

236th NRI Media Forum

The 2030 Housing Market

~An Increase in the Mobile Population is the Key to Invigorating the Housing Market in an Era With a Declining Population~

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Consulting Division

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Factors that impact new housing starts

Three factors have major impacts on new housing starts: 1) Mobile population, 2) Nominal GDP growth rate, and 3) Average age of housing stock.

Population and number of households

- Total population
- Working-age population
- Total number of households
- Number of households in which the head of household is of working age
- Mobile population
- Number of mobile households etc.

Economic growth

- Real GDP
- Real GDP growth rate
- Real GDP for the previous year
- Real GDP growth rate for the previous year
- Nominal GDP
- Nominal GDP growth rate
- Nominal GDP for the previous year
- Nominal GDP growth rate for the previous year Etc.

Housing stock

- Total housing stock
- Average age
- Number of vacant homes
- Vacancy rate etc.

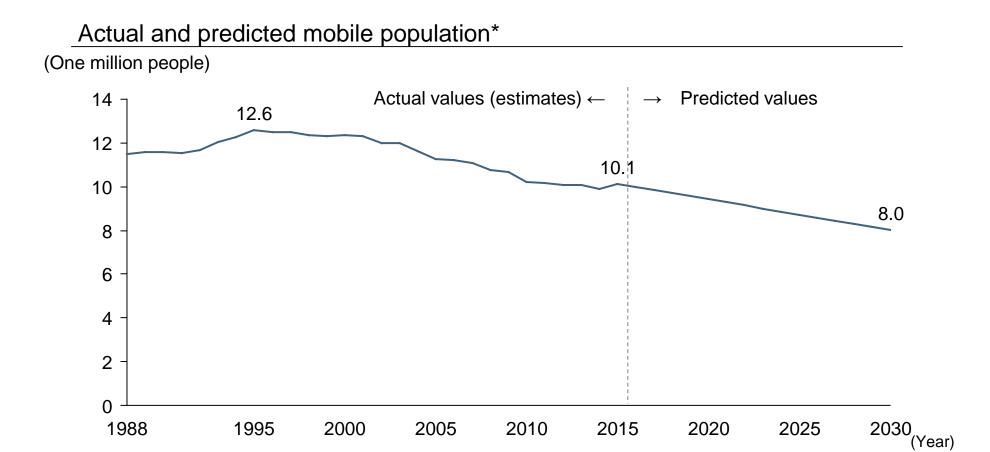
Is it logically relevant as a factor impacting new housing starts?

Can one say it impacts new housing starts statistically?

Factors that impact new housing starts

1) Mobile population 2) Nominal GDP growth rate 3) Average age of housing stock

The mobile population is expected to decrease from 10.1 million people in 2015 to eight million people in 2030

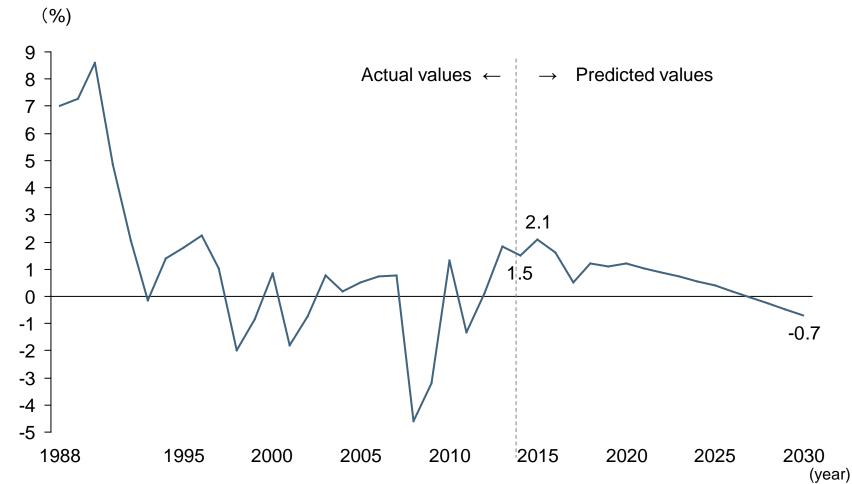


^{*} Mobile population: the number of people that moved to a new address in the applicable year

Future predictions on factors that impact new housing starts (2)

Predictions by the Japan Center for Economic Research are used for the nominal GDP growth rate (Growth power is decreasing in the mid to long term, and an era of negative growth will start around 2030)

Actual and predicted nominal GDP growth rate





Future predictions on factors that impact new housing starts (3)

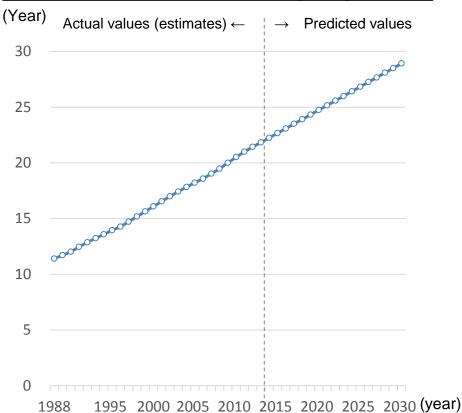
The average age of housing stock is expected to increase from 22 years in 2013 to 29 years in 2030

A decay curve was calculated, showing the degree of decrease after construction for housing stock according to the period in which construction was started (right chart).

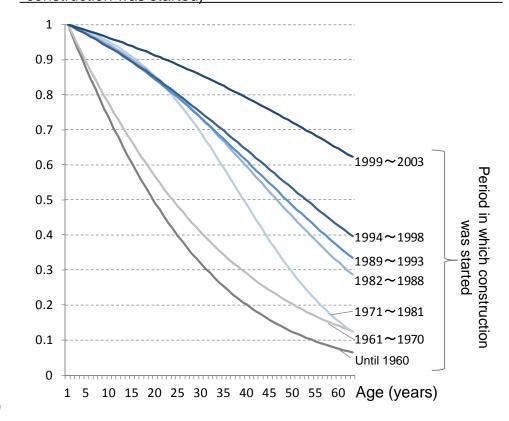
The average age was calculated by calculating the housing stock according to the year in which construction was started, based on the decay curve

(left chart).

Actual and predicted average age



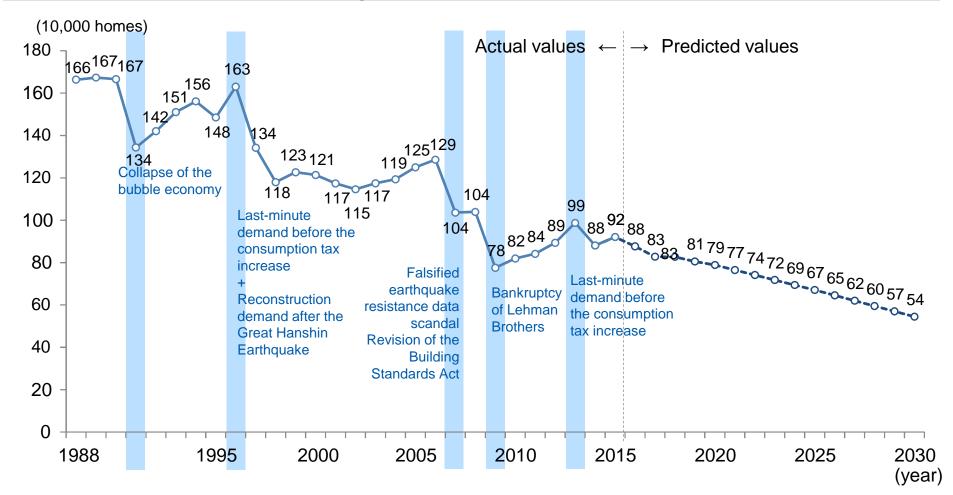
Decay curve (Housing stock decrease rate by period in which construction was started)



New housing starts prediction results

New housing starts are expected to gradually decrease due to factors such as the decreasing population, decreasing number of households, and longer life of housing, totaling approximately 540,000 in 2030

Actual and predicted new housing starts



Factors that impact the renovation market scale

Three factors have major impacts on the renovation market scale: 1) New housing starts (8) years ago), 2) Nominal GDP growth rate, and 3) Average age of the housing stock

Number of households

- Total number of households
- Number of households in which the head of household is of working age
- Number of people moving
- Number of households moving
- New housing starts etc.

Economic growth

- Real GDP
- Real GDP growth rate
- Real GDP for the previous year
- Real GDP growth rate for the previous year
- Nominal GDP
- Nominal GDP growth rate
- Nominal GDP for the previous year
- Nominal GDP growth rate for the previous year Etc.

Housing stock quality

- Average age
- Number of vacant homes
- Vacancy rate etc.

Is it logically relevant as a factor impacting the renovation market scale?

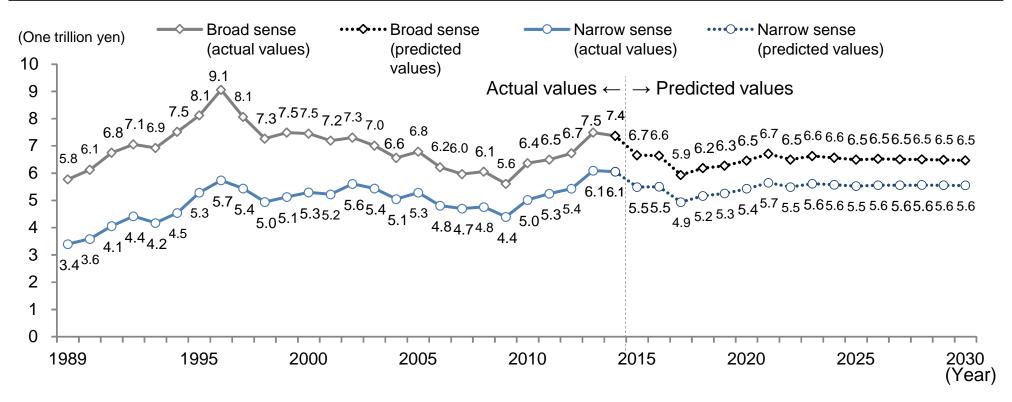
Can one say it impacts the renovation market scale statistically?

Factors that impact the renovation market scale 1) New housing starts (8 years ago) 2) Nominal GDP growth rate 3) Average age of the housing stock

Renovation market scale prediction results

Although growth is anticipated for the renovation market scale, expansion will be difficult if no measures are taken In addition to policy support, inventive approaches by private business operators will also be necessary to invigorate the market

Actual and predicted renovation market scale



^{*} Narrow sense: Building additions and reconstruction work included under "New housing" in the new housing starts statistics Broad sense: Renovation market scale in the narrow sense with the amount including the purchase expenses for durable consumer goods related to renovation (such as air conditioners and furniture), interior products, etc. Source) Actual values: Housing Renovation Market Scale (2014 Version) by the Center for Housing Renovation and Dispute

Settlement Support. Predicted values: NRI



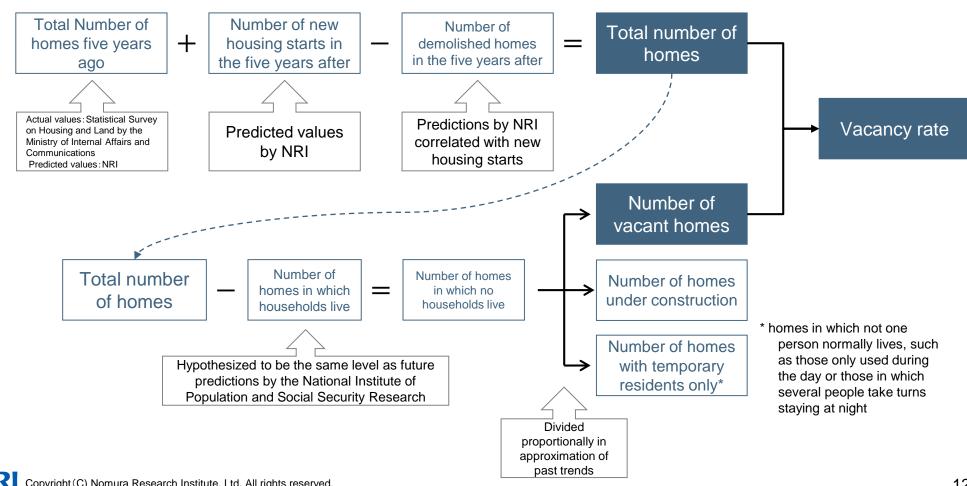
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Prediction method

Predictions on the total Number of homes, number of vacant homes, and Vacancy rate utilize the following method

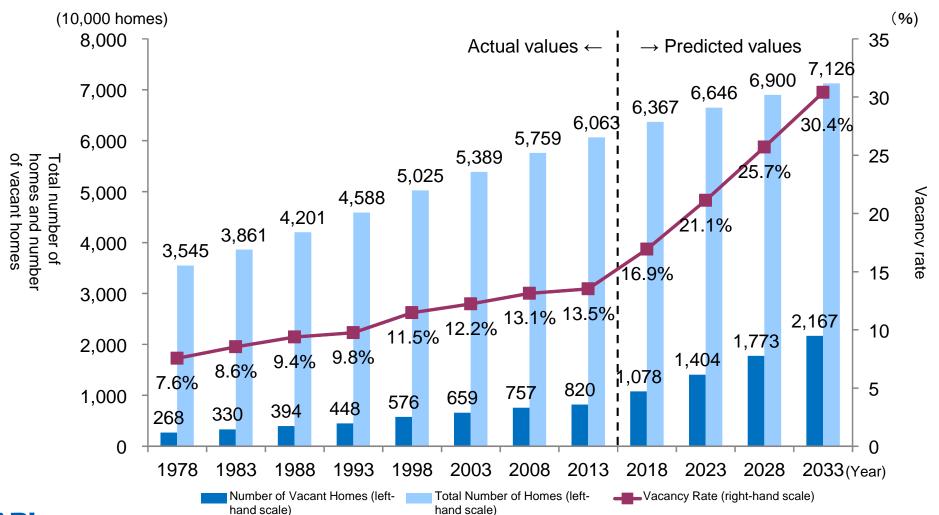
Way of thinking for predicting the total Number of homes, number of vacant homes, and Vacancy rate



Predictions on the total number of homes, number of vacant homes, and Vacancy rate

Together with the decreased number of households and increased total number of homes, the number of vacant homes is expected to be roughly 21.67 million in 2033 with a vacancy rate of 30.4%

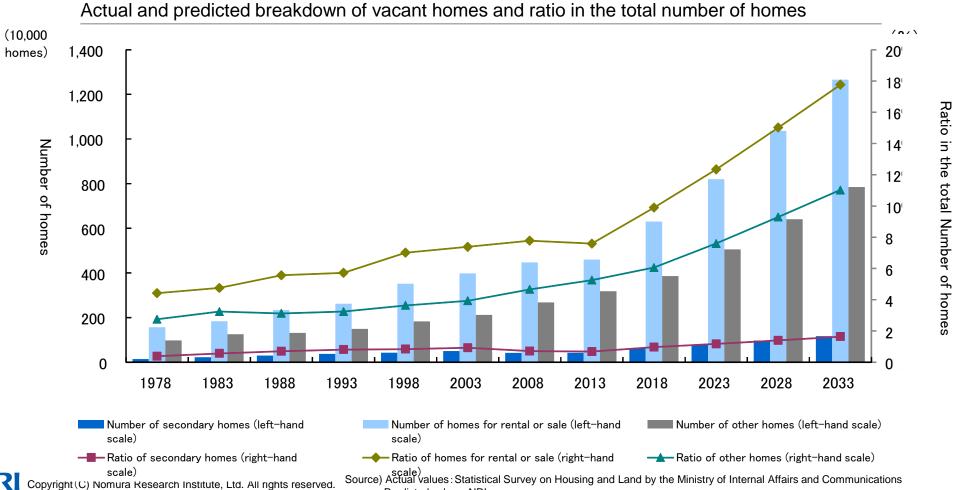
Actual and predicted total number of homes, number of vacant homes, and vacancy rate



Predictions on the breakdown of vacant homes and ratio in the total Number of homes

The breakdown of vacant homes is approximately 12.7 million homes for rental or sale in 2033, accounting for 17.8% of the total Number of homes, and roughly 7.9 million other homes (those with no particular usage), accounting for 11.0%

■ It is thought that other homes will continue increasing if homes are not demolished or downsized, and the falling number of households will lead to more homes for rental or sale.



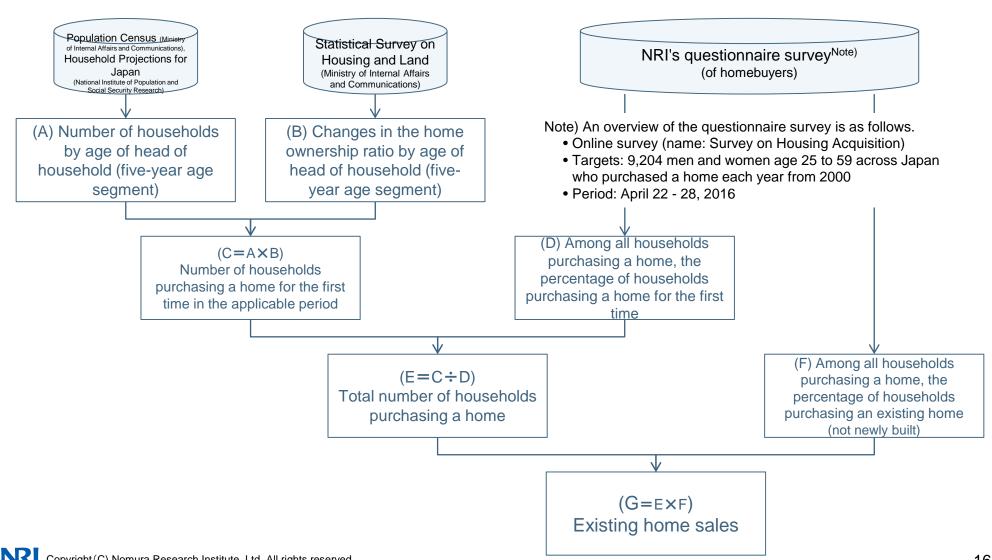
Predicted values: NRI

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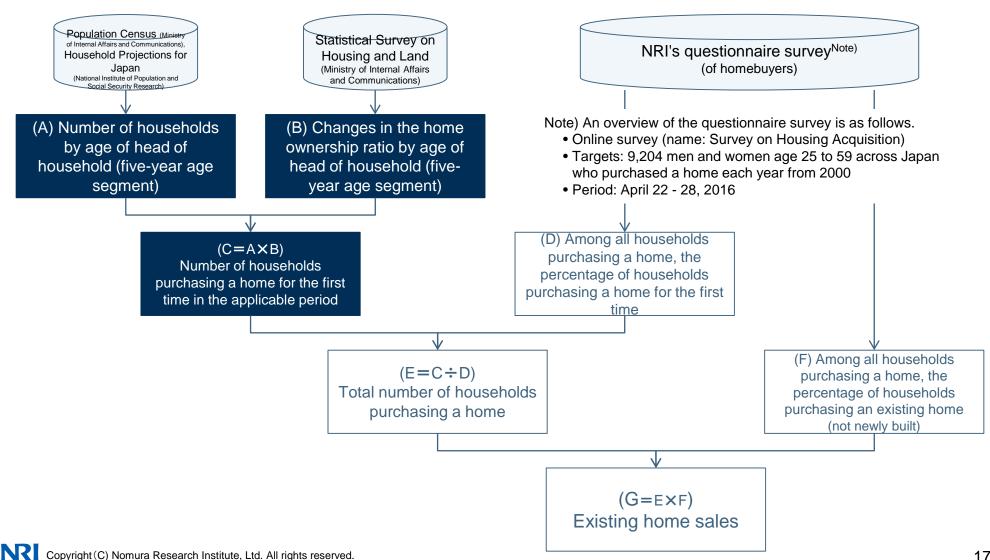
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Prediction method

existing home sales were estimated and predicted based on information about the number of households and changes in the home ownership ratio from external data, as well as the percentage of people buying a house for the first time and percentage of people buying existing homes from NRI's own surveys



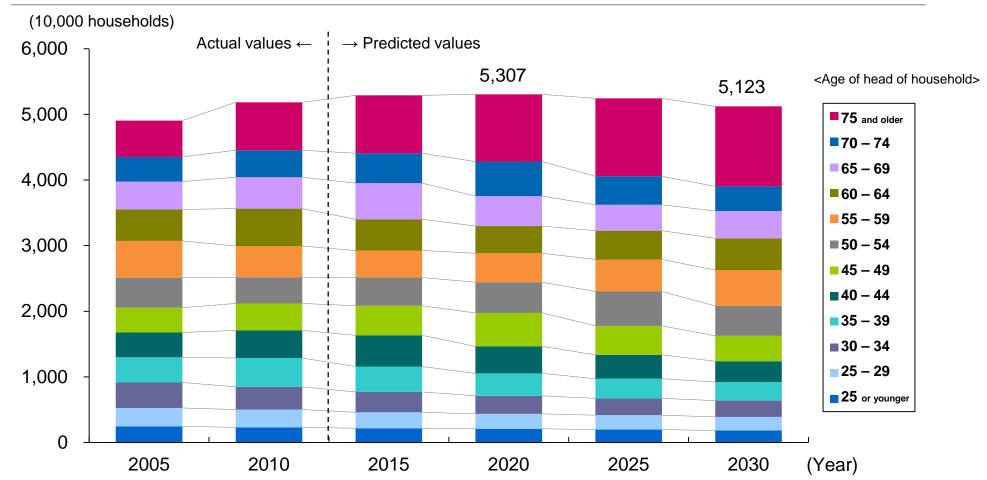
existing home sales estimation and prediction method (1)



(A) Number of households by age of head of household (five-year age segment)

The number of households is expected to peak in 2019 and then declines to around 51 million in 2030

Actual and predicted number of households (by age of head of household [five-year segment])

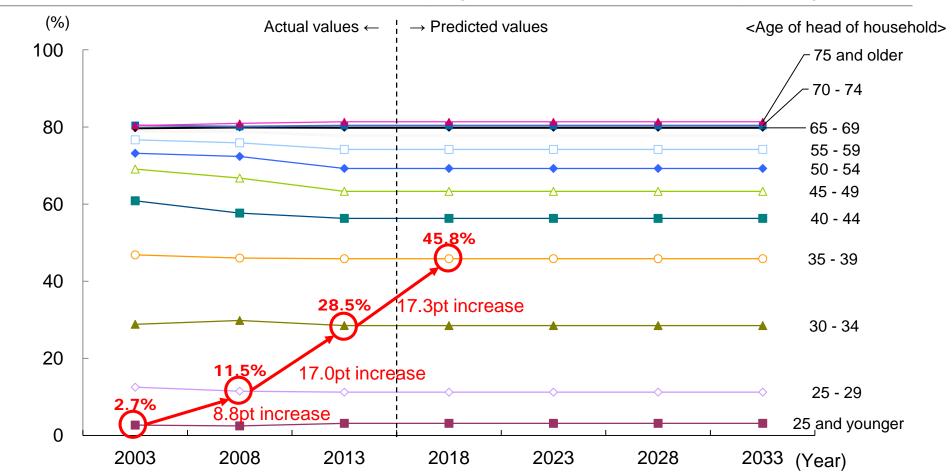




(B) Changes in the home ownership ratio by age of head of household (five-year age segment)

The home ownership ratio from 2018 on is assumed to be the same as 2013. The home ownership ratio for the demographic of people who were under age 25 in the 2003 survey is expected to increase to roughly 46% in 2018.

Actual and predicted home ownership ratio (by age of head of household [five-year segment])

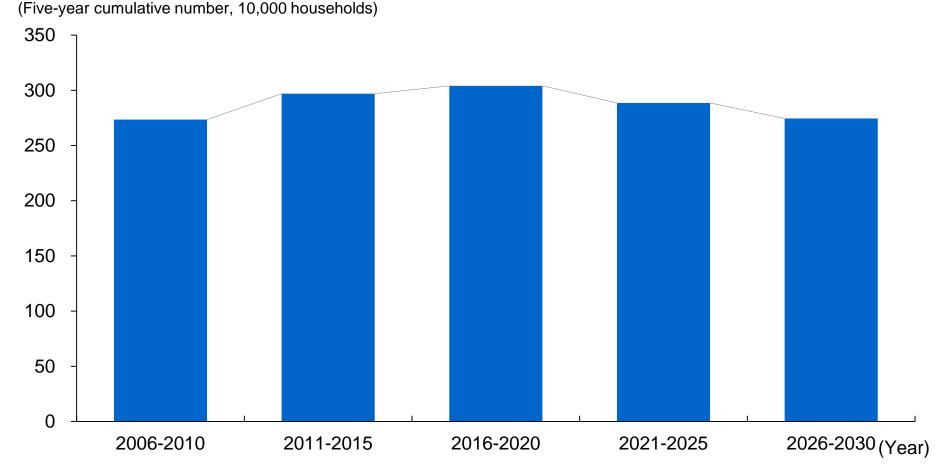




(C) Number of households purchasing a home for the first time in the applicable period

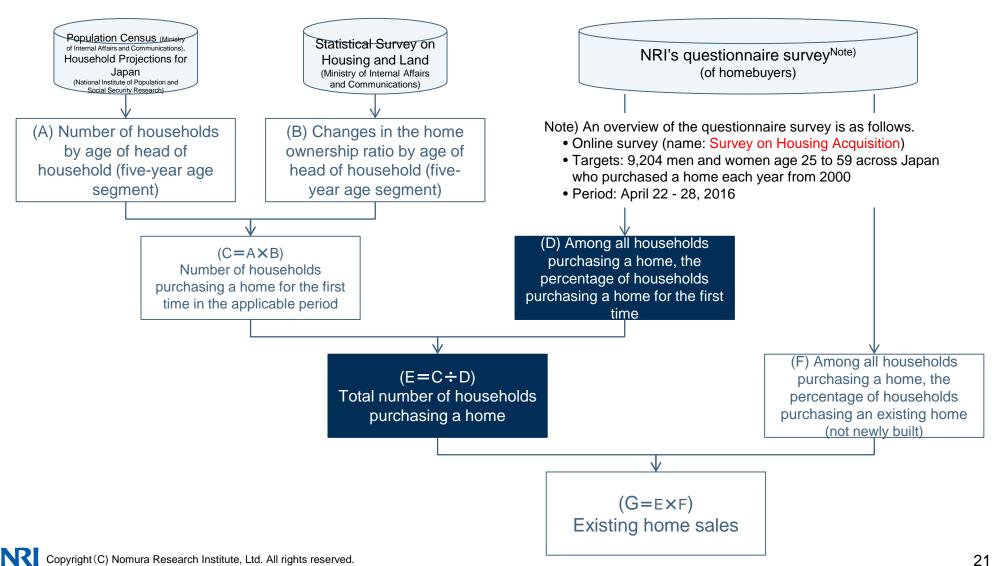
The cumulative number of households purchasing a home for the first time is expected to reach approximately 2.75 million (yearly average of 550,000) for the five-year period from 2026 to 2030

Actual and predicted number of households purchasing a home for the first time (five-year cumulative number)



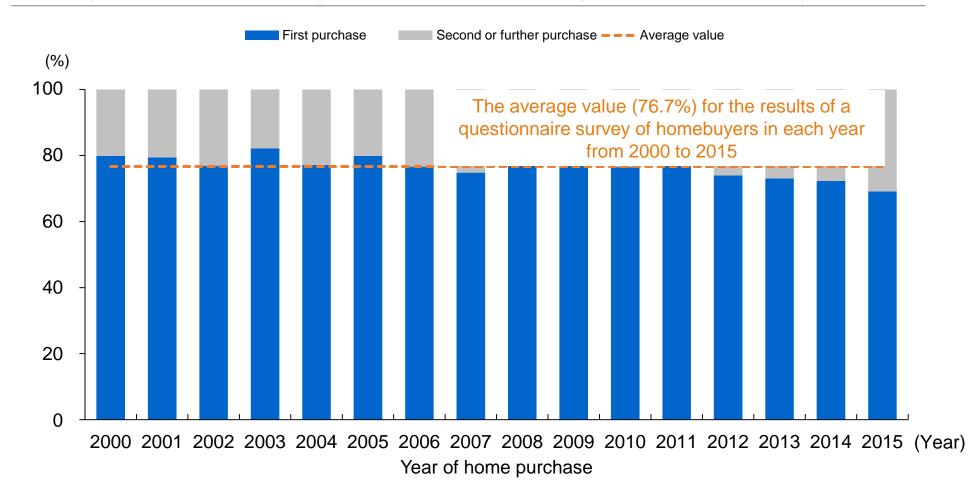


existing home sales estimates and estimate method (2)



(D) Among all households purchasing a home, the percentage of households purchasing a home for the first time The percentage of households purchasing a home for the first time in 2016 or later is estimated to be 77%, which is the average value calculated based on the results of a survey of homebuyers who purchased a home in 2000 or later

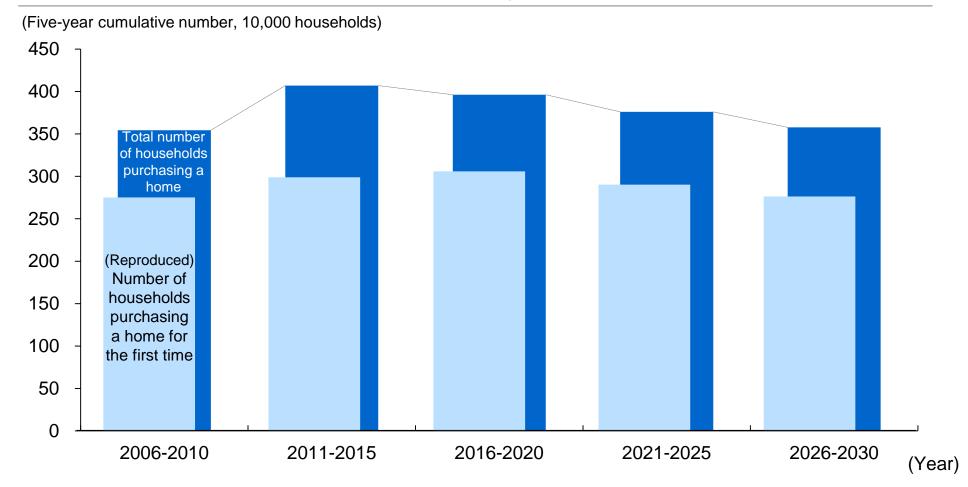
Percentage of households purchasing a home for the first time among all households purchasing a home

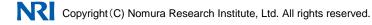


(E) Total number of households purchasing a home

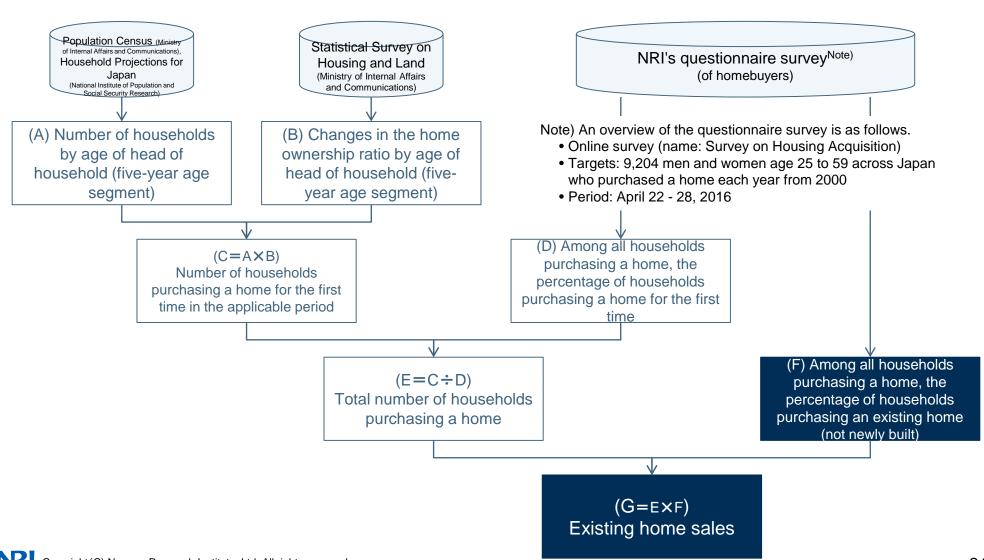
The cumulative total number of households purchasing a home is expected to reach approximately 3.6 million (yearly average of 720,000) for the five-year period from 2026 to 2030

Actual and predicted total number of households purchasing a home (five-year cumulative number)





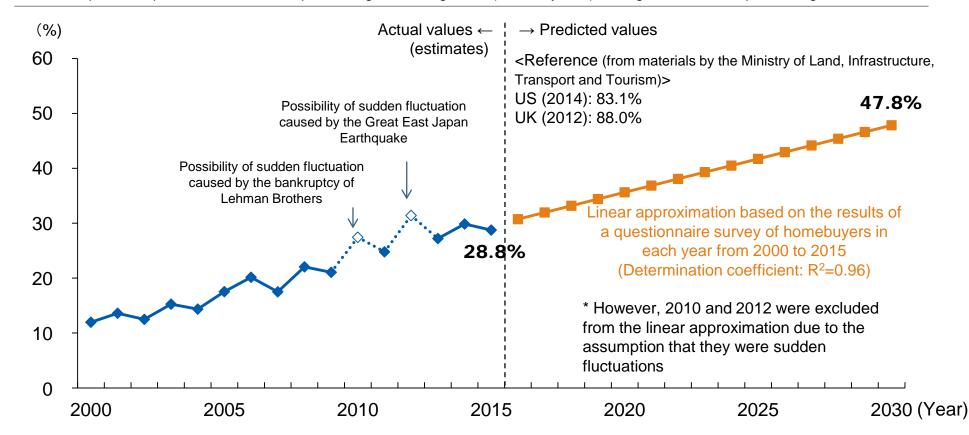
existing home sales estimation and prediction method (3)



(F) Among all households purchasing a home, the percentage of households purchasing an existing home (not newly built) Assuming that the trend of increase from 2000 to 2015 will continue in 2016 and after, the percentage of households buying existing homes other than newly built homes will reach approximately 48% in 2030

■ The ratio of people choosing existing homes is expected to continue increasing due to improved competitive power for existing homes (quality, location, etc.) and consumer changes (values, income, etc.) in recent years (although there is still a major disparity compared to Europe and the United States).

Actual and predicted percent of households purchasing an existing home (not newly built) among all households purchasing a home

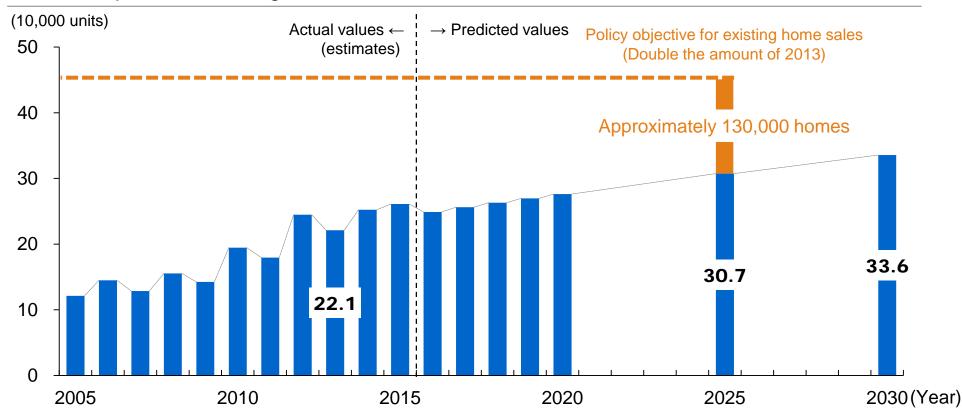


(G) existing home sales

Existing home sales are expected to continue increasing because of improved competitive power for existing homes and consumer changes, reaching approximately 340,000 in 2030

■ Even if existing home sales increase favorably as NRI predicts, they will still be approximately 130,000 homes short of the existing home sales policy objective (double the amount of 2013 by 2025) in the Basic Housing Plan (Cabinet decision of March 2016).

Actual and predicted existing home sales





(Reference) Actual and predicted frequency of switching residences An increase in the mobile population (moving, switching residences, replacement purchasing, etc.) is essential for achieving the approximately 130,000 homes required to meet the existing home sales target in an era with a declining population and number of households

- Even if it is assumed that an increase in the mobile population will contribute only to existing home sales, it will be necessary to increase the mobile population by 20% (from approximately 8.72 million to approximately 10.09 million people).
 - Note) However, even though an increase in the mobile population should impact new housing starts as well as existing home sales, specific quantification is not performed for these estimates.

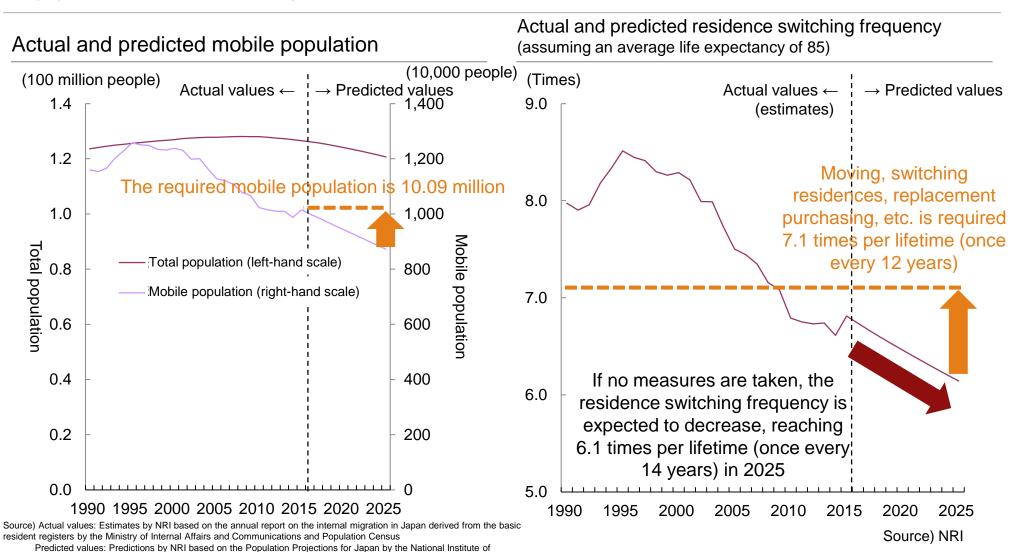
Relationship between house sales and mobile population

	Home sales (units)	New construc tion (units)	Existing homes (units)	Mobile population (people)
If no measures are taken	980,000	670,000	310,000	8.72 million
			+130,00 units	00 1.2 times
If the existing home sales objective is met	1.11 million	670,000	440, 000	↓ 10.09 million

Note) A simple existing home sales calculation method was established based on the mobile population and nominal GDP, and the mobile population was estimated if existing home sales total 1.11 million.

(Reference) Actual and predicted frequency of switching residences

Assuming that existing home sales of approximately 130,000 homes are achieved due to an increase in the mobile population (moving, switching residences, replacement purchasing, etc.), one person must move, switch residences, engage in replacement purchasing, etc. 7.1 times in his or her lifetime (around the 2009 level)



Population and Social Security Research

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Summary

- New housing starts, which totaled 920,000 in 2015, are expected to decrease to approximately 540,000 in 2030. It will be difficult to expand the scale of the renovation market, where growth is hoped for, without taking any measures to that end. This market is predicted to level off at approximately six trillion yen (in the broad definition) by 2030.
- NRI predicts that, if existing homes are not demolished or effectively used for non-residential purposes, the number of vacant homes will reach roughly 21.7 million in 2033, and the Vacancy rate will reach 30.4%, both of which are increases.
- Anticipating an impending era of full-scale decreases in population and the number of households, there is concern about a long-term slump in the housing market. However, existing home sales are predicted to increase to approximately 220,000 in 2013, 310,000 in 2025, and 340,000 in 2030, which is one reason for a positive outlook.
- However, even if existing home sales increase favorably as NRI predicts, they will not meet the policy objective (double the amount of 2013 by 2025) in the Basic Housing Plan (Cabinet decision of March 2016).
- An increase in the mobile population (moving, switching residences, replacement purchasing, etc.) is essential for further invigorating existing home sales in an era with a declining population and number of households. To that end, initiatives such as the following are necessary.
 - Establishing valuation systems for existing homes and enhancing loans for existing homes and renovations
 - Creating an environment that facilitates trial moving, residences in multiple regions, etc.
 - New business creation by private business operators (businesses to support moving, switching residences, replacement purchasing, etc.)
- NRI believes that an increase in the mobile population in an ageing society will have effects such as creating an environment in which people can choose optimum housing depending on their life stage, as well as the qualitative improvement of residential environments for consumers.



Dream up the future.