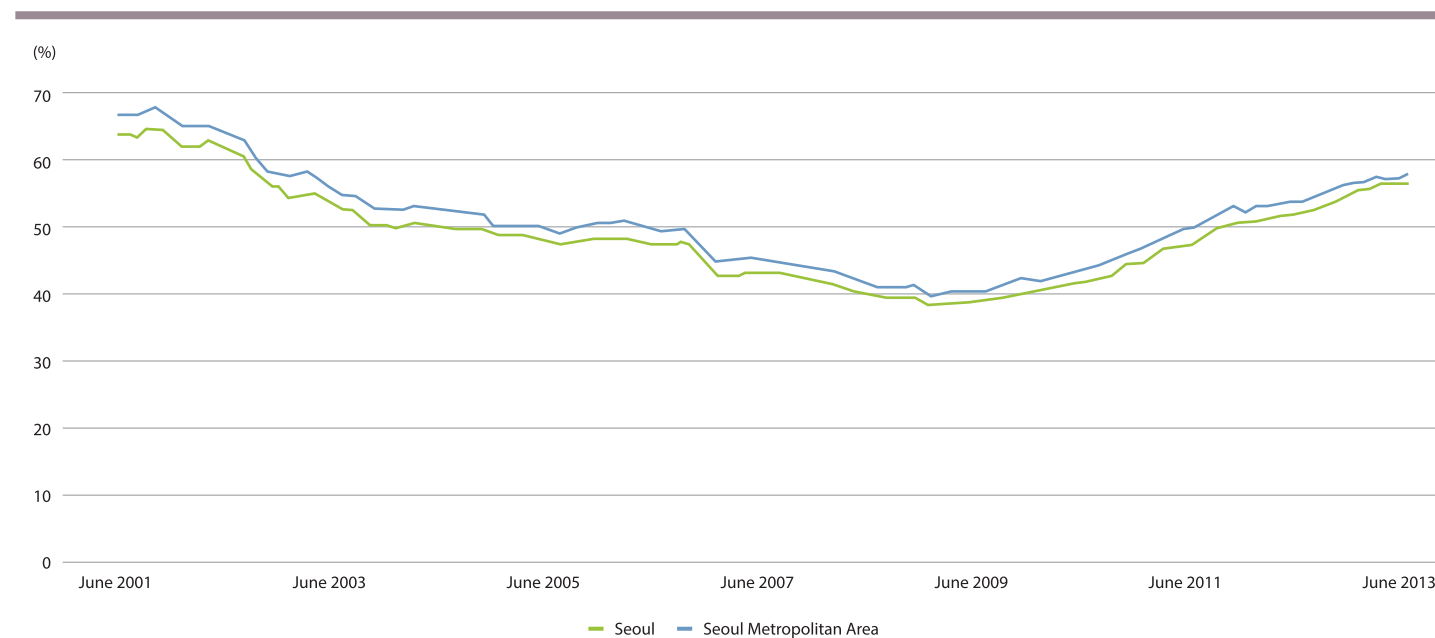
The ratio of Jeonse prices to housing sales prices in Seoul, on the rise since 2009 to 54.5% in 2013

In June 2013, the ratio of Jeonse prices to housing sales prices was recorded at 58.6% on average for the nation, 54.5% for Seoul and 54.8% for the Seoul Metropolitan Area. In terms of the housing type, the ratio of Jeonse prices to housing sales prices on average was 58.0% for tenement houses, 56.7% for apartments and 40.9% for detached houses.

The ratio of Jeonse prices to apartment sales prices on average in Seoul decreased for 64.0% in June 2001 to 38.9% in June 2009, but it has been increasing since then and reached 56.7%

in June 2013. The ratio of Jeonse prices to apartment sales prices on average in the Seoul Metropolitan Area showed similar tendencies as that of Seoul, and it reached 57.8% in June 2013. For reference purposes, the ratio of Jeonse prices to apartment sales prices on average in the nation is 63.7% as of June 2013.

Fig. 1-6 Changes in the ratio of Jeonse prices to apartment sales prices in Seoul and the Seoul Metropolitan Area



Source: Kookmin Bank, house price index time series, 2013.6.

II. Residential Conditions of Seoul Citizens

1. General Conditions

1.1. Occupancy Type

Occupancy by home owner (40.4%) has been decreasing, and there has been reduced availability of Jeonse and increased availability of monthly rentals

As of 2012, the most common type of housing occupancy in Seoul is home ownership, accounting for 40.4%, followed by Jeonse at 32.5% and monthly rental at 25.7%. Between 2006 and 2012, the proportion of owner occupancy in Seoul decreased from 49.2% to 40.4%, while the proportion of monthly rental occupancy increased from 16% to 26%. As of 2012, one out of every four household in Seoul was paying monthly rent.

In the case of the Seoul Metropolitan Area (Seoul, Incheon and Gyeonggi Province), 46% of all housing occupation is owner occupancy, 29% is Jeonse and 23% is monthly rental as of 2012. The proportion of owner occupancy is higher than that of Seoul and those of Jeonse and monthly rental are relatively lower. The proportion of owner occupancy declined and monthly rental occupancy rate increased compared to 2006, and this is somewhat similar to the trends observed in Seoul.

Table 2-1 Changes in the types of housing occupancy in Seoul and the Seoul Metropolitan Area

Unit: %

		Owner occupancy	Jeonse	Monthly rent	Other	Total
Seoul	2006	49.2	32.0	16.4	2.4	100
	2008	42.3	39.3	16.1	2.4	100
	2010	43.8	32.8	21.1	2.2	100
	2012	40.4	32.5	25.7	1.4	100
Seoul Metropolitan Area	2006	50.2	29.7	18.1	2.0	100
	2008	50.7	29.6	17.6	2.2	100
	2010	46.6	29.4	22.2	1.8	100
	2012	45.7	29.3	23.0	2.0	100

Note: The Seoul Metropolitan Area includes Seoul, Incheon and Gyeonggi Province.
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, Each Year

1.2. Housing Size

The average size of a residence occupied by a household is 79.8m²

As of 2012, the average size of a residence occupied by a household in Seoul is 79.8m². The average size of a residence for every household in Seoul increased from 65.2m² in 2006 to 79.8m² in 2012. While there was a decrease in the percentage of residents living in small- and medium-sized housing units with an area of 85m² and smaller, there was an increase in the percentage of residents living in medium- and large-sized housing units with an area of 85m² and bigger.

8.7% of the households in Seoul do not meet the "minimum housing standards"

As of 2012, there are about 310,000 households that do not meet the minimum housing standards and this is 8.7% of the total number of households in Seoul. As for the Seoul Metropolitan Area, about 6.6% of the 8.5 million households were found not to meet the minimum housing standards.

Table 2-2 Changes in the housing size

Unit: %

	Average residence size per household (m ²)	Proportion by housing size				
		40m ² and under	40~60m ²	60~85m ²	85m ² and over	Total
2006	66.2	22.3	26.6	27.1	24.0	100
2008	68.0	19.6	28.4	26.0	26.0	100
2010	66.9	24.3	26.3	27.9	21.5	100
2012	79.8	16.9	16.9	16.4	49.8	100

Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, Each Year

Table 2-3 Households not meeting the minimum housing standards in Seoul and the Seoul Metropolitan Area (2012)

	Total households	Households not meeting the minimum housing standards	Ratio of the households not meeting the min. housing standards to the total households
Seoul	3,622,858	312,915	8.7%
Seoul Metropolitan Area	8,513,330	557,425	6.6%

Source: Ministry of Land, Transport and Maritime Affairs (2002) Survey on Residential Conditions, Each Year; Article 5-2 of the Housing Act and Article 7 of the Enforcement Decree of the Act

The minimum housing standards are based on the area (housing size) and facilities. The minimum area is 14m² for a single-person household, 26m² for a two-person household, and 36m² for a three-person household, consisting of parents and a child. The minimum number of rooms is shown in Table 2-4. In addition, the facilities are assessed based on the presence of a water supply system or a facility for the use of groundwater with good water quality, as well as an exclusive kitchen, exclusive flush-type toilet and bathing facilities (incl. case in which there are bathing facilities with a flush toilet) with drainage and sewage facilities.

Table 2-4 Minimum housing size and number of rooms based on the number of household members

Number of household members	Standard household composition ¹⁾	Room composition ²⁾	Total housing size (m ²)
1	Single-member household	1 K	14
2	Parents	1 DK	26
3	Parents and 1 child	2 DK	36
4	Parents and 2 children	3 DK	43
5	Parents and 3 children	3 DK	46
6	Grandparents, parents and 2 children	4 DK	55

1) ① A child in a three-member household should be aged 6 years or above, ② 2 children in a four-member household should be aged 8 years or above (1 boy and 1 girl), ③ 3 children in a five-member household should be aged 8 years or above (2 boys and 1 girl or 1 boy and 2 girls), ④ 2 children in a six-member household should be aged 8 years or above (1 boy and 1 girl)

2) K is “kitchen” and DK is a “dining room+kitchen,” while the numbers indicate the number of bedrooms (incl. bedroom+living room) or rooms that could be used as bedrooms

3) Remarks: The number of rooms should be determined based on the following room division principle:

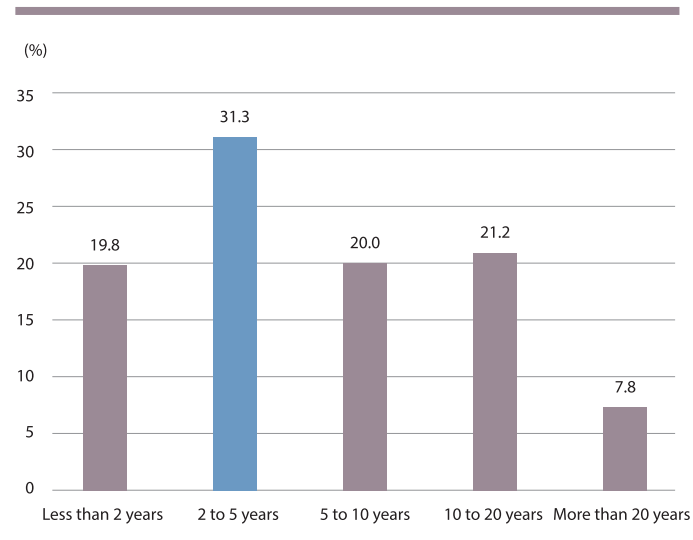
① The parents use the same bedroom, ② Children aged 6 years or above should have a separate bedroom from the parents, ③ Boys and girls aged 8 years or above should have separate bedrooms, ④ The grandparents should have a separate bedroom

1.3. Residence Tenure

50% of the total households in Seoul have resided in the current residence for less than 5 years, and 20% have resided for less than 2 years

About 1.13 million households in Seoul, which is about 31% of the total households, were found to have resided in the current place of residence for 2 to 5 years. On the other hand, nearly half of the total households in Seoul have resided in their current residence for less than 5 years, while 20% of the total households have resided in their current residence for less than 2 years. About 29% were long-term residents, who have lived in their current place of residence for more than 30 years.

Fig. 2-1 Period of residence in the current housing, 2012

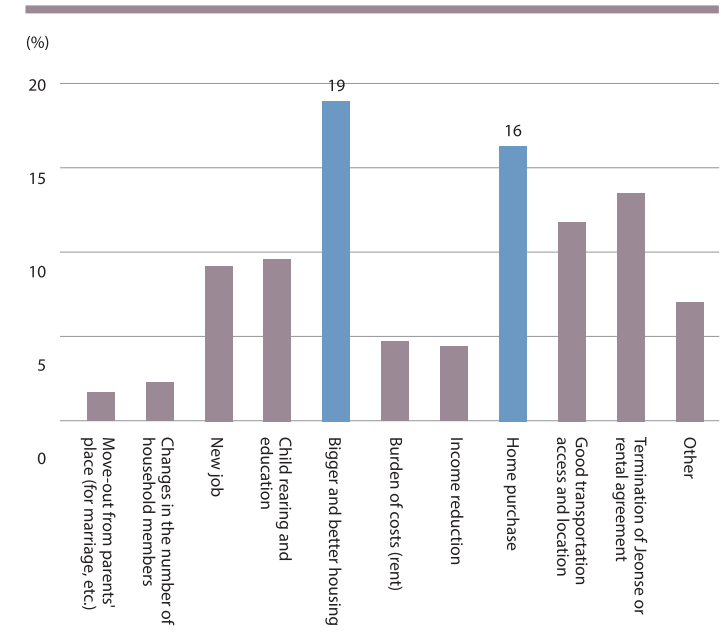


Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

Change of residence resulting from home purchase and the termination of Jeonse/rental agreement or burden of rent for 1/3 and 1/4 of Seoul citizens, respectively

The reasons for moving into their current place of residence were examined, and the results showed that one out of three households in Seoul moved into the current place of residence to live in a bigger and better house (19%) or because they purchased a new home (16%). On the other hand, 23% of the households that moved did so for non-voluntary reasons such as the termination of Jeonse or monthly rental agreement (14%), burden of high monthly rent (5%) and income reduction (4%) etc.

Fig. 2-2 Reasons for moving, 2012



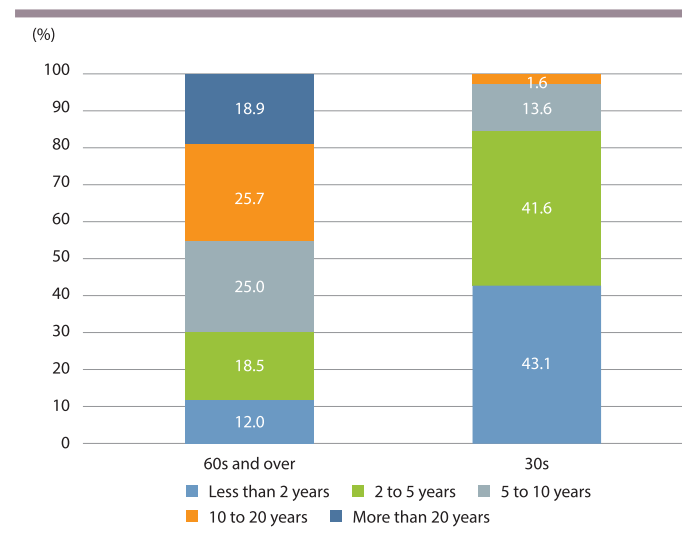
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

45% of the elderly households in Seoul resided in the same place for more than 10 years

As of 2012, 45% of the elderly households in Seoul were found to have resided in their current place of residence for more than 10 years, showing a strong tendency toward "long-term residence." Compared to the households where the head of the household is in his/her 30s, a significantly higher percentage of the elderly households lived in their current place of residence for at least 5 years.

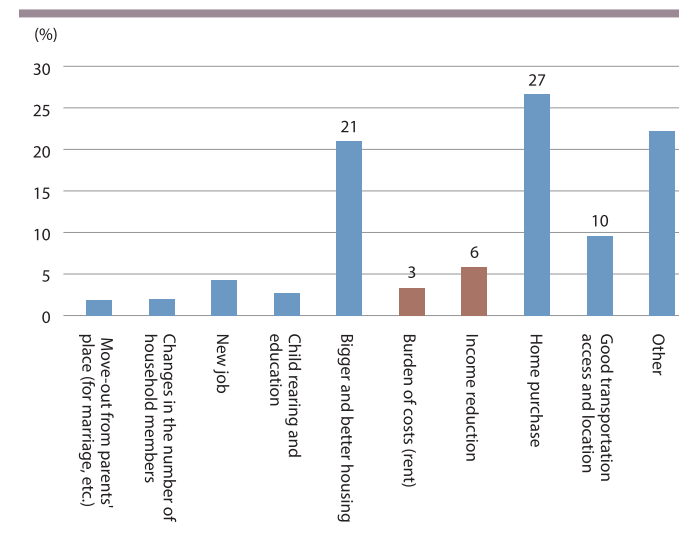
The most common reason for moving into the current place of residence among the elderly households in Seoul was home purchase (27%), while 21% moved for bigger and better housing and 10% moved for better location and transportation access. Meanwhile, 9% of the elderly households moved for non-voluntary reasons such as the burden of rent and lower income, etc.

Fig. 2-3 Period of residence in the current housing among elderly households, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

Fig. 2-4 Reasons for moving among the elderly households, 2012



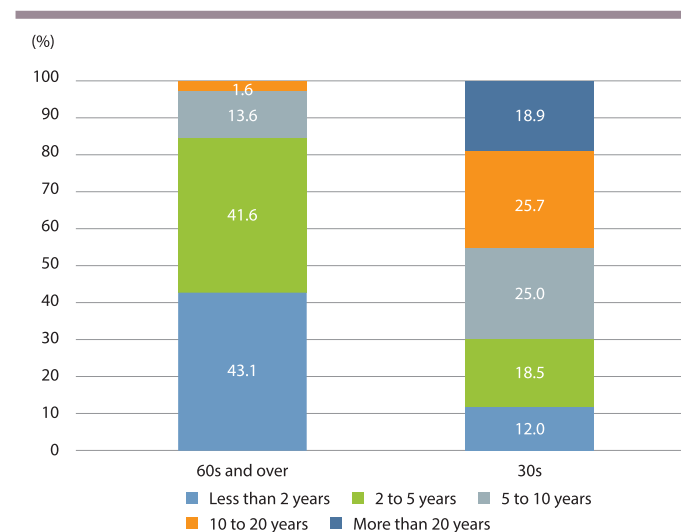
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

43% of the young households resided in the same place for less than 2 years

As of 2012, 43% of the young households (with the head of the household in their 30s) in Seoul were found to have resided in their current place of residence for less than 2 years, showing a strong tendency toward "short-term residence." This is associated with how 80% of the young households are living on Jeonse or monthly rent.

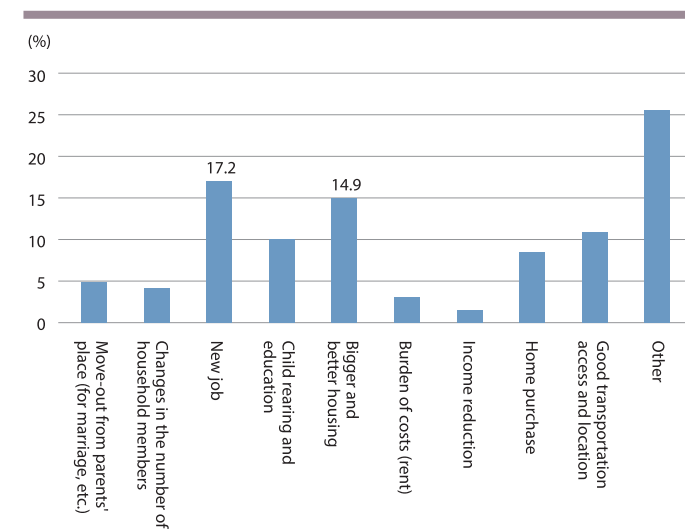
The young households moved for various reasons such as a new job (17%), housing size (15%), transportation access and location (11%), and child education (10%). It was found that while child education and transportation access and location are becoming more prevalent reasons for moving, the reasons of bigger housing and home purchase are becoming less common.

Fig. 2-5 Period of residence in the current housing among young households, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

Fig. 2-6 Reasons for moving among the young households, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

1.4. Housing Costs

The housing price-to-income ratio (PIR) in Seoul is 10.0

The housing price-to-income ratio (PIR) in Seoul increased from 7.2 in 2006 to 10.0 in 2012, while in the Seoul Metropolitan Area, the housing PIR increased from 5.7 in 2006 to 6.7 in 2012. Thus, the PIR in Seoul was found to be higher than that of the Seoul Metropolitan Area.

For reference purposes, the housing PRI in Seoul is considerably higher compared to other major cities overseas including New York (7.0), London (6.9) and Tokyo (5.8) (2020 Seoul Housing Plan Report, 2011)

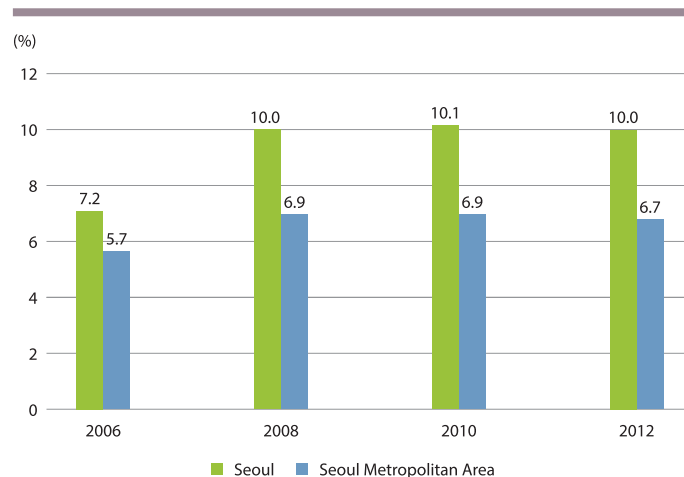
The rent-to-income ratio (RIR) in Seoul is 25.5%

The rent-to-income ratio (RIR) is 25.5% in Seoul and 23.3% in the Seoul Metropolitan Area as of 2012.

In 2012, the average lump-sum deposit for Jeonse in Seoul was 181,090,000 KRW, which was a 14% increase annually on average from 83,520,000 in 2006. Of particular note, the average Jeonse deposit in Seoul increased by about 55% from 2010 to 2012. On the other hand, for monthly rentals, the average lump-sum deposit was 21,990,000 KRW with a monthly rent of 310,000 KRW. The monthly rent deposit increased annually by 11% and the monthly rent by 1% from 2006 to 2012. When the lump-sum deposit was converted to the monthly rent, the monthly rent was shown to have increased at an average annual rate of 4%.

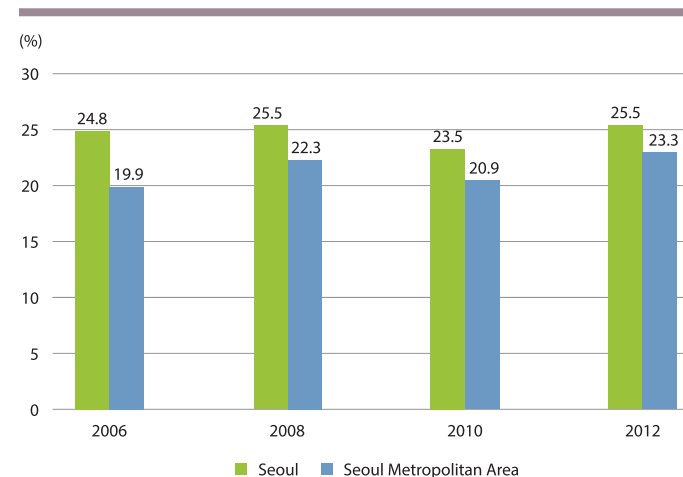
In the Seoul Metropolitan Area, the average Jeonse deposit rose to 150 million KRW at an average annual rate of 14% and the average monthly rate increased to 310,000 KRW with a deposit of 21.45 million KRW at an average annual rate of 5% between 2006 and 2012.

Fig. 2-7 PIR in Seoul and the Seoul Metropolitan Area



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, Each Year

Fig. 2-8 RIR in Seoul and the Seoul Metropolitan Area



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, Each Year

2. Residential Conditions for Low-Income Households

2.1. Characteristics of Low-Income Households**

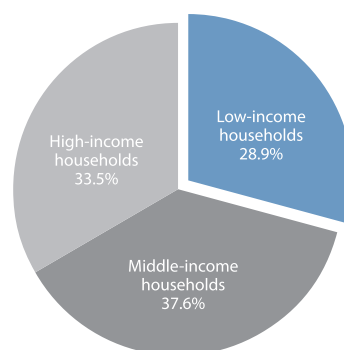
Low-income households (1.04 million) account for 29% of the total number of households in Seoul

As of 2012, there are 1.04 million low-income households falling under the 2.20 million KRW mark, which corresponds to the lower 40% of the income level, and this is 29% of the total number of households in Seoul. Single-person and two-

person households account for 37% and 35% of the low-income households, respectively, and together, the single-person and two-person households make up three-quarters of the total number of low-income households.

** The income brackets (based on income levels) were divided into low-income class (up to the 40th percentile), middle-income class (50th to 80th percentile) and high-income class (90th to 100th percentile) based on the total average monthly income of the household members.

Fig. 2-9 Distribution of households by income level, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

Fig. 2-10 Distribution of households by income level, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

58% of the low-income households are the elderly households and 55% have unemployed head of households

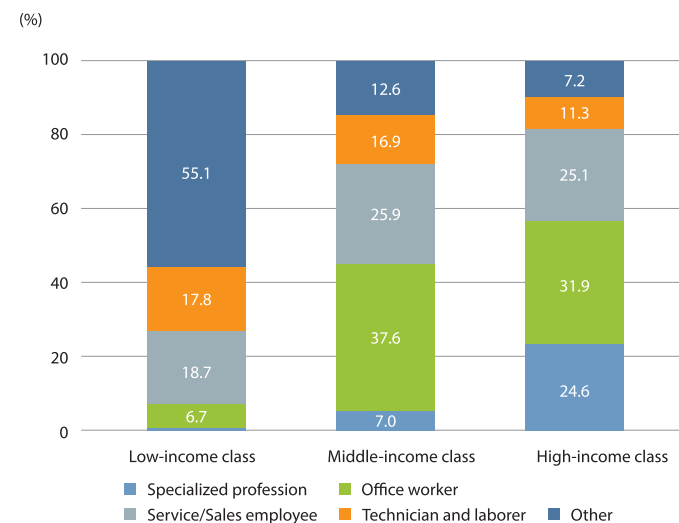
In terms of the age group, elderly households with members aged over 60 accounted for the highest proportion of the low-income households at 58%, followed by the households with members aged over 50 (13%). In 55% of the low-income households, the head of the household was a student, housewife or unemployed, which made up the highest proportion.

Fig. 2-11 Distribution of age group by income bracket, 2012



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

Fig. 2-12 Distribution of occupation by income bracket, 2012



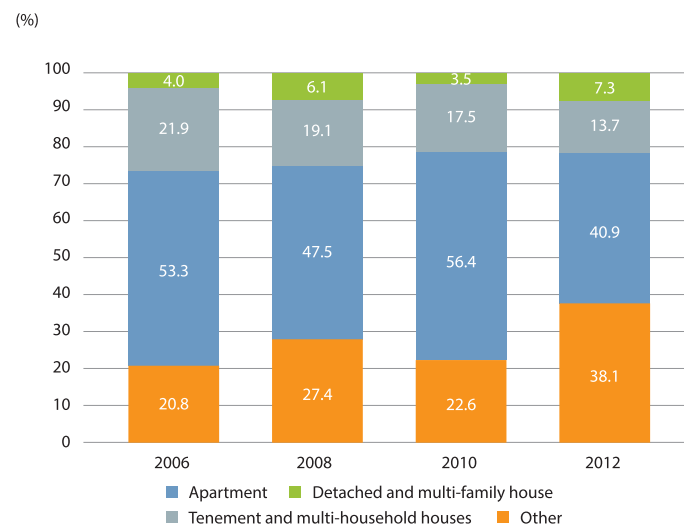
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

2.2. Housing Type

Most low-income households lived in detached or multi-family houses at 41%

As of 2012, the most common type of housing occupied by low-income households were detached and multi-family houses at 41%, followed by apartments (38%) and tenement and multi-household houses (14%). The ratio of low-income households residing in detached and multi-family houses was higher than that residing in other housing types until 2010, but the ratio of low-income households residing in detached and multi-family houses decreased, while the ratio of apartment residence increased significantly in 2012.

Fig. 2-13 Period of residence in the current housing among elderly households, 2012



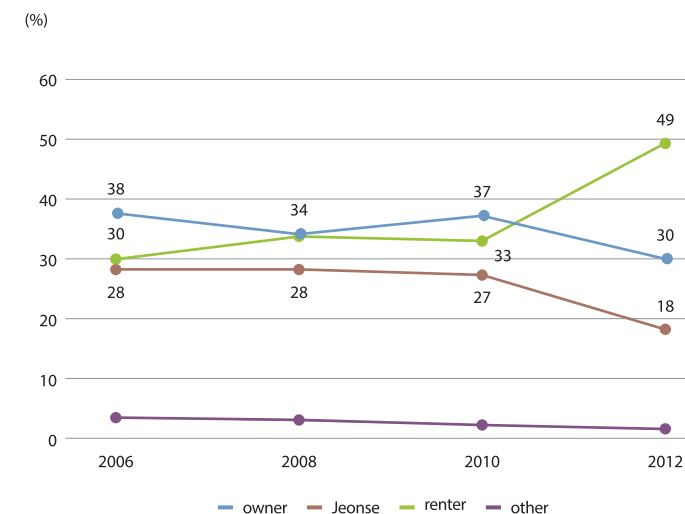
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2012

2.3. Occupancy Type

Half of low-income households are renters; a decrease in home owners and Jeonse occupants and an increase in renters

As of 2012, 49% of the low-income households living in Seoul are renters, which basically means that one out of two low-income households lives in a rented home. They are followed by home owners and Jeonse occupants, who account for 30% and 18% of the total number of low-income households, respectively. From 2006 to 2012, the ratios of owner occupancy and Jeonse occupancy decreased from 38% to 30% and 28% to 18%, respectively, whereas the ratio of renters increased considerably from 30% to 49% during the same period.

Fig. 2-14 Changes in the occupancy type among the low-income households



Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, Each Year

III. Residential Mobility within the Seoul Metropolitan Area

1. Population Migration to and from Seoul within the Seoul Metropolitan Area

1.1. Moving in and out of Seoul

Net migration of 74,000 people from Seoul annually; population reduction resulting from social factors rather than natural factors

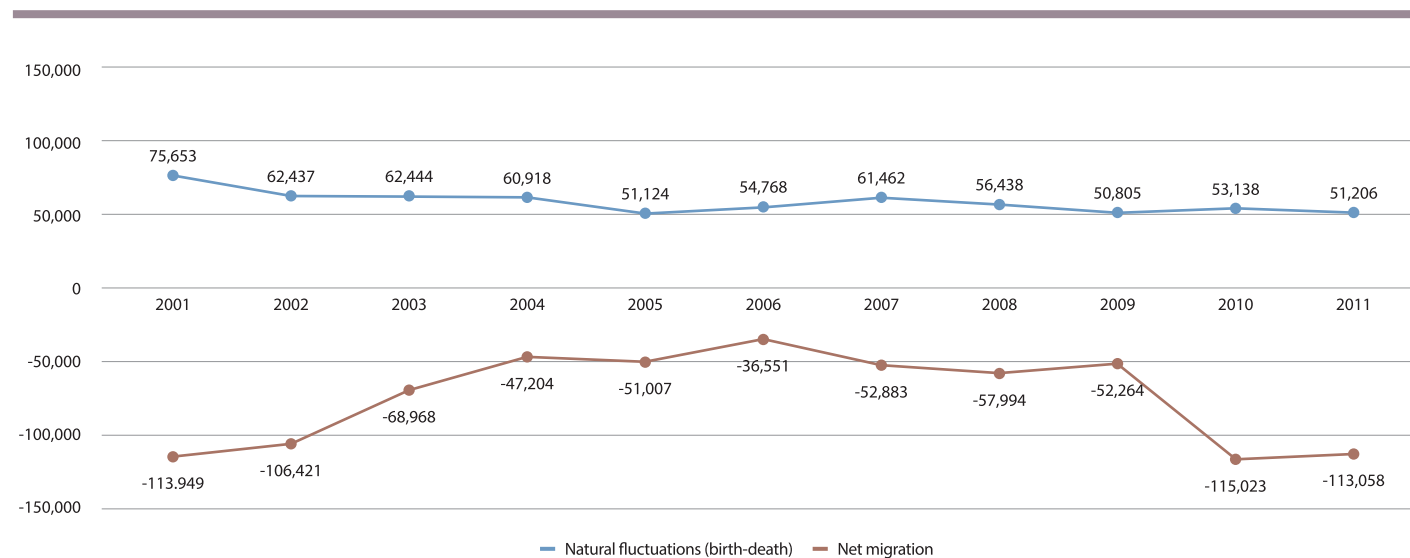
In 2011, social factors such as move-outs contributed to a net decrease of 113,000 in the population of Seoul, while natural factors such as births and deaths contributed to a net increase of 51,000 people. While the population of Seoul decreased by 74,000 people on average annually due to net migration out of Seoul and increased by 58,000 due to births exceeding deaths over the course of 10 years from 2001 to 2011. Based on this, it

can be said that the population reduction in Seoul in the past 10 years was more heavily affected by the social factors than the natural factors.

Increase in the net outflow of population since 2010

Although the degree of outflow of population decreased between 2001 and 2009, it increased dramatically after 2010. There was a net outflow of 80,000 people from Seoul on a yearly basis from 2000 to 2012.

Fig. 3-1 Natural and social factors causing the fluctuations in the population (2000-2012)



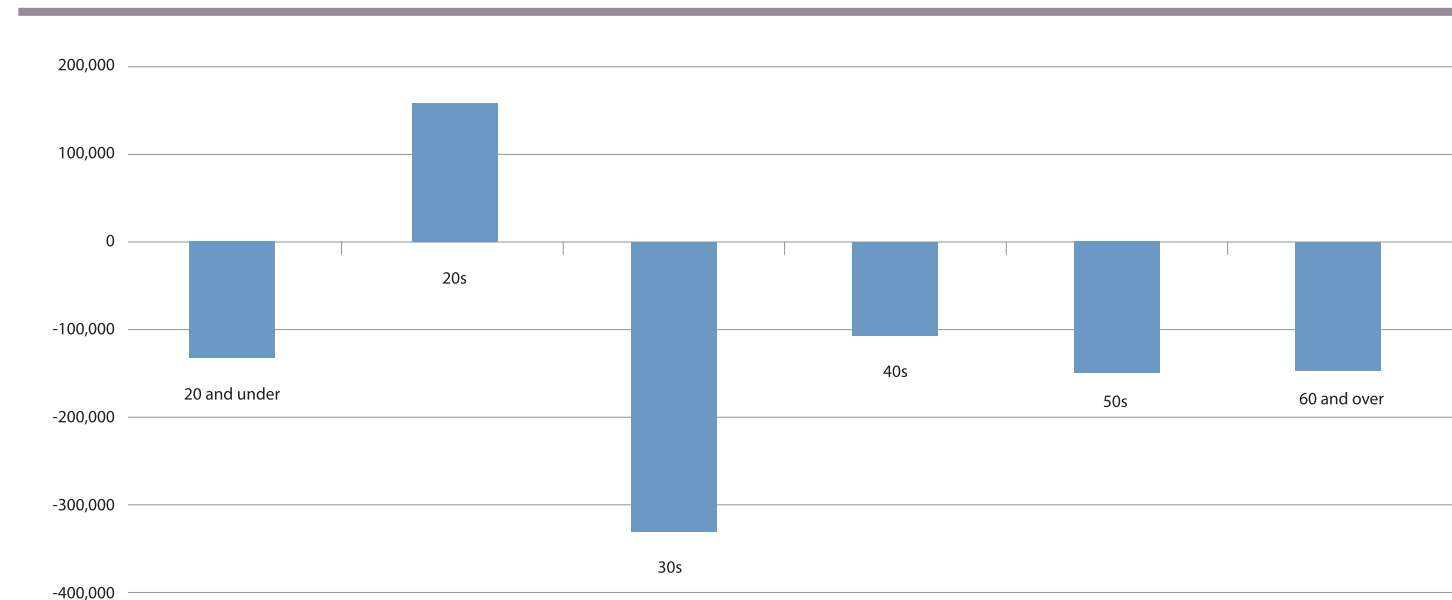
Source: Statistics Korea, Population Trends Survey, each year; Statistics Korea, Korean Population Migration Statistics, each year.

Population exodus from Seoul from all age groups, excluding the 20s, and the largest outflow of people in their 30s (2001~2010)

From 2001 to 2010, there was a net outflow of a total of 700,000 people from Seoul. There was a net outflow from all age groups, excluding the people in their 20s, as the move-out rate was higher than the move-in rate, while there was a net inflow of 17,000 people in their 20s annually on average. The net inflow of people in their 20s is speculated to have resulted from moving into Seoul to find a job or for schooling. On the

other hand, there was a net outflow of 34,000 people in their 30s annually on average, and this was the highest outflow rate among all age groups. An explanation for this could be the fact that the people in their 30s get married and move to the Incheon and Gyeonggi Province, where the housing costs (rent) are relatively more affordable.

Fig. 3-2 Net migration by age group between other parts of the nation and Seoul



Source: Statistics Korea, Population Trends Survey, each year; Statistics Korea, Korean Population Migration Statistics, each year.

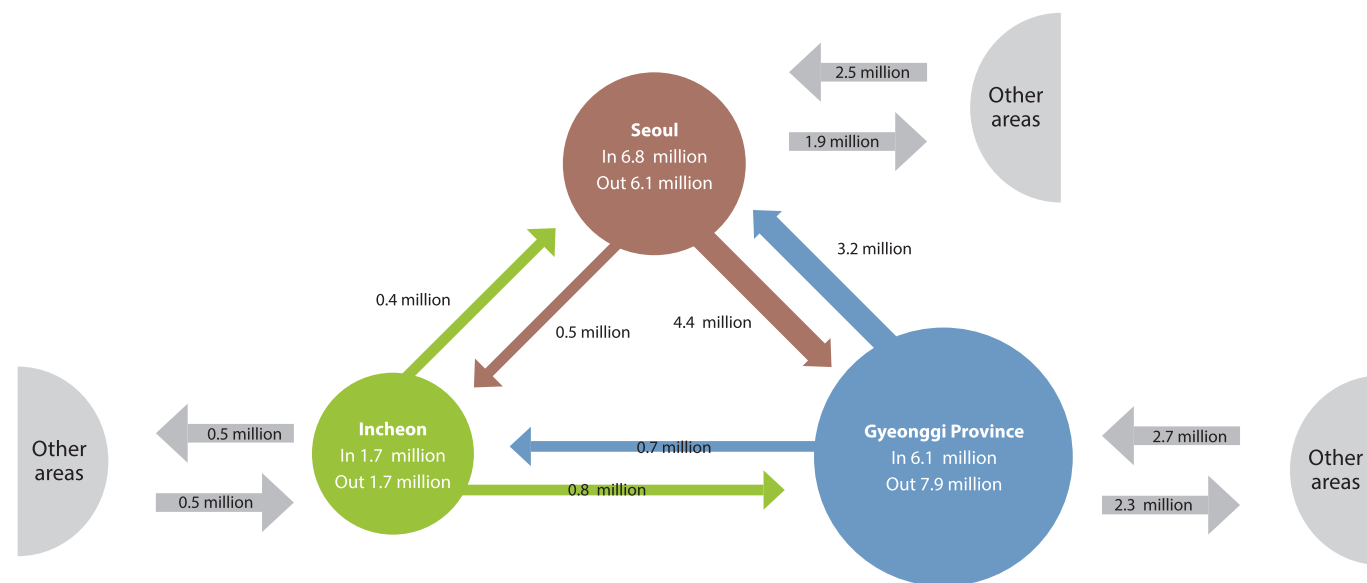
1.2. Migration between Seoul ↔ Incheon and Gyeonggi Province

65% of the people moving out of Seoul migrated to Gyeonggi Province

A total 4.86 million people moved out of Seoul from 2001 and 2010. The highest ratio of these people (65%) moved to Gyeonggi Province, while 7% moved to Incheon and 28% moved to areas other than the Seoul Metropolitan Area. The ratio of population movement within the Seoul Metropolitan Area was high, especially between Seoul and Gyeonggi Province.

On the other hand, 52% of the people moving into Seoul departed from Gyeonggi Province, while 7% and 41% left from Incheon and areas other than the Seoul Metropolitan Area, respectively. Although a large number of people moved into Seoul from the regions other than the Seoul Metropolitan Area, the number of people who moved from Gyeonggi Province to Seoul was still higher.

Fig. 3-3 Migration between Seoul, Incheon and Gyeonggi Province (2001-2010)



Note: The number in the brackets indicate the ratio of people migrating within the city/province compared to the nation, excl. internal migrant population
Source: Statistics Korea, Korean Population Migration Statistics, each year.

2. Networks and Reasons for Residential Mobility

2.1. Households Moving Out of Seoul

210,000 households moving from Seoul to Incheon and Gyeonggi Province annually on average

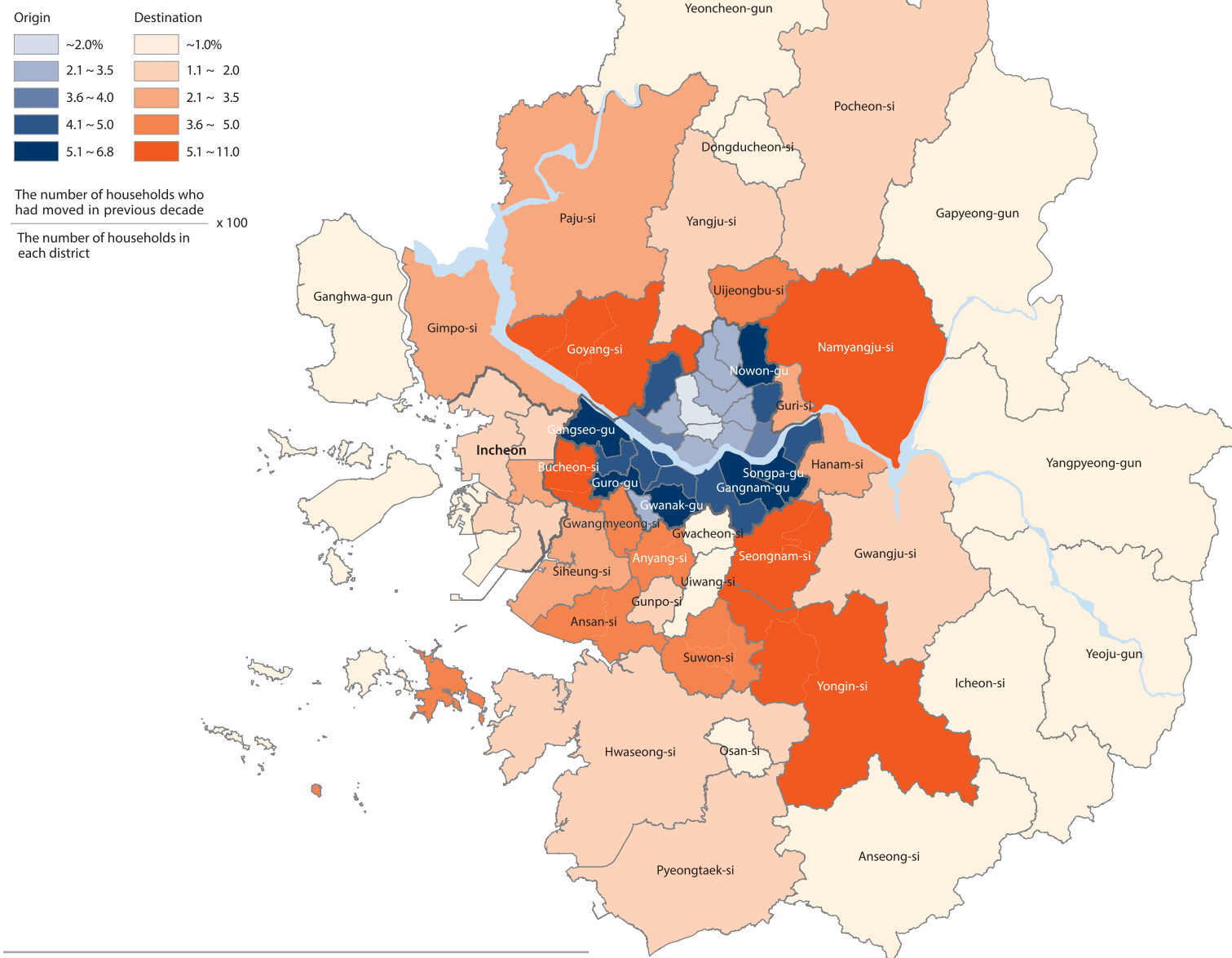
The number of households, with the heads of the households being in their 20s and older, who moved out of Seoul between 2001 and 2010, was 2.09 million, which means that 210,000 households moved out annually on average. The most common areas of departure were Songpa-gu (7%), Gwanak-gu (6%), Gangnam-gu (6%), Gangseo-gu (6%) and Guro-gu (5%) in Seoul, and there was a tendency to arrive in Goyang-si (11%), Seongnam-si (9%), Yongin-si (7%), Bucheon-si (7%) and Namyangju-si (6%) in Gyeonggi Province.

2.2. Households Moving into Seoul

160,000 households moving into Seoul from Incheon and Gyeonggi Province annually

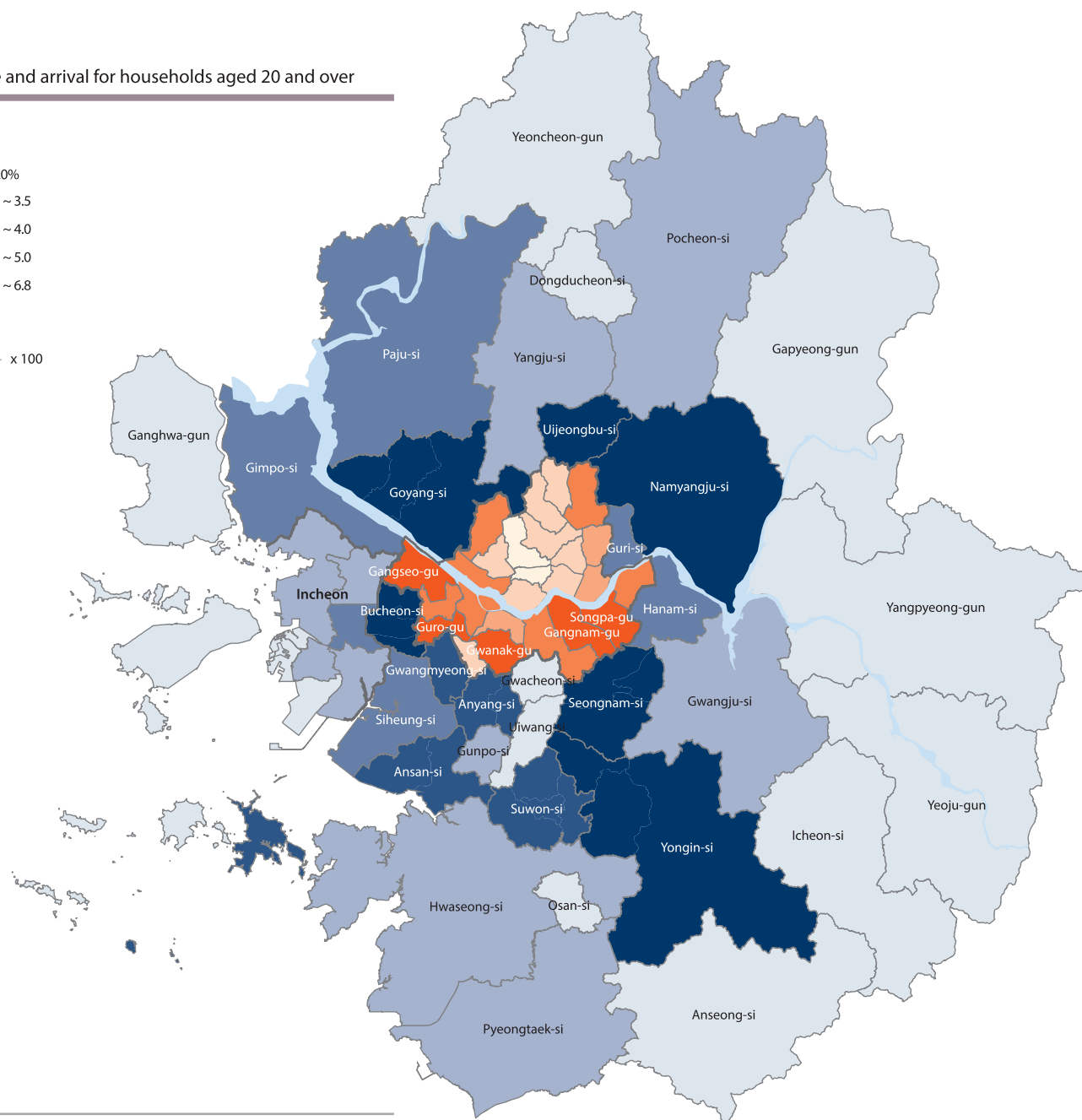
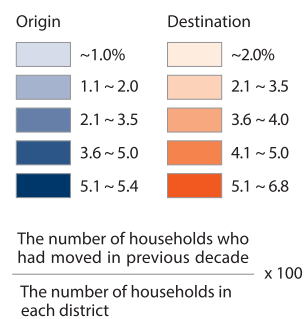
A total of 1.6 million households, with the heads of the households being in their 20s, moved into Seoul from 2000 and 2010, which means that 160,000 households moved into Seoul on average annually. The common areas of departure were Goyang-si (11%), Seongnam-si (9%), Bucheon-si (7%), Yongin-si (6%), and Namyangju-si (5%) in Gyeonggi Province and there was a tendency to move into Songpa-gu (7%), Gangnam-gu (7%), Gwanak-gu (6%), Gangseo-gu (6%) and Guro-gu (5%) in Seoul.

Fig. 3-4 Areas of departure and arrival for households aged 20 and over



Source: Statistics Korea, Korean Population Migration Statistics, each year.

Fig. 3-5 Areas of departure and arrival for households aged 20 and over



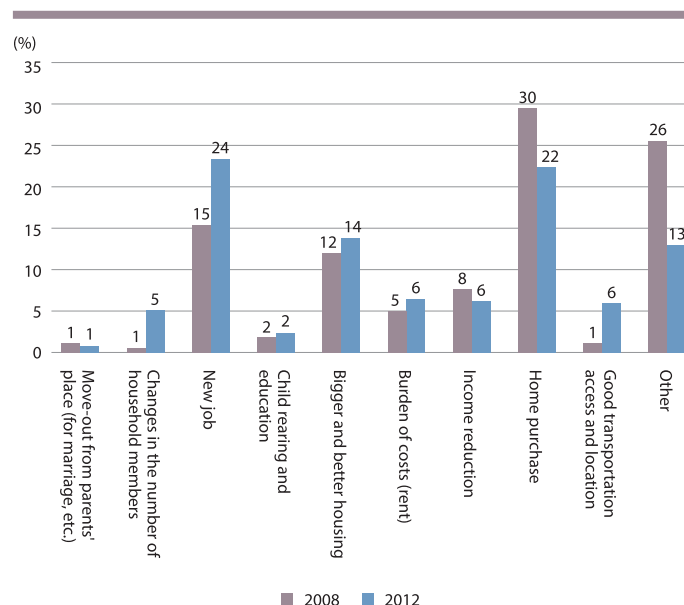
Source: Statistics Korea, Korean Population Migration Statistics, each year

2.3. Reasons for Residential Mobility

Households moved out of Seoul to purchase a home or due to a new job

Households moving out of Seoul tended to move to Incheon and Gyeonggi Province due to a new job (24%), to purchase a home (22%) or in search of larger and better housing (14%). 12% moved out of Seoul due to the financial burden caused by rent and lower income, and this figure was 4%p higher compared to the households that moved into Seoul for the same reasons. It is deemed that the development of new towns in Gyeonggi Province, large supply of new housing and relatively more affordable housing costs compared to Seoul had an impact on the decision to move out of Seoul.

Fig. 3-6 Reasons for moving out of Seoul (2008-2012)



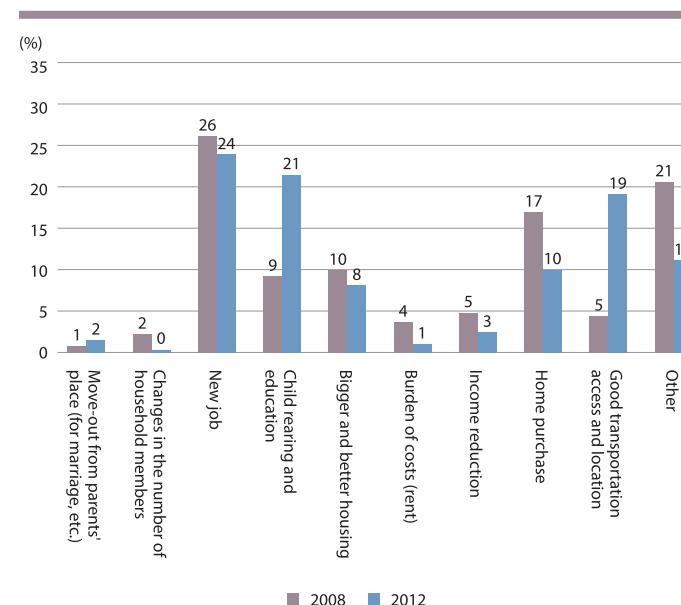
Note: Reasons for moving out of their previous homes
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2008, 2010, 2012.

As of 2012, "a new job" became an increasingly important factor causing households to move out of Seoul, while "purchasing a home" became a less important factor compared to 2008.

Households moved into Seoul due to a new job or for child education

It was found that the primary reasons for moving into Seoul were a new job (24%) and child education (21%). As of 2012, "child education" and "transportation access and location" became increasingly important factors causing households to move into Seoul, while "purchasing a home" became a less important factor compared to 2008.

Fig. 3-7 Reasons for moving into Seoul (2008-2012)



Note: Reasons for moving out of their previous homes into their current homes
Source: Ministry of Land, Transport and Maritime Affairs, Survey on Residential Conditions, 2008, 2010, 2012.

3. Conditions and Characteristics of Commuters in the Metropolitan Living Area

The term, "households in the metropolitan living area," refers to the "households that cross the city boundaries for daily commuting purposes," and they are divided into "inflow commuters" commuting to Seoul for work while living in Incheon or Gyeonggi Province and "outflow commuters" commuting to Incheon or Gyeonggi Province while living in Seoul.

3.1. Inflow Commuters

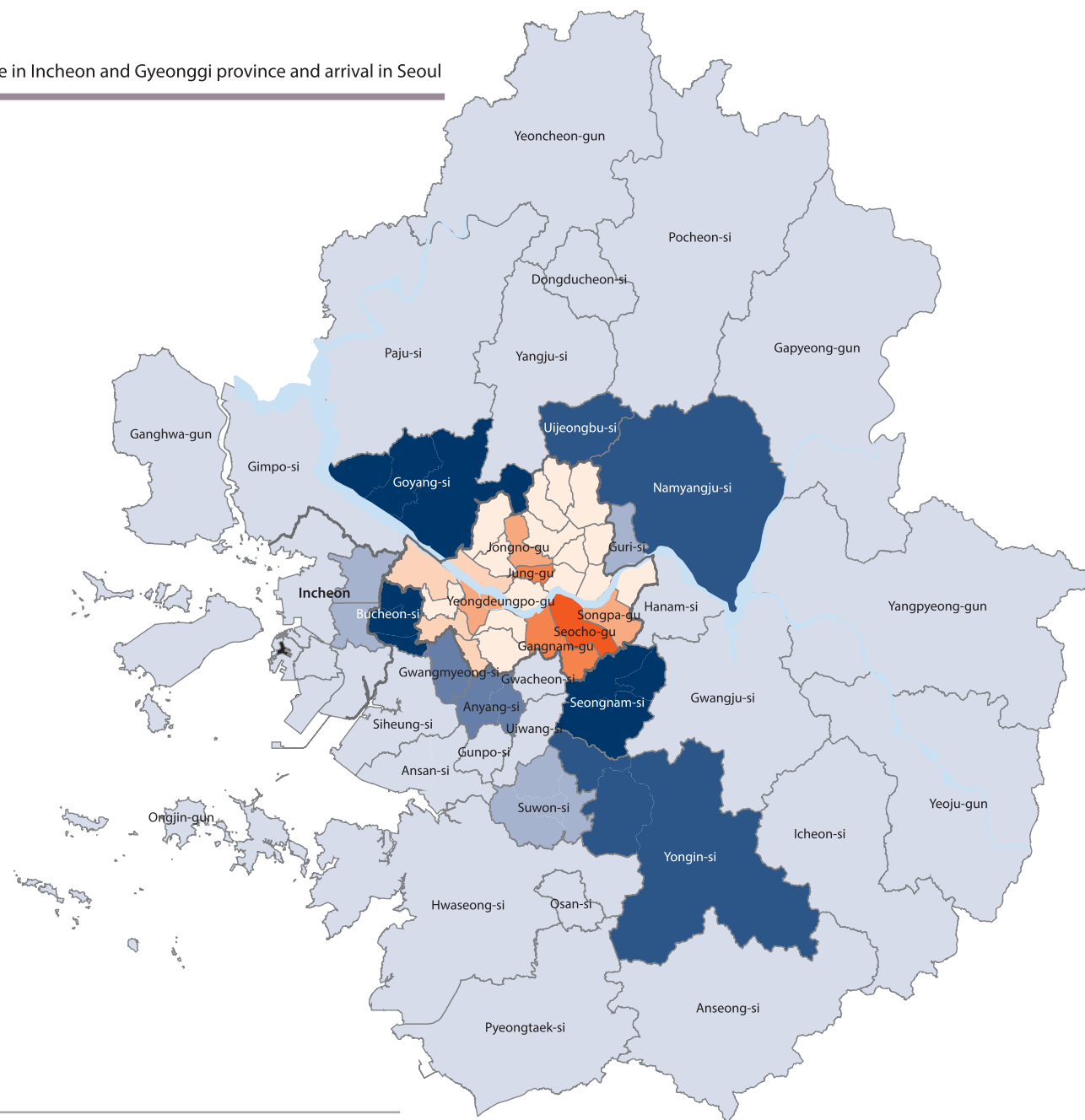
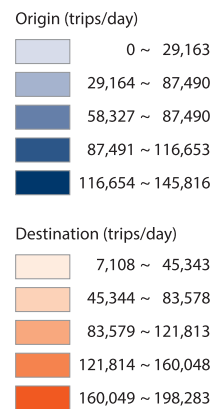
1.25 million inflow commuters on a daily basis; a large number of commuters departing from Seongnam-si and Goyang-si and arriving in Gangnam-gu, Seocho-gu and Jung-gu

As of 2010, there are 1,253,000 inflow commuters coming into Seoul from Incheon and Gyeonggi Province on a daily basis. A large number of such commuters depart from Seongnam-si (12%), Goyang-si (11%), Bucheon-si (9%), Gwangmyeong-si (7%), Anyang-si (6%), Yongin-si (6%) and Namyangju-si (6%) in Gyeonggi Province and arrive in the business centers located in Gangnam-gu (16%), Seocho-gu (11%), Jung-gu (10%), Yongdeungpo-gu (8%), and Jongno-gu (7%) in Seoul.

Bigger network of commuters from new towns to business centers such as Gangnam and a negligible number of commuters entering the northeastern area

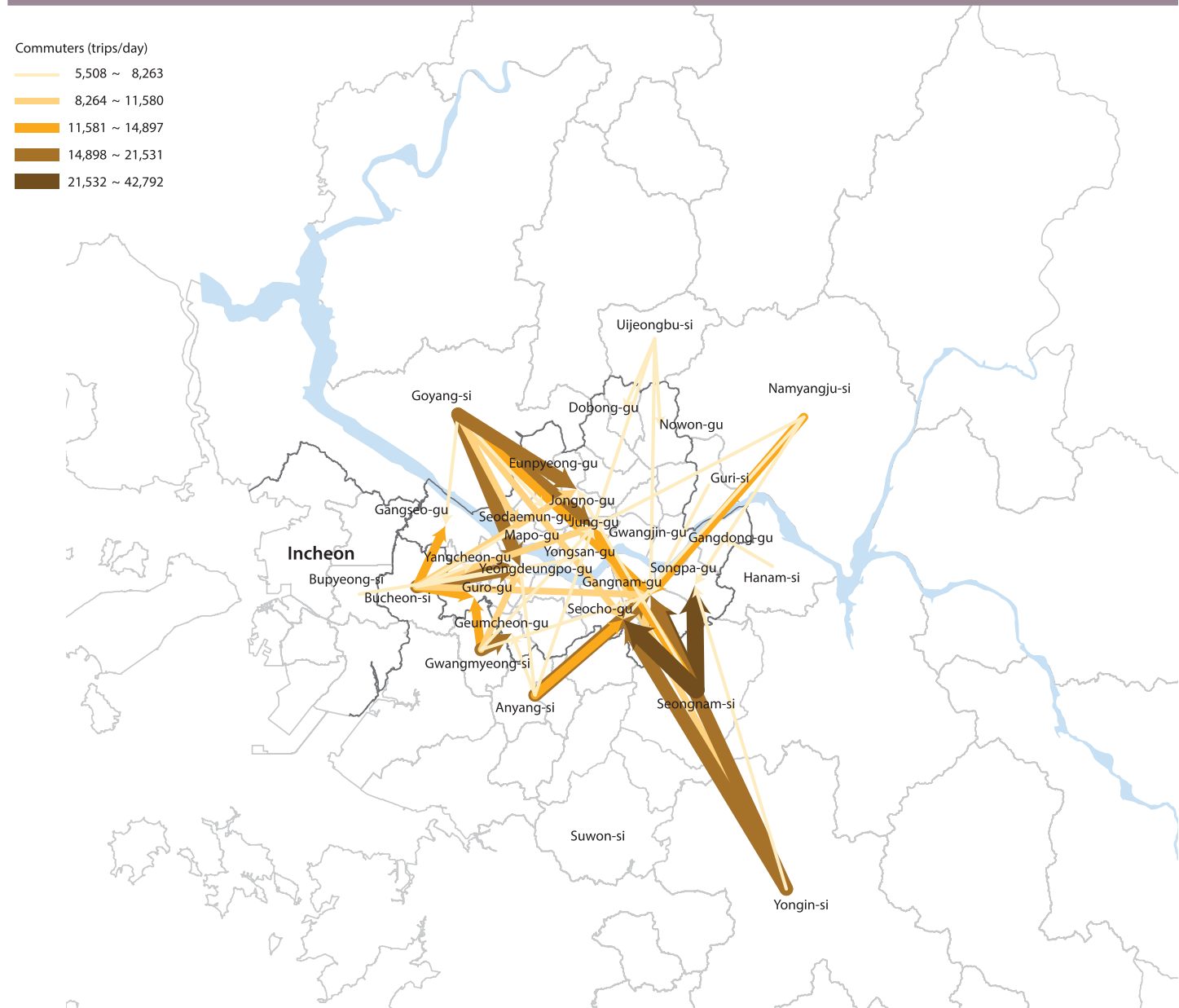
The majority of the inflow commuters tended to leave from the first new town development areas and arrive in central business centers in Seoul such as Gangnam and Yeouido. There was a formation of three large commuting networks and they are the southeastern area centering on Gangnam, the northwestern area centering on the city center, and the southwestern area centering on Yeongdeungpo, and more specifically, Seongnam-si ↔ Gangnam-gu (43,000), Seocho-gu (25,000) and Songpa-gu (24,000), Goyang-si ↔ Jung-gu (20,000), Yongin-si ↔ Gangnam-gu (19,000) and Seocho-gu (19,000), Gwangmyeong-si ↔ Geumcheon-gu (19,000), Bucheon-si ↔ Yeongdeungpo-gu (17,000). The northeastern area of Seoul receives few inflow commuters, and is believed to have negligible influence.

Fig. 3-8 Areas of departure in Incheon and Gyeonggi province and arrival in Seoul



Source: Metropolitan Transportation Authority, Survey on Household Trips, 2010

Fig. 3-9 Commuting networks from Incheon and Gyeonggi Province to Seoul



Source: Metropolitan Transportation Authority, Survey on Household Trips, 2010

3.2. Outflow Commuters

620,000 outflow commuters on a daily basis; a large number of commuters departing from Gangseo-gu and Songpa-gu and arriving in Goyang-si and Seongnam-si

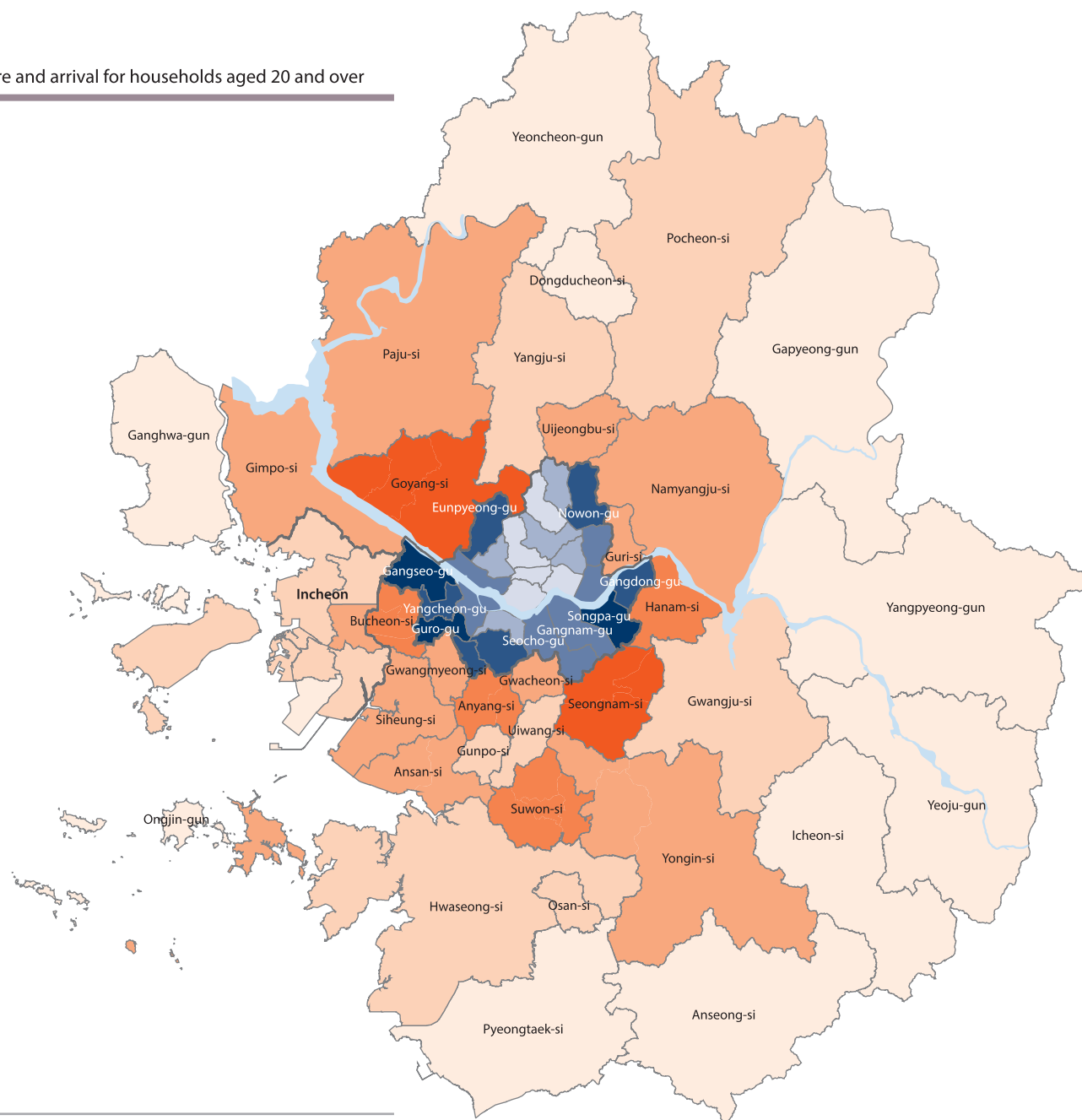
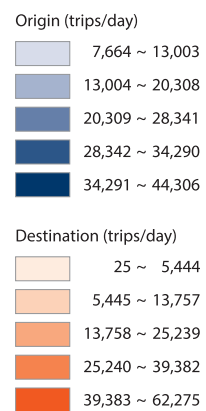
As of 2010, there are 618,000 outflow commuters traveling from Seoul to Incheon and Gyeonggi Province for work. A large number of commuters leave from south of the Hangang River such as Gangseo-gu (7%), Songpa-gu (7%), Guro-gu (7%) and Yangcheon-gu (6%) and commute to nearby municipalities such as Goyang-si (10%), Seongnam-si (10%), Bucheon-si (6%), Anyang-si (6%), Hanam-si (5%) and Suwon-si (4%) in Gyeonggi Province.

Outflow commuters reside in the outskirts of Seoul and form a commuting network around the nearby municipalities of Incheon and Gyeonggi Province

There was a definite formation of commuting networks of the outflow commuters in the northwestern, southeastern and southwestern areas and a part of the network has formed around the northeastern area. Based on the descending order of the size of the commuting network, outflow commuters travel from Eunpyeong-gu ↔ Goyang-si (14,000), Songpa-gu ↔ Seongnam-si (13,000), Gangdong-gu ↔ Hanam-si (9,000), Jungnang-gu ↔ Guri-si (7,000), Gangnam-gu ↔ Seongnam-si (7,000), Guro-gu ↔ Gwangmyeong-si (7,000) and Bucheon-si (7,000) and Gangseo-gu ↔ Goyang-si (7,000).

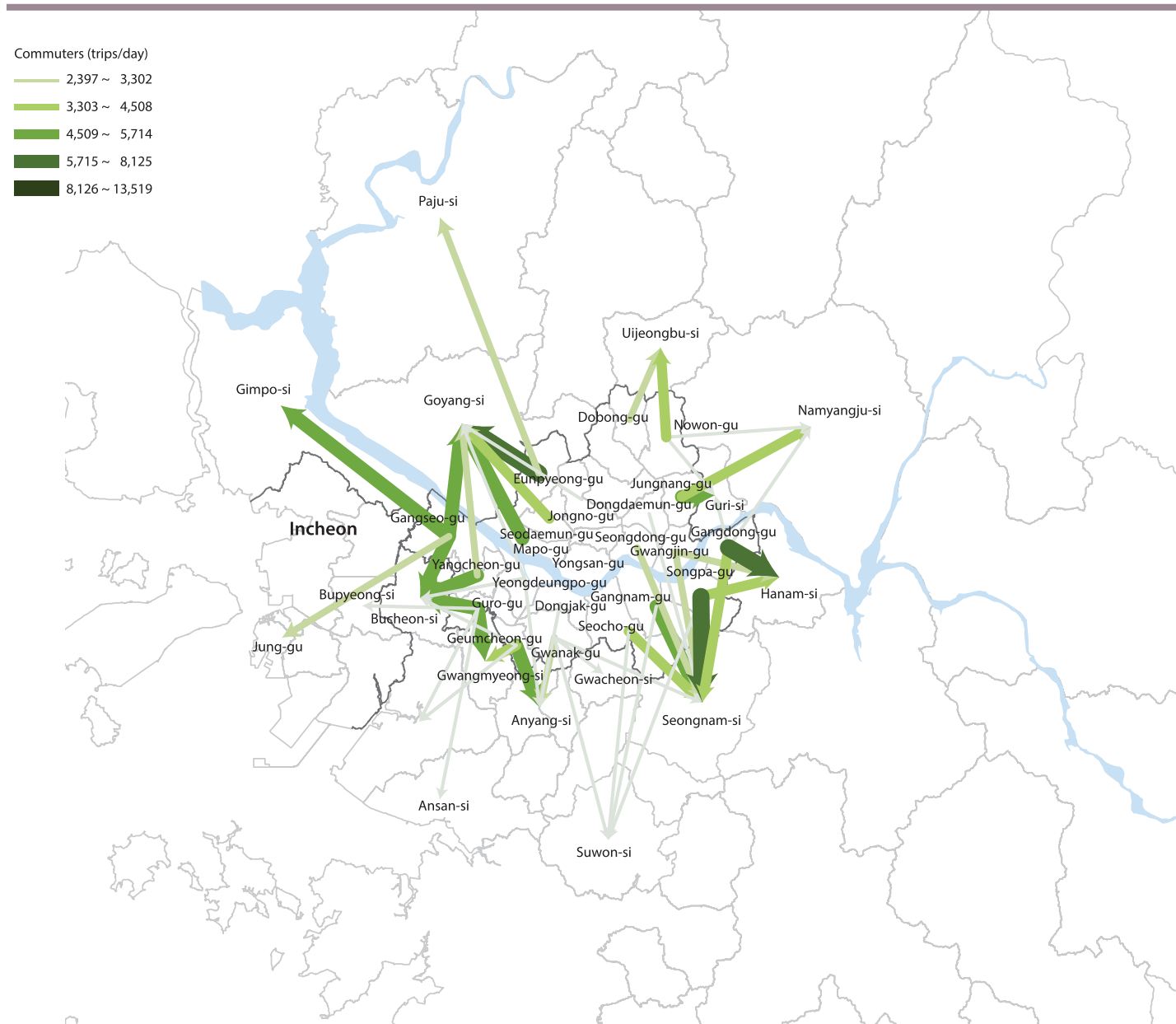
While the commuters from Incheon and Gyeonggi Province to Seoul went to the major business centers of the city, commuters from Seoul commuted to the nearby municipalities of Incheon and Gyeonggi Province more evenly, except for the northeastern area.

Fig. 3-10 Areas of departure and arrival for households aged 20 and over



Source: Statistics Korea, Korean Population Migration Statistics, each year

Fig. 3-11 Commuting networks from Seoul to Incheon and Gyeonggi Province



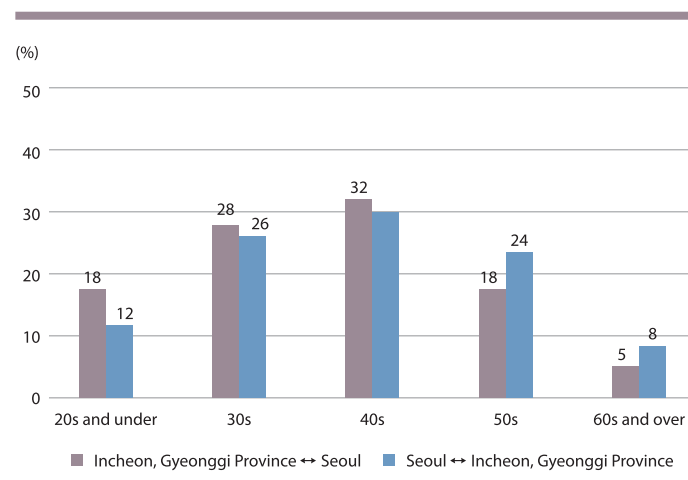
Source: Metropolitan Transportation Authority, Survey on Household Trips, 2010

3.3. Characteristics of Inflow and Outflow Commuters

Most inflow commuters are in their 40s or younger and most outflow commuters are in their 50s or older

The majority of the inflow commuters from Incheon and Gyeonggi Province (Gyeongin) to Seoul were in their 40s (32%), followed by those in their 30s (28%), 20s (18%) and 50s (18%). On the other hand, the majority of the outflow commuters from Seoul to Incheon and Gyeonggi Province were in their 40s (30%), followed by those in their 30s (26%), 50s (24%) and 20s (12%). While a large number of inflow commuters are aged below the age of 40, a large number of outflow commuters are over the age of 50.

Fig. 3-12 Distribution of households in the metropolitan living area by age group

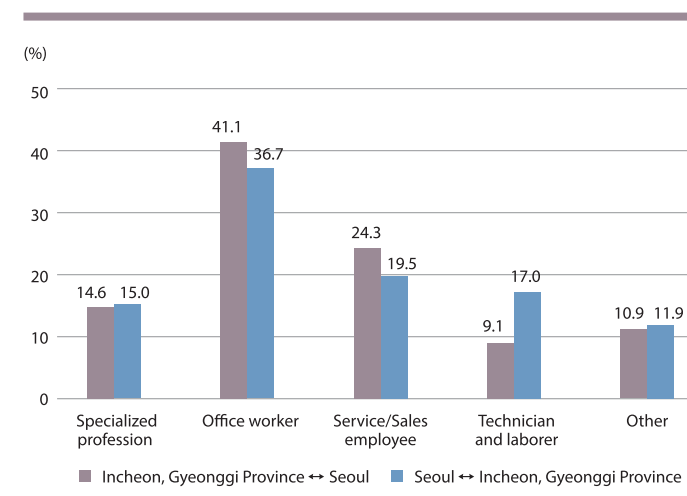


Source: Metropolitan Transportation Authority, Survey on Household Trips, 2010

A large number of commuters are office workers and workers in the service and sales industries, and most outflow commuters are laborers

A large number of both the inflow and outflow commuters were found to be householders working in the office or in the service or sales industry. However, while the number of office workers and those working in the service and sales industries were higher among the inflow commuters, a relatively larger number of householders were technicians and laborers among the outflow commuters.

Fig. 3-13 Distribution of households in the metropolitan living area by occupation



Source: Metropolitan Transportation Authority, Survey on Household Trips, 2010