## Trends Concerning Land in FY2014

## **Basic Measures in Relation to Land in FY2015**

Abstract

June 2015

Ministry of Land, Infrastructure, Transport and Tourism

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"Trends Concerning Land in FY2014" and "Basic Measures in Relation to Land in FY2015" are created based on the provisions of Article 10, paragraphs (1) and (2) of the Basic Act for Land (Act No. 84 of December 22, 1989).

## "Trends Concerning Land in FY2014"

## Part 1 Trends Concerning Land

## Chapter 1 Trends in Land Prices and Land Transactions in FY2014

The Japanese economy in fiscal 2014 showed weakness at the beginning of the year in consumer spending in reaction to rush demand ahead of the rise in the consumption tax, however the economy showed a moderate recovery trend throughout the fiscal year.

# Section 1 Economic Situation Surrounding the Real Estate Markets in Japan (Changes in GDP)

Influenced by the rush demand ahead of the rise in consumption tax and subsequent reactionary demand decrease, the Japanese economy experienced negative growth in the April-June and July-September quarters of 2014 from the preceding quarters, but showed positive growth in the October-December quarter.

## (Trends in corporations)

The fund-raising environment of corporations continued to improve in the context of expansion of monetary easing by the Bank of Japan. The sense of equipment overcapacity among companies has been falling since 2009 in both manufacturing and non-manufacturing industries.

#### (Trends in households)

Concerning the labor environment, employer's perceptions regarding excesses in employment have improved since the July–September quarter of 2009 and the employer perception that there is a labor shortage became a stronger trend in fiscal 2014 than in the previous fiscal year. Active opening rate also has been rising since the July–September quarter of 2009.

Consumption by households has been falling since the April-June quarter of 2014 in reaction to rush demand ahead of the rise in the consumption tax and other factors.

## Section 2 Trends in Land Prices

Publication of the land values of standard sites in 2015 ("2015 Publication") showed a decline in residential lands in the national average, but the rate of decline contracted, and the trend line in the national average values of commercial lands moved from decline to being flat (0.0%).

The average prices of the three major metropolitan areas continued to rise both in residential and commercial land, with the prices rising for nearly 50% of residential land and nearly 70% of commercial

land. In other areas, on the other hand, prices continued to decline though the rate of decline contracted. The prices of almost 70% of the land declined in both residential and commercial areas.

Looking at the changes by the use of land, residential land prices continued to show a smaller decline or a rise partly thanks to governmental measures to support housing demand, including: low interest rates and tax deductions on housing loans, wealth effect thanks to rising share values, demand for apartment buildings for countermeasures to inheritance tax; in the context of a continuing mild upswing.

Commercial land prices continued to show a smaller decline or a rise due to a favorable fund-raising environment partly thanks to the low interest rates and a continuing mild upswing. Across the country, there were moves to use commercial land as condominium sites against the backdrop of the robust housing demand, which is one of the factors behind the increase in land prices or narrowing of their rate of decline. These trends can be also attributed to the events such as consumption being strong at stores in central areas of major cities, office building vacancy rates generally continuing to decline, rents improving in some areas and rising demand for investment properties.

		Residential land					Commercial land				
		2011	2012	2013	2014	2015	2011	2012	2013	2014	2015
		Publication	Publication	Publication	Publication	Publication	Publication	Publication	Publication	Publication	Publication
National		-2.7	-2.3	-1.6	-0.6	-0.4	-3.8	-3.1	-2.1	-0.5	0.0
Three major metropolitan areas		-1.8	-1.3	-0.6	0.5	0.4	-2.5	-1.6	-0.5	1.6	1.8
	Tokyo area	-1.7	-1.6	-0.7	0.7	0.5	-2.5	-1.9	-0.5	1.7	2.0
	Osaka area	-2.4	-1.3	-0.9	-0.1	0.0	-3.6	-1.7	-0.5	1.4	1.5
	Nagoya area	-0.6	-0.4	0.0	1.1	0.8	-1.2	-0.8	-0.3	1.8	1.4
	eas other than Tokyo, aka and Nagoya areas	-3.6	-3.3	-2.5	-1.5	-1.1	-4.8	-4.3	-3.3	-2.1	-1.4
	Sapporo/Sendai/ Hiroshima/Fukuoka	-2.9	-1.7	-0.2	1.4	1.5	-5.1	-2.7	-0.3	2.0	2.7
	Others	-3.6	-3.5	-2.8	-1.8	-1.3	-4.7	-4.5	-3.6	-2.6	-1.8

Changes Fluctuation in land prices (year-on-year)

(%)

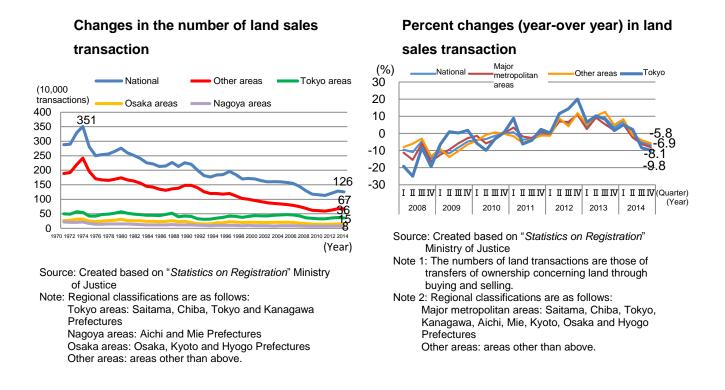
Source: "Publication of value of standard sites" Ministry of Land, Infrastructure, Transport and Tourism

Note 1: Regional classifications are as follows: Three major metropolitan areas: Tokyo area, Osaka area, and Nagoya area. Tokyo area: A group of municipalities that include existing urban areas and suburban development areas pro national Capital Region Development Act. Osaka area: A group of municipalities that include existing urban areas and suburban development areas pro Region Development Act. Nagoya area: A group of municipalities that include urban areas provided by the Chubu Region Development Areas other than Tokyo, Osaka and Nagoya areas: Those other than the three major metropolitan areas. Other: Areas of municipalities other than Sapporo, Sendai, Hiroshima and Fukuoka among local district areas								
Note 2:	2011 Publication: from January 1, 2010, to January 1, 2011 2012 Publication: from January 1, 2011, to January 1, 2012 2013 Publication: from January 1, 2012, to January 1, 2013 2014 Publication: from January 1, 2013, to January 1, 2014 2015 Publication: from January 1, 2014, to January 1, 2015							
Note 3:	The drop ratio decreased or the appreciation rate increased from the previous year. The drop ratio increased or the appreciation rate decreased from the previous year.							

## Section 3 Trends in Land Transactions

#### (Changes in the number of land transactions, etc.)

The trends in land transactions are followed by the number of transfers of ownership registered through buying and selling. The number of land transactions decreased for the first time in three years, falling to 1.257 million in 2014 (down 1.9% from the previous year.) In terms of year-on-year quarterly changes, the number has been negative since the July-September quarter of 2014 in every region.



## (Perception of land transactions by corporations)

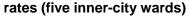
According to the Survey of Land Transaction Trend conducted by the Ministry of Land, Infrastructure, Transport and Tourism, the diffusion index (DI: the ratio of corporations responding that transaction activity is "vibrant" minus the ratio of corporations responding that it is "sluggish") regarding the perception of the current land transaction situation at the location of headquarters was mostly flat for Tokyo's 23 wards while that for Osaka and other regions declined.

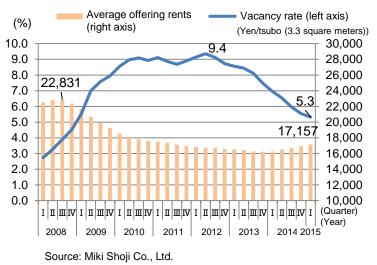
## (Trends in the office market)

Concerning the rental office market, the demand for offices in 2014 continued to improve in many areas.

The vacancy rate continued to decline in five wards in the heart of Tokyo to 5.5% in the October-December quarter of 2014. Average offering rents continued to rise since the January-March quarter of 2014.

## Changes in office building rents and vacancy

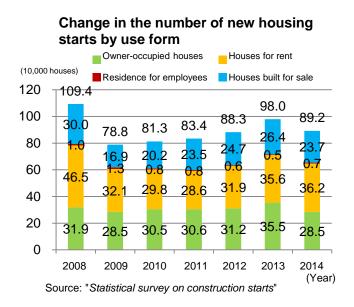




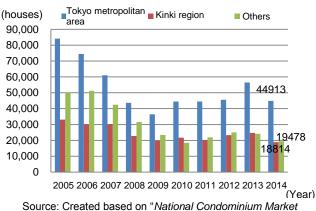
#### (Trends in the residential market)

The total number of new housing starts greatly decreased for the first time in five years to 892,261 units in 2014, down 9.0% from the previous year strongly influenced by rush demand ahead of the rise in consumption tax and up 1.1% from two years ago.

Comparing the number of new sales to the previous year as an indication of the condominium market trend, the number for the nation was 83,205 units (down 21.0% from the previous year) while the number for the Tokyo metropolitan area was 44,913 units (down 20.5% from the previous year) and that for the Kinki region was 18,814 units (down 23.8% from the previous year.)



## Changes in the number of new condominium sales by region



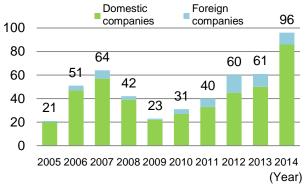
Source: Created based on "*National Condominium Market Report*" Real Estate Economic Institute Co., Ltd.

Note: Regional classifications are as follows: Tokyo metropolitan area: Saitama prefecture, Chiba prefecture, Tokyo, and Kanagawa prefecture. Kinki region: Shiga prefecture, Kyoto prefecture, Osaka prefecture, Hyogo prefecture, Nara prefecture, and Wakayama prefecture

## (Trends in other real estate markets)

Against the background of the increase in foreign tourists visiting Japan and other factors, transaction of hotels, inns and other accommodation facilities was brisk. According to a survey of a private company, the number of existing accommodation facilities sold was 96, the highest in the past 10 years, partly due to acquisitions by J-REIT in 2014,

## Changes in the number of existing accommodation facilities sold



Source: Created based on "Survey on real Estate Transaction" by Urban Research Institute Corporation

Note 1: Number of properties acquired by listed companies based on the information on transfers, acquisition, etc. of fixed assets disclosed to the Tokyo Stock Exchange based on the Rules on Timely Disclosure, etc. of Company Information by Issuers of Listed Securities and information made public in newspapers, etc.

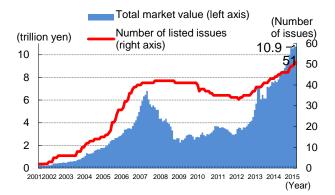
Note 2: "Companies" include REIT and funds

## Section 4 Trends in the Real Estate Investment Market

## (Trends in the J-REIT market)

In fiscal 2014, new listings of seven investment corporations on the Tokyo Stock Exchange changed the number of different stocks to 51 as of the end of March 2015. The current aggregate market value reached about 10.9 trillion yen at the end of February 2015, hitting a new high since the market was established.

## Changes in the number of listed REIT issues and their total market value



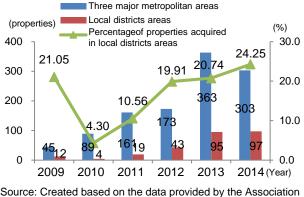
Source: Created based on the data published by the Association for Real Estate Securitization

#### (Real estate investments in rural areas)

Looking at the progress of real property securitization in rural areas, while properties acquired by J-REIT in the three major metropolitan areas decreased from the previous year to 303, the number of properties acquired in rural areas was 97. Their number and the ratio to the total acquired properties increased for four consecutive years.

Section 5 Trends in Land Use

## Changes in the number of properties acquired by J-REIT by area and the ratio of properties in local district areas



for Real Estate Securitization Note: Three major metropolitan areas: Saitama, Chiba, Tokyo,

As of 2013, the total area of Japan was approximately 37.80 million hectares (93.41 million acres). Forestland accounts for the largest portion (25.06 million hectares, 61.92 million acres), followed by agricultural land (4.54 million hectares, 11.22 million acres), thus marking a decrease from the preceding year. When combined, forestland and agricultural land account for about 80% of the national land area. In addition, developed land, such as residential and industrial land, amounts to 1.92 million hectares (4.74 million acres), roads occupy 1.37 million hectares (3.39 million acres), surface water, rivers, and canals cover 1.34 million hectares (3.31 million acres), and fields total 0.34 million hectares (0.84 million acres).

## Section 6 Survey on Land among Corporations and Households

## (Survey on ownership of land/house among households

In MLIT's "Survey on the Public Attitude Toward Land Issues," the percentage of people answering "yes" to the question "Do you think land is a profitable asset compared with deposits/savings or stocks?" was over 60% in fiscal 1994 but the percentage declined year to year remaining at the 30% level since 1998 and falling to 30.3% in 2014, the lowest since the start of the survey.

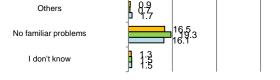
Kanagawa, Aichi (partially), Kyoto (partially) Osaka, and Hyogo (partially) prefectures. Local districts areas: areas other than above.

## (Survey on underutilized/unused land)

According to "The Housing and Land Survey" the total number of houses was 60.63 million (up 5.3% compared with 2008) in 2013. The number of empty houses was 8.20 million accounting for 13.5% of all houses, with both the number and percentage reaching the highest since the start of the survey.

The percentage of respondents choosing "conspicuous vacant lots, empty houses, closed stores, etc." as the most familiar land problem increased every year from the 2012 to 2014 surveys reaching over half of the respondents in fiscal 2014. This shows that the increase of vacant and lots. empty houses other underutilized/unused land has become recognized as a big problem by the public.

#### (%) <sub>60</sub> 40 20 Conspicuous vacant lots, empty houses 40,8 closed stores, etc. ·40.2 Significant concern in terms of disaster control, including concentration of old buildings Increase of neglected farmland and forests loss of immediate natural environment 18.9 19.3 Land price is determined based on the profitability and convenience of the land, which generates disparaties. High house prices Land prices continue to fall. Land lots becoming smaller through inheritance Landscape and townscape have been 9.8 12.2 FY2012 survey spoiled. FY2013 survey Land prices are rising in some areas. 6.5 FY2014 survey House prices are falling 4540



Others

Source: Created based on "The Survey on the Public Attitude Toward Land Problems" by MLIT

## Section 7 Real Estate Markets after the Great East Japan Earthquake

#### (Trends in land prices in the disaster areas)

Looking at trends in land prices in each of the most afflicted prefectures (lwate, Miyagi and Fukushima) based on the "2015 Publication," the average fluctuation rate of Iwate prefecture was -0.4% (-0.9% in 2014 Publication) for residential land prices and -2.2% (-3.5% in 2014 Publication) for commercial land prices because sites for which prices fell decreased and those of flat prices increased. In Miyagi prefecture, the percentage of sites for which prices rose increased to just under 80% for residential land and just over 60% for commercial land; its average fluctuation rate was 2.3% (2.5% in 2014 Publication) for residential land and 2.3% (1.7% in 2014 Publication) for commercial land. The percentage of sites for which prices rose increased in Fukushima prefecture (just over 60% for residential land and just over 50% for commercial land). Its average fluctuation rate was 2.9% (1.2% in 2014 Publication) for residential land and 0.8% (-0.5% in 2014 Publication) for commercial land, reversing the downward trend.

#### Familiar land problems

	Residential land					Commercial land					
		Fluctuation rate (%)	Increase	Flat	Decrease		Fluctuation rate (%)	Increase	Flat	Decrease	
	2015	- 0.4	22 sites	38 sites	65 sites	2015	- 2.2	3 sites	19 sites	31 sites	
	Publication		(17.6%)	(30.4%)	(52.0%)	Publication		(5.7%)	(35.8%)	(58.5%)	
lwate	2014	- 0.9	22 sites	18 sites	84 sites	2014	- 3.5	4 sites	4 sites	45 sites	
prefecture	Publication	- 0.9	(17.7%)	(14.5%)	(67.8%)	Publication	- 3.5	(7.5%)	(7.5%)	(85.0%)	
	2013	- 2.7	16 sites	6 sites	107 sites	2013	- 4.8	3 sites	3 sites	47 sites	
	Publication	- 2.1	(12.4%)	(4.7%)	(82.9%)	Publication	- 4.0	(5.7%)	(5.7%)	(88.6%)	
	2015	2.3	306 sites	35 sites	46 sites	2015	2.3	89 sites	24 sites	23 sites	
	Publication		(79.1%)	(9.0%)	(11.9%)	Publication		(65.4%)	(17.7%)	(16.9%)	
Miyagi	2014	2.5	303 sites	36 sites	50 sites	2014	1.7	83 sites	26 sites	24 sites	
prefecture	Publication	2.5	(77.9%)	(9.2%)	(12.9%)	Publication		(62.4%)	(19.6%)	(18.0%)	
	2013	1.4	256 sites	46 sites	77 sites	2013	0.0	57 sites	13 sites	66 sites	
	Publication	1.4	(67.5%)	(12.1%)	(20.3%)	Publication		(41.9%)	(9.6%)	(48.5%)	
	2015	2.9	189 sites	50 sites	47 sites	2015	0.8	47 sites	19 sites	24 sites	
	Publication		(66.1%)	(17.5%)	(16.4%)	Publication		(52.2%)	(21.1%)	(26.7%)	
Fukushima	2014	1.2	146 sites	39 sites	99 sites	2014	- 0.5	28 sites	17 sites	44 sites	
prefecture	Publication	1.2	(51.4%)	(13.7%)	(34.9%)	Publication	- 0.5	(31.5%)	(19.1%)	(49.4%)	
	2013	- 1.6	38 sites	16 sites	226 sites	2013	- 3.2		2 sites	91 sites	
	Publication	- 1.0	(13.6%)	(5.7%)	(80.7%)	Publication	- 3.2		(2.2%)	(97.8%)	

Trends in land prices in lwate, Miyagi and Fukushima prefectures

Source: "Publication of value of standard sites " Ministry of Land, Infrastructure, Transport and Tourism

Note 1: There is no survey site in the areas seriously affected by the Great East Japan Earthquake due to changes in selection of survey sites.

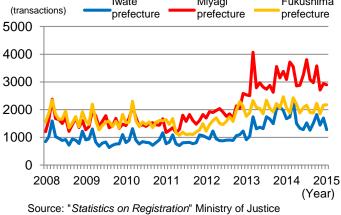
Note 2: Survey was suspended for standard sites within evacuation zones, etc. designated under the Act on Special Measures Concerning Nuclear Emergency Preparedness (17 sites within evacuation zones, planned evacuation zones and zones inpreparation for having the evacuation order lifted) in

Fukushima prefecture as of January 1, 2014. Note 3: 2013 Publication: from January 1, 2012, to January 1, 2013 2014 Publication: from January 1, 2013, to January 1, 2014

2015 Publication: from January 1, 2014, to January 1, 2015

#### (Trends in land transactions in the disaster areas)

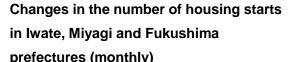
In respect to the year-on-year change in the number of land transactions in the disaster areas, though the number dropped just after the earthquake in March 2011, the figure greatly increased after January 2013 in all three prefectures. Round figures of land transactions in 2014 were 1,500-2,000 per month in Iwate prefecture, 3,000-3,500 per month in Miyagi prefecture and 2,000-2,500 per month in Fukushima prefecture. Changes in the number of land transactions through purchases in lwate, Miyagi and Fukushima prefectures (monthly)

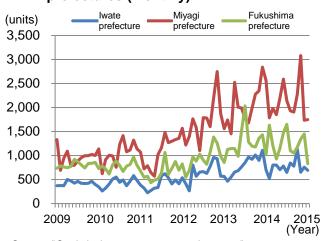


## (Trends in the housing market and the office market in the disaster areas)

Looking at the trend in the housing market in the disaster areas, the number of housing starts increased in the three prefectures from the latter half of 2012. The figures are 9,111 units (down 3.4% from the previous year) in lwate, 26,039 units (up 7.8% from the previous year) in Miyagi and 15,165 units (down 0.4% from the previous year) in Fukushima prefecture.

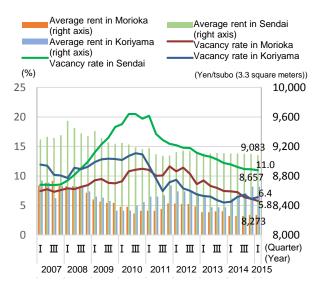
Regarding the office market in the disaster areas, the vacancy rate in Sendai was as high as around 20% just before the earthquake due to a large supply of new office buildings during the period from 2008 to 2010. However, the rate has continued to drop against a background of demand for offices among reconstruction-related companies, for example, to 11.0% in the January-March quarter of 2015. The rents that displayed a downward tendency previously have remained flat after the earthquake disaster. The vacancy rates in the cities of Morioka and Koriyama are also on a declining trend partly due to reconstruction-related demands. The rents in Koriyama increased from the beginning of 2014.





Source: "Statistical survey on construction starts'

## Changes in the office vacancy rate in Morioka, Sendai and Koriyama (quarters)



Source: Created based on the material of Miki Shoji Note: Data of March, June, September and December are used respectively for the first to fourth quarters for Morioka and Koriyama (data of April for the 1st quarter of 2011

## Chapter 2 Land Use towards a Depopulating Society

The Population of Japan is expected to decline rapidly, especially in local district areas. The accompanying decrease in demand for land is anticipated to bring about various challenges concerning land use.

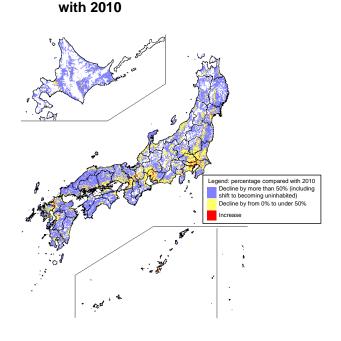
This chapter focuses on the sustainability of daily life and social activities that are affected by reduced population density and scattered facilities necessary for living as the central problem. First, the trends concerning the population of Japan are organized in Section 1, followed by challenges and efforts of local cities and rural districts in Sections 2 and 3 respectively.

## Section 1 Demographics of Japan

The population of Japan is expected to decline by 24% in 40 years from 128.06 million of 2010 to 97.08 million by 2050. The number of households is also projected to begin to decline in 2020.

Looking at demographics divided into about 1-square kilometer units, the population of many units is expected to decline to less than half of the population of 2010 by 2050. By municipalities, the smaller the population of the municipality is in 2010, the higher is its expected population decline rate by 2050.

With these changes, reduced population density and scattered facilities necessary for living due to reduced demand for land may bring about difficulties in maintaining residents' lifestyles in areas where population will decline.



Population changes in 2050 compared

Source: Created based on "*Population Census*" of the Ministry of Internal Affairs and Communications and values estimated by MLIT Note: does not include all territories of Japan

## Section 2 Current State and Policy Measures of Provincial Cities

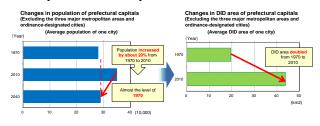
#### (Influence by low population density in urban areas and Compact City Policy)

Urban areas of local cities have rapidly expanded with the development of the suburbs in response to population increase. Looking at the changes in average population and average DID area of prefectural capitals across the country excluding the three major metropolitan areas and ordinance-designated cities, the population increased by about 20% from 1970 to 2010, while the DID area almost doubled during the same period. Because the population of these cities is expected to decrease to the level of 1970 by 2040, urban areas with low population density are likely to be formed if the total area is to remain unchanged.

If the population density in urban areas becomes low, it is predicted to become difficult in future to maintain medical, welfare, commercial and other life services and public transportation that would have been possible based on a certain level of population density.

In light of this, in the medium to long term, it is desirable, by inducing concentration of city functions and habitation, to form cities where housing, medical, welfare, commercial and other facilities are relatively close to each other so that residents can easily access private and public services. Such cities are referred to by the term "Compact City." In recent years there can be seen efforts aimed at creating Compact Cities and similar urban structures in cities across the country. As of April 2014, 72% of 798 cities (ordinance-designated cities, other cities and wards) have positioned or plan to position a Compact City in their Master Plan for City Planning Area.

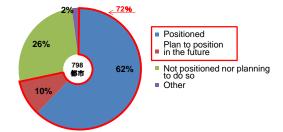
## Changes in population and DID area of prefectural capitals



- Source: Created based on "*Population Census*" of the Ministry of Internal Affairs and Communications and values estimated by MLIT
- Note: Excluding the three major metropolitan areas and ordinance-designated cities as of 2010 for calculation of population and DID areas of any year

(ordinance-designated cities, other cities and wards) positioning Compact City in their Master Plan for City Planning Area

Percentage of cities



Source: MLIT material

Note 1: As of April 2014

- Note 2: Including Master Plan for City Planning Area developed by the municipalities before the merger for cities not having developed a plan after merger in Heisei
- Note 3: Including Master Plan for City Planning Area to be newly developed, for which it has been decided to include Compact City, etc. to a certain extent.

Formation of Compact Cities is expected to contribute to maintaining and improving land prices through improvement of functionalities and convenience of cities. For example, in Toyama city, Toyama, the land price decline rate was lower in the residence promotion districts established in 2007 for the period 2007 to 2013 compared with the areas outside them.

## Chart: Trends of land prices in Toyama City, Toyama



Source: Created based on Toyama City's material Note: Ratio of land prices to those in 2003

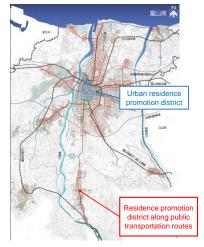
## Advanced Measures by municipalities etc.

#### •Integrated implementation of urban, transportation and other policies toward the Compact City

#### (Toyama City, Toyama)

Toyama City faced challenges of increased administrative costs and environmental burdens accompanying further reduced population density in the context of low birthrate, population aging and decline, decrease in various activities all over the city due to the hollowing out of the city center and decline of public transportation due to heavy dependence on motor traffic.

In order to solve the problems, the city suggested the concept of a Compact City where walking spheres (dumplings) are connected by public transportation (skewer) in its Master Plan for City Planning formulated in fiscal 2007. In concrete terms, the city set up "Urban Residence Promotion District" in an area including the city center and "Residence Promotion District Along "Urban Residence Promotion District" and "Residence Promotion District Along Public Transportation Routes"



Source: Created based on Toyama City material

Public Transportation Routes" that is mostly within 500m from a public transport station or 300m from a bus stop, with the aim of concentrating public services, medical, welfare, commercial and other urban functions while encouraging people to live in the districts. In order to promote housing construction and residence in the districts the city provides subsidy to businesses and citizens. The goal as the percentage of the population of the districts is set at 42% by 2025 (it was 32% in 2013.)

As a result, persons moving-in exceeded those moving-out for the "urban residence promotion district" in 2008, while the trend toward a greater number of persons moving-out was stopped and reversed by a greater number of persons moving-in in 2014 in the residence promotion district along public transportation. Furthermore, the numbers of pedestrians and elementary school students increased while the number of vacant stores decreased in the urban residence promotion district.

Toward a sustainable Compact City, not only urban and transportation policies but also welfare, agricultural, environmental and other policies were promoted in an integrated manner. For example, the

city uses public lands in the city center for development of welfare, exchange and commercial facilities, while at the same time providing a charge discount system for the elderly to encourage them to go out to the city center and use public transport. The city also holds farmers' markets to sell agricultural products grown in the suburbs and local-production-local-consumption exchange and learning events in the city center, and promotes human resource development in agriculture by helping citizens learn farming techniques and also pursues revitalization of agriculture through the "6<sup>th</sup> industry" development. These efforts will contribute to sustainable land use in the whole region including the urban area and the surrounding rural area.

## •Manifestation of the process toward a Compact City (Yubari City, Hokkaido)

Yubari flourished as a coal mine city with a large urban area consisting of coal mine facilities and housing. Its population was 120,000 at the peak. However, because mines were closed one after another since the mid-'60s, the population fell to below 10,000 in 2014 and is expected to become less than 5,000 in 2035. On the other hand, settlements are still scattered around mine mouths and public and other facilities remain arranged based on the past population level, which makes the cost to maintain people's daily living activities and facilities a matter of concern.

In the light of this situation, the city formulated its Master Plan for City Planning ("the Master Plan") in March 2012 toward a goal of "Compact City Yubari for safe and happy life" based on the conservation and succession of the historical, cultural and natural environment. The Master Plan aims at long-term concentration of the urban area in the "North-South axis" in a period of about 20 years. The city makes efforts to downsize the urban area in each district toward the goal for the time being.

When formulating the Master Plan, the city held review meetings including members from the general public as well as round-table conferences in each district. At these opportunities, different drafts of the goal for the city were presented to the residents, their opinions were listened to and the policy above was adopted.

After the formulation of the Master Plan, the city set forth restructuring and concentration of municipal houses to realize the plan. As a concrete project, the city developed the Ayumi and Mebae housing complexes of wooden flat houses of barrier-free design in the Shimizusawa district where about half of its municipal houses are concentrated. In the Mayachi district, which has a high rate of aging, the city tried to maintain the community while reducing living costs for residents and the operating costs for the city by concentrating living spaces in housing complexes with many unoccupied rooms after discussions with the residents.

## Full view of Ayumi housing complex



## (Effective utilization of Public Real Estate for promotion of the Compact City and similar concepts)

Real estate owned by the central or local governments (Public Real Estate: PRE) is worth about 590 trillion yen and accounts for about one quarter of all real estate in Japan. Local governments own real estate worth about 450 trillion yen.

When promoting urban planning, development, and management with the Compact City or similar concept, it is desirable to use PRE for strategic guiding of city functions and residences in coordination with restructuring of PRE that accounts for a large part of the urban area, by positioning library and other public facilities with high customer attraction power in the hub of the town, for example.

#### Advanced Measures by municipalities etc.

#### •Enhancing city functions through rearrangement of PRE (Nagaoka City, Niigata)

Nagaoka is a local core city with a population of about 280,000 at the center of Niigata Prefecture. The city has developed as an important point of transportation where an expressway branches off to the Kan'etsu and Hokuriku Expressways.

In the center of Nagaoka city, developed around JR Nagaoka Station, commercial functions were concentrated with eight big retailers whose establishment dates from the Showa to the Heisei period, but six out of the eight retailers closed their stores in about 10 years from 1995, which rapidly reduced the traffic in the commercial district. The central part of the city needed renovation due to the progress of aging and underutilization of its buildings due to multiple vacant stores.

For comprehensive renewal of the city center, the city promoted "relocation and distribution of city offices to downtown" project to move its decrepit city office situated about 2km away from



Source: Created based on Nagaoka City material

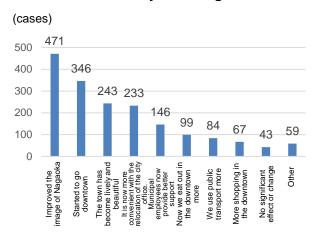
the Nagaoka Station to an about 1.2ha-wide urban planning park adjacent to the station. This was not done by concentrating city office functions in one building but rather by redeveloping multiple blocks adjacent to the new building and distributing branch offices to the blocks.

The city positioned welfare, parenting support, lifelong learning and other city functions for which high needs were found through a demonstration experiment carried out at "Nagaoka Citizen Center" using an old department site as a "downtown public service," and created "citizen collaboration" functions to support citizens' activities based on creative thinking, while developing centers of surrounding blocks in parallel with development of the city office building.

The concept of the Aore Nagaoka, the main government building, is "a city office at a place where citizens gather (Town Hall in Heisei)." Equipped with an arena and a roofed public square in addition to multiple halls and meeting spaces, the building has been used by over one million people every year since it opened in 2012. Today this is a major venue of civic activities and events of the entire city after the municipal merger. The resulting flow of people has improved citizens' image of the downtown.

In this way, the city is trying to transform the downtown exhausted due to weakened commercial functions into an area used by citizens by combining the accumulation of city functions suiting citizens' needs with measures supporting citizens' use by taking advantage of the opportunity of relocation of the city office using sites for public facilities.

Produced by Aore Nagaoka



Source: Material of Nagaoka City

Note: Questionnaire survey conducted by the city for visitors to events at Aore Nagaoka from September to October 2012

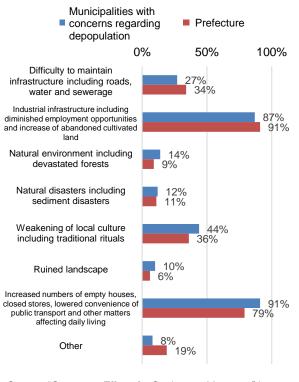
## Section 3 Current State and Policy Measures of Rural Areas

Population of rural areas is expected to decline at a pace exceeding that of urban areas.

Due to the population decline, settlements in rural area are gradually losing stores, clinics and other facilities/services necessary for daily living as well as places for community activities. According to a questionnaire survey for 797 municipalities with concerns regarding depopulation, 91% of the municipalities chose as an issue of measures for settlements "increased numbers of empty houses, closed stores, lowered convenience of public transport and other matters affecting daily living."

There is a concern that places to provide life services and community functions will diminish and become scattered, thus making the access by the elderly and other local residents difficult.





Source: "Survey on Efforts for Settlement Measures" by the Ministry of Internal Affairs and Communications (FY2014)

## (Developing a community with all basic needs within walking distance)

Some rural areas are trying to maintain and improve resident life by concentrating residence and daily living services just like local cities making efforts toward the Compact City.

## Advanced Measures by municipalities etc.

## •Collaboration of residents toward a community with all basic needs within walking distance (Numata town, Hokkaido)

Numata town has been experiencing population decline and aging since the closure of its coal mines in 1968, which has been accompanied by the decline of its shopping district near the train station, increase of empty houses, traffic problems due to heavy snow and other problems.

In this context, the city, after consultation with the welfare hospital association, made a judgment that it was desirable to change a welfare hospital that was the only hospital with registered beds to a clinic without beds when rebuilding the hospital. This created an urgent need to maintain medical and welfare functions and ensure coordination among relevant facilities. In response, the town has organized many forums for residents to discuss not only medical care and welfare but also overall challenges of the town since 2013. For example, "Korekara Juku (study meeting of town people)" and tours provide townspeople

with opportunities to acquire knowledge with focus on medical care and welfare from advanced efforts presented by experts and neighborhood municipalities, which will help them when considering town development. In workshops, townspeople discuss the future direction of the entire town based on their own prioritization of issues and cost analysis. In addition "Tsunagaru Juku (planning committee)" is discussing the concrete direction of the clinic to assume the functions of the welfare hospital and effective use of the site of former junior-high school that is the planned construction site. More than 15 sessions have been held in total regarding these initiatives for about one and half years up to March 2015, with participation of over 1,000 townspeople of a wide range of ages and occupations.

Scenes of the workshops



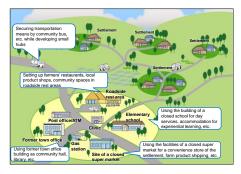
Through these discussions, the town compiled "Numata Rural Compact Eco Town Concept" and is considering concentrating facilities and services necessary for daily life in an area within an approximate 500m radius from the town center with the aim of developing a town with all basic needs within walking distance even during heavy snow season in response to various challenges of the town, including housing, shopping and traffic as well as medical care and welfare. Specifically, with a plan to support moving into empty houses in its urban area and renovation for this purpose, the town has worked to grasp the distribution condition of empty houses, for example. The town aims to effectively use the large area of a former junior-high school site by setting up a multipurpose square, houses, exchange facilities,

etc. in addition to medical and welfare facilities so that the location can provide central functions in the area

## (Concentrating life service and other functions through development of settlement hubs)

There are initiatives in many parts of the nation to build "Small Hubs" to support daily living by concentrating multiple life services in an area within walking distance in combination with other policy means such as transport networks supporting local communities and cooperation among them in order to secure an environment to make it possible to settle down in rural areas while maintaining and increasing their vitality.

Image of "Small Hubs"



Source: MLIT material

## Advanced Measures by municipalities etc.

## Prefecture's support for building of centers in hilly/mountainous regions ("Settlement activity center")

## of Kochi Prefecture)

With the highest forest area ratio in Japan and steep and deep mountains, Kochi prefecture is experiencing significant population decline and aging in its hilly/mountainous regions. In order to solve problems of the region based on the results of a questionnaire survey of settlements with less than 50 households in hilly/mountainous regions conducted in fiscal 2011, the prefecture strengthened the organization of the prefectural government while enhancing measures for hilly/mountainous regions to comprehensively promote its policy in cooperation with the municipalities.

The prefecture strengthened the system of its hilly/mountainous region task force and set up the Hilly/Mountainous Region Policy Division in the prefectural government so as to promote comprehensive measures related to hilly/mountainous regions in fiscal 2012. The prefecture also established a project to support opening and running of "Settlement Activity Centers" through municipalities for up to three years in order to build a system to solve problems of the community. The "Settlement Activity Center" is a system for residents of a community (size of an elementary school district) to undertake daily living activities, welfare, disaster-control and other activities in an integrated manner in cooperation with neighboring settlements and to use external human resources. 17 centers have opened as of March 2015.

The first "settlement activity center" opened at Asemigawa, Motoyama Town, in June 2012. Asemigawa consists of six settlements (196 residents) with a high rate of aging of 58% and its residents had a sense of crisis in maintaining the community from early on. The community uses accommodation

and exchange facilities (renovated building of a closed elementary school) as the core facilities of its "settlement activity center" and is working "to create a mechanism for everyone to continue to live with a sense of security while earning a certain level of income." Activities include proposals to review the bus operation time based on questionnaire surveys of residents and production and sale of processed foods using red perilla grown in idle lands.

Activities by the settlement Activity Centers (as of June 2012)



## •Forming a hub with a focus on health services based on a resident questionnaire (Tessei Town, Niimi, Okayama)

Before the merger with Niimi City (March 2005), with a view to relocation of the town office in response to the deterioration of the building, Tessei Town acquired a site of about 3.8ha at the center of the city along the national road based on the discussion of a town development council consisting of 40 residents and developed a roadside rest area named "Koitakubo" with a restaurant, facilities for experience-based learning and life service functions in 1997. As the next step, the town made a long-term plan to develop facilities that are truly necessary for residents in conjunction with the town office development.

For this purpose, the town implemented a questionnaire survey covering all residents (junior-high school students and older) in 1997. Based on the result, the town decided a policy to develop medical, cultural and other facilities with high citizen needs in an integrated manner in conjunction with the development of the town office building and, after the completion, shift to measures focused on health services.

The design proposition of the complex was developed through over 60 consultation sessions with residents during one and a half years from the fall of 1998. In October 2001, "Kirameki Hiroba Tessei" was completed. This is a nationally unique complex that combines the Tessei town office (now branch office,) a clinic (internal medicine and dentistry,) a lifelong learning center, a culture hall, a library and a health and welfare center in an integrated manner and also has functions of a disaster control center. The complex together with the roadside resting area Koigakubo provides functions of the community's center.

Because residents have been proactively and closely involved in the facilities development starting from the stage of consultation, they have a strong attachment to and satisfaction with the facilities, which have been established as a familiar place for conducting daily living activities with a sense of security for the residents of Tessei and used by about 60,000 people every year.

Currently NPO Kirameki Hiroba established by resident volunteers in October 2004 is trusted with a part of their management and runs the facilities in coordination with various groups and organizations. Full viewof "Kirameki Hiroba Tessei"



## Section 4 Summary

Examples given in Sections 2 and 3 share three common characteristics: (1) they built their vision of the city or region from a long-term perspective, (2) the local governments are promoting town development while engaging with residents by making efforts to understand their needs to the maximum extent through active dialogues and cooperation, for example, and (3) they promoted efforts related to land use in line with the vision of the city/region and in conjunction with other efforts including public transport and welfare.

## Chapter 3 Land Use According to the Risk of Natural Disasters

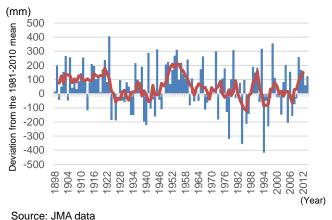
In recent years Japan has suffered huge damage due to natural disasters including the Great East Japan Earthquake in March 2011. The Great East Japan Earthquake, in particular, forced us to realize that disaster prevention measures limited to infrastructure development are insufficient and to become acutely aware of the need for soft measures including how we live in order to deal with natural disasters. Because large-scale natural disasters are expected to occur with high probability also in the future, high risk regions are promoting land use considering the risk of disasters by sharing land information concerning disaster risk, regulation of and guidance for land use and mitigation of disaster risks by securing spaces contributing to disaster control with cooperation of residents and others.

This Chapter, after surveying disaster risks surrounding the country in Section 1, introduces efforts for development and dissemination of land information as well as regulation of and guidance for land use, and takes up efforts to secure spaces in coordination with multiple bodies and accompanying regional disaster control activities in Section 3.

## Section 1 Risk of Natural Disasters in Japan

There is a concern of various large-scale natural disasters that may occur in Japan. According to a Survey by the Earthquake Research Committee, Headquarters for Earthquake Research Promotion, the probability of an M8-9 earthquake occurring in Nankai Trough within 30 years is around 70% and that of an M7 earthquake occurring under the metropolitan area within 30 years is also 70%. In respect to storm and flood damages, frequency of rainfall exceeding 50mm or 80mm per hour has been increasing in recent years, and fluctuation of annual precipitation has also been increasing since the 1970s.

Changes in average annual precipitation anomaly



Note: The bars represent average values of annual precipitation anomaly (deviation from a reference value sown in mm) of 51 points in Japan. The polygonal line represents 5-year moving average of deviations. Reference value is the average of 30 years from 1981 to 2010.

The Great East Japan Earthquake also caused changes in public awareness including more focus on kyojo (cooperation) and jijo (self-help) in addition to kojo (assistance by public bodies)

Considering possible large-scale disasters, we are required to carry out necessary environmental improvement so that communities can work together to make preparation for disasters, while each citizen chooses his/her residence with consideration of the risk.

## Section 2 Promoting Safe Land Use According to Disasters Characteristics

Many disasters are closely related with topographical conditions, land use history, etc. Therefore, in order to avoid or alleviate disaster damage, it is necessary, while understanding the topographic characteristics and use history of the land, to ensure use that takes its disaster risk into account. This may include avoiding living in a high-risk place and improving the safety of land where buildings already stand.

This section focuses attention on development and dissemination of information concerning disaster risk in the region and regulation of and guidance for land use.

## 1 Development and dissemination of land information concerning disaster risk

## (Amendment of the Act on Promotion of Sediment Disaster Countermeasures for Sediment Disaster Prone Areas)

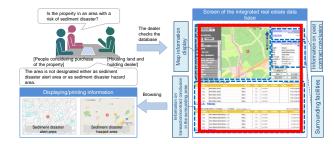
Many kinds of issues such as delay of the basic survey and designation of sediment disaster prone areas and insufficient information about the risk of sediment disaster provided to the local residents were found after a sediment disaster occurred in Hiroshima City, Hiroshima, in August 2014.

In response to these issues, the amendment of the Act on Promotion of Sediment Disaster Countermeasures for Sediment Disaster Prone Areas, etc. was enforced in January 2015. The revised act requires that prefectures should publish the results of the basic survey and inform local residents about the risk of sediment disaster as soon as possible. In addition, the evacuation system is to be strengthened by showing evacuation places and routes in the local disaster management plan of the municipalities after the designation of sediment disaster prone areas.

## (Collection and provision of information concerning real estate transaction)

In current real estate transactions, information on the land such as statutory restrictions, hazard map, past land use, and disaster history which even the seller does not know is scattered among various organizations and media including national and local administrative organs, which makes it difficult to promptly provide sufficient information to consumers.

To address this situation, MLIT is conducting a study for introduction of a system to efficiently collect dispersed information necessary for real Information provision using the Integrated Real Estate Database



Source: MLIT material

estate transaction (disaster-control-related information, transaction history, information of the surrounding environment, etc.) and provide the information in a tabulated form (Integrated Real Estate Database) to housing land and building dealers as a market infrastructure with the aim of revitalizing the real estate market through timely and adequate provision of a wide range of information from housing

land and building dealers to consumers. In particular, information concerning disaster risk of the land on which the property is located is especially important for consumers who are considering purchase of the property. Therefore, MLIT is considering using data created by local governments and collecting information on the designation status of hazard areas based on laws such as the Sediment Disaster Prone Area, hazard maps and other information concerning disaster risks.

In fiscal 2015, we will conduct trial operations of a prototype system built in fiscal 2014 for properties in Yokohama City, Kanagawa Prefecture, examine the effect of introduction of the system and issues concerning its functions for information collection, management and provision, while studying rules necessary for efficient provision of administrative information as well as collection methods.

## Advanced Measures by municipalities

•Development and distribution of land information concerning disaster risk using a mobile application (Chigasaki City, Kanagawa)

Chigasaki is densely packed with wooden detached houses and has many narrow roads as a result of population increase and accompanying land use during a period of high economic growth.

Because it was necessary to grasp the information on the vulnerability of its area for creation of disaster-proof districts in cooperation between citizens and the government, the city implemented "district earthquake risk assessment" in fiscal 2008. The project used GIS and the latest analysis methods to assess risk of spread of fire, risk of collapse of building at the time of an earthquake, ease of vehicle passage, risk of blocking of roads, etc. in each district. After the assessment, the results were made public and administrative officers visited neighborhood councils in the city and explained the results to ensure information sharing and foster public awareness of disaster prevention.

In January 2013, the city computerized the "district earthquake risk assessment" and started free distribution of an application for tablets and smartphones, which enables display of risk information of each location over the actual landscape by interlocking the information with GPS and camera functions. The app has been downloaded about 8,400 times as of February 2015.

Since 2009 the "workshop for creation of disaster-proof districts" has been held in different areas in the city for residents to discuss disaster

Screen image of the application for tablets/smartphones



risks in the areas and carry out site surveys. During the workshop, participating residents can discover and share issues for disaster control in the community by walking in the town with the app for tablets and smartphones described above and drawing dangerous spots and evacuation places on their map.

## 2 Regulation and guidance for land use

## Advanced Measures in Various Locations

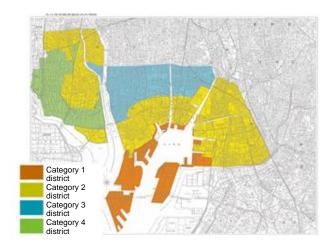
## •Land use control setting different districts according to the risk (Nagoya City, Aichi)

The city has been damaged by tidal waves several times in the past. The Ise Bay Typhoon in 1959, in particular, caused tremendous damage. The damage was partly attributed to the fact that many people were living on land with high disaster risk.

Making good use of the experience, the city formulated the Nagoya City Ordinance on Disaster Hazard Area in 1961, two years after the disaster. In this ordinance the city designated its coastal areas widely as a disaster prevention zone, divided the zone to different districts based on the disaster hazard and land use, and regulated buildings according to the characteristics of the district.

Specifically, the structure and height of the first floor of houses and public buildings are regulated. For example, in the Category 1 district that is outside of the seawalls, wooden buildings are prohibited and the height of the first floor must be 4.0m higher than the reference level of the Nagoya harbor. The area was divided into five categories at the time of enactment but today there are four categories after an amendment of the ordinance based on the changes in risk due to the improvement of the seawalls, etc.

## Districts designated by the "Nagoya City Ordinance on Disaster Hazard Area"



## •Land use conversion by reconstructing municipalities (Higashi-Matsuyama City, Miyagi)

Some municipalities on the Pacific Coast of Tohoku which are recovering from the Great East Japan Earthquake are making efforts to change land use with future tsunami risk in mind.

The city is promoting relocation by designating its urban area and settlements that suffered enormous damage as seven relocation promotion districts and developing seven residential estates on inland hills and around the existing urban area, thus ensuring multiple defenses (disaster prevention open space, roads on high banking, etc.). In July 2013 the city formulated a basic land use plan for the sites from which residents will move in groups. Reconstruction patterns of the sites are divided into sites with changed land use, and ones with mixed use or function, etc. according to the damage and characteristics of the sites in order to promote their use. Ohmagarihama district was changed from a Category 1 Residential District to an Industrial District, where lands are collected and ordered under a land adjustment project to develop industrial sites and urban parks. Their transfer is scheduled in April 2016. As of March 2015, 13 businesses in and outside the city including a transport company plan to use the sites. Some parts of

Ushiami, Hamaichi, which used to be farming and fishing villages, were developed into farmland through soil dressing starting from February 2014 and rented to local agricultural production corporations for a contract of 10 years. As of February 2015, 9 ha has been developed as farmland and used by five corporations for production.

Land use conversion in Ushiami and Hamaichi districts



## <u>Section 3 Securing of Spaces and Regional Disaster Prevention Activities through</u> <u>Cooperation of Multiple Bodies</u>

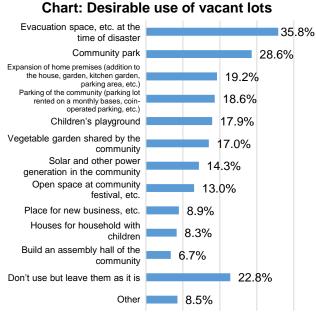
In many places we find efforts to secure evacuation sites and routes, stockpile warehouses and other spaces that will become necessary once a natural disaster occurs through cooperation of local residents, land owners and others. Some of these efforts not only secure spaces but also build a human network that is important at the time of a disaster through regional activities and exchange accompanying the efforts.

This section focuses on securing of spaces to use at the time of a disaster through the cooperation of multiple bodies as well as regional disaster prevention activities conducted in conjunction with the former. Efforts are divided into those in residential lands and those in commercial lands.

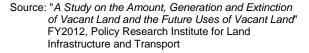
## 1. Measures in residential lands

## (Securing and utilization of vacant lots for disaster prevention)

At the time of an earthquake, fire or other disaster, vacant lots may help in securing evacuation places and alleviating damage. In a questionnaire survey for residents of five districts with a relatively high vacant lot ratio in Japan, the highest 35.8% of respondents chose "evacuation space, etc. at the time of a disaster" as the answer to "desirable use of vacant lot.



0.0% 10.0% 20.0% 30.0% 40.0%



## Advanced measures by municipalities etc.

## •Removal of dangerous empty houses in densely built-up areas and management of the sites by local residents (Nagasaki City, Nagasaki)

With the expansion of the city after mid-1950s, houses were built on slopes that used to be farmland resulting in a sloped urban area crisscrossed with narrow hillside roads and stairs. In recent years, while population increased in flat land, the problem of empty houses has come to the surface due to rapid population decline and aging in sloped lands with narrow roads where cars cannot enter and stairs inconvenient to use. In fiscal 2003, the urban area development, building guidance, fire, self-government promotion and other departments of the city office cooperated to study comprehensive and practical measures for empty houses.

Under the program for dilapidated and dangerous empty houses established in fiscal 2006, the city removes very dangerous and dilapidated empty houses within a designated area on condition that the land and building are donated to the city. Local residents and the city discuss and decide the use of the site and the local residents perform daily maintenance management based on a charge-free lease agreement between the city and the neighborhood council. Utilization of such sites not only increases the appeal of the community but also contributes to improved disaster preparedness of the community through creation of parks and open spaces, widening of passages and increased storage of fire hoses, for example.

Up to fiscal 2014, 44 houses have been removed out of 368 houses for which application was made. In cases where donation is not feasible due to rights of the land/building (too many heirs, for example) the city conducts search for the heirs, and explanation of the program to the heirs to ensure smooth operation of the program.

Furthermore, contents of all applications are made into a data base, applications not yet adopted are shared by multiple departments, and owners are provided with guidance to help removal including use of "the Subsidy for Removal of Dilapidated and Dangerous Empty House" based on the "Nagasaki City Ordinance on Appropriate Management of Empty Houses, etc." In addition, the city is considering enhancement of the "Bank of Information on Empty Houses and Vacant Lots" for empty houses that can be used for a certain purpose, as a part of its comprehensive measures for empty houses in coordination of multiple departments and programs.



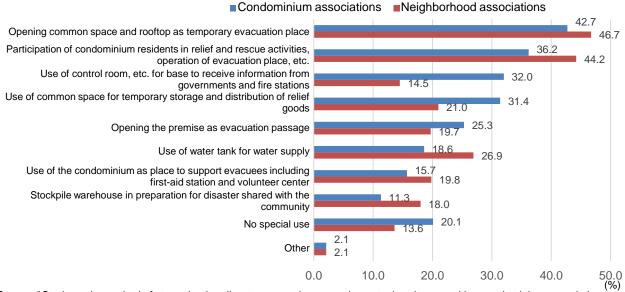




## (Cooperation between condominiums and communities)

Solid mid-to-high-rise private housing may serve as important places for evacuation not only for their residents but also for the entire community at the time of tsunami, storm, flood and other disasters. In a questionnaire survey of condominium associations and neighborhood associations, 42.7% of condominium associations chose "opening common space and rooftop as temporary evacuation place" and 31.4% chose "use of common space for temporary storage and distribution of relief goods" as "Use of condominium facilities/equipment for which the condominium and neighborhood associations may cooperate." This indicates that condominium associations are not necessarily against accepting evacuees and relief goods.

## Condominium facilities/equipments which the condominium and neighborhood associations may share



Source: "Study on the method of strengthening disaster prevention power by mutual assistance with a condominium association," the neighborhood association and others," Policy Research Institute for Land Infrastructure and Transport Note: Questionnaire survey for 12 cities/wards that meet the conditions including "situated in one of the seven Kanto prefectures and where more than intensity "6 lower" is forecasted when Tokyo Inland Earthquake occurs" and "has more than 100 condominiums."

## Advanced Measures by municipalities etc.

## • Authorization of Condominium with Strong Disaster Prevention Power (Osaka City, Osaka)

Damage through earthquakes, wind and floods and other disasters is predicted for Osaka. Having learned from the Great Hanshin Awaji Earthquake the lessons that areas and facilities with vigorous community activities during normal times could smoothly respond to the disaster and considering that there are many condominiums in the city, Osaka established the "Authorization of Condominium with Strong Disaster Prevention Power" system in fiscal 2009. Under this system the city authorizes condominiums excellent both in tangible (earthquake and fire resistance, etc.) and intangible (disaster prevention activities on a daily basis, etc.) things in order to encourage development of disaster-resilient condominiums of good quality. 43 condominiums (4,352 units) have been authorized as of the end January 2015.

The system benefits private businesses by allowing them to make an appeal concerning the disaster resilience of their condominiums to potential residents through information regarding their authorization on the city's website, etc. Purchasers may receive an interest rate cut for housing loans for some authorized new condominiums.

Generally speaking, because local residents often oppose building of a condominium in the neighborhood out of concern regarding worsening of the landscape and living environment, and only a fraction of condominium residents become members of the local residents' association, cooperation between condominiums and local residents is not found in many cases in Japan. Because the Osaka's system's criteria include not only evacuation of the condominium residents but also opening up of facilities to evacuees for a certain period of time after a disaster and regional authorized cooperation, condominiums are expected to serve as evacuation place for residents of areas distant from any designated evacuation place. Furthermore, it is expected to contribute to good communication between condominium and local residents through disaster drills.

## Plate of Authorized Disaster-resistant Condominium



## 2 Measures in Commercial Land

## Advanced Measures by municipalities etc.

•Securing space for travelers who have difficulty returning home, warehouses for stockpiling, etc. with cooperation of office land owners (Otemachi-Marunouchi-Yurakucho district, Tokyo)

In the Otemachi-Marunouchi-Yurakucho district (OMY district), around the Tokyo Station, in addition to 200,000 workers there are a large number of business visitors, shoppers, tourists and railway users in the district. The number of stranded people who will have difficulty returning home is estimated to reach about 30,000 if a disaster hits the area at 15:00 on a weekday, or about 60,000 (excluding employees) at 15:00 on a holiday.

In OMY district, the "Chiyoda Ward Regional Cooperative Association for Measures for People Who Have Difficulty Returning Home" set up the "Tokyo Station Neighborhood Association for Disaster Prevention (Regional Cooperative Association)" in 2004 as an organization dedicated to support for such stranded people at the time of disaster. The Regional Cooperative Association is a voluntary organization that is managing the ward's disaster prevention warehouse storing emergency food, blankets and other goods. Chiyoda ward and owners of some facilities have concluded an agreement to receive such stranded people at the time of disaster. Furthermore, the association jointly with Chiyoda ward organizes drills to support such stranded people including evacuation drills for foreign travelers. 102 land owners are members of the Regional Cooperative Association as of the end January 2015.

Thanks to these efforts during normal times, actions including distribution of blankets to people visiting commercial facilities, etc. and having difficulty returning home were smoothly carried out at the time of the Great East Japan Earthquake in 2011.

Because some problems were found in the initial response and the chain of command on this occasion, the "Rule Book of the Tokyo Station Neighborhood Association for Disaster Prevention" was developed in 2012 to provide the outline of the activities of the Association.

In March 2015 the "Council on Urban Renaissance Urgent Redevelopment of the Tokyo Inner and Waterfront Area" formulated a "Plan to Ensure Safety through Urban Renaissance of the Otemachi-Marunouchi-Yurakucho District" based on the Act on Special Measures Concerning Urban Reconstruction. The plan aims to build a system for volunteer groups who are active in tenant companies and the communities, and area management bodies, etc. to cooperate in taking actions for

travelers having difficulty returning home.

As tangible measures, the district has established a system to authorize buildings contributing to strengthening of the area's disaster prevention power as "Area disaster-proof building" in an effort to promote safe buildings and spaces at the time of a disaster.

OMY district makes these disaster response efforts in conjunction with regular urban development and has improved its international competitiveness as an office and commercial district by positioning "safety for all visitors" and "high business continuity" as new added value.

## Emergency drill by the Regional Cooperative Association



#### Section 4 Summary

In some of the cases described in Sections 2 and 3, local governments are, while ensuring close communication with residents, comprehensively promoting development of safe communities in effective combination of measures including provision of land information and regulation/guidance of land use. In other cases, land owners, businesses, residents and other stakeholders are working to improve the overall value of the community including the aspects other than disaster prevention through peacetime cooperation with emergencies in mind based on common recognition of problems.

For land use based on disaster risk, it is also important to consider the aspect of population decline described in Chapter 2. In local cities where population will decline, for example, we expect simultaneous pursuit of the Compact City and disaster prevention/mitigation including measures to discourage residing in areas with relatively high disaster risk.

## Part 2 Basic Measures in Relation to Land in FY2014 (Omitted)

## **Basic Measures in Relation to Land in FY2015 (excerpt)**

## Chapter 1 Dissemination of Basic Philosophy on Land

During the "Land Month" of October (October 1 is "Land Day"), the government will work to disseminate the basic philosophies on land and introduce various measures and systems concerning land in collaboration with relevant organizations.

## Chapter 2 Enhancement of Information on Land

## Section 1 Systematic Maintenance of Land Information

In order to systematically maintain information on land ownership, utilization, transactions, prices and so forth, the government will conduct publication of the value of standard sites and cadastral surveys, as well as grasp transaction information. The government will publish the confirmed data of the "Corporation Survey of Land and Buildings" (fundamental statistics) conducted in fiscal 2013.

## Section 2 Promotion of National Land Survey

The government promotes cadastral surveys, land classification surveys (including a land-use history survey), and water surveys.

Section 3 Promotion of Enhancement of National Land Information

As for digital national land information, the government will revise publication of values of standard sites and publication of values of standard sites by prefectural government. Concerning geospatial information, the government will prepare and update map information and geospatial information (i.e., social foundation) based on the basic plan for advancing the use of geospatial information that was decided by the Cabinet in March 2012. The administration of land surveys will be also promoted.

## Section 4 Enrichment of the Land Registration System

The government will focus on the intensive mapping of urban areas for which the lot numbers are not adequately registered and other areas requiring urgent mapping across the nation in order to provide them at registries.

## **Chapter 3 Accurate Understanding of Land Price Trends**

## Section 1 Promotion of the Publication of Values of Standard Sites

The government will also publish the results of analyses of trends in land prices based on the results of the standard sites expanded to 25,270 in 2016 Publication.

## Section 2 Provision of Real Estate Transaction Prices

The government will conduct surveys on real estate transaction prices nationwide and publish the information on transaction prices obtained in the surveys on the Internet on a quarterly basis.

## Section 3 Development of Property Price Indices

The government will ensure stable operation of residential property price indices while developing commercial property price indices working toward trial operation, based on the development status of international guidelines for their development.

## Section 4 Enhancement of Real Property Appraisal

The government will work to disseminate the real property appraisal standards, etc. revised in fiscal 2014 and continue appraisal monitoring, including on-site inspection concerning real property appraisal firms and investigation of operations concerning real estate appraisal, etc. for securitization.

## Section 5 Balanced and Proper Land Appraisal by the Public Sector

In order to promote proper land-price formation and taxation, the government will strive for balance and reasonableness in public land appraisals relative to the prices that are used in assessing fixed property tax and inheritance tax, while making efforts to properly reflect land price trends, etc. on appraisals.

## Chapter 4 Improvement of Real Estate Markets

## Section 1 Improvement of Real Estate Transaction Market

The government will ensure proper application of the Building Lots and Buildings Transaction Business Act, development and revitalization of real estate markets including the used-house transaction market, promotion of Real Estate Specified Joint Enterprises, proper application of the land transaction control systems, spread and promotion of the supply of green buildings and provision of contaminated-land information related to land transactions, for example

## Section 2 Improvement of Real Estate Investment Market

In order to revitalize the real estate investment market, the government will take measures including formulation of guidelines concerning utilization of the healthcare REIT for hospital real estate, formulation and dissemination of manuals for local governments on utilization of securitization methods and implementation of model projects concerning public real estate.

## Section 3 Land Tax Measures

In view of the energization of land transactions and the promotion of land use, the government will continue to implement tax measures for the acquisition, possession and transfer of land at each step.

## Section 4 Support for Global Business Development in Real Estate Markets

The government will support the development of legal systems in the construction and real estate fields of emerging Asian countries, while working on enhancement of Japan's presence through international dissemination of information and active participation in international conferences.

## **Chapter 5 Improvement and Enhancement of the Land Use Plans**

## Section 1 Promotion of the Land Use Plans

In order to ensure smooth development and promotion of prefectural/municipal plans based on the National Land Use Plan (National Plan), the government will take necessary measures including surveys and information provision, while promoting proper and reasonable land use by properly implementing the general plan of land use.

## Section 2 Ensuring Proper Use of Land in City Planning

The government will promote the appropriate implementation of the "Policy for Improvement, Development and Preservation of City Planning Areas" (master plan), which is laid out in each city planning area, and formulation of the "Basic Policy Concerning Municipal City Planning" (municipal master plan). The government will also promote appropriate utilization of land use systems and support municipalities in developing location optimization plans based on the Act on Special Measures Concerning Urban Renaissance to promote formation of compact cities.

## Section 3 Coordination with National Land Policy

Toward revision of the National Spatial Strategies (National Plan), the government will conduct study based on "the interim compilation of the new National Spatial Strategies (National Plan)" compiled in March 2015, while hearing a wide range of opinions including those of local people, toward the objective of compilation in the summer. Based on the National Plan to be revised, the government will also advance the study toward compilation of Regional Plans within fiscal 2015. Moreover, the government will promote the formation of regional centers and industrial location policies, develop transport networks and information communication infrastructure, for example.

## **Chapter 6 Promotion of Housing Measures**

## Section 1 Promotion of Housing Measures

The government will work on promotion of basic plans for housing, facilitation of supply of public rental housing, active promotion of housing supply in urban areas with focus on big cities and formation of good living spaces through downtown redevelopment. With the full enforcement of the Act on Special Measures to Advance Municipalities' Measures for Empty Houses, the government will ensure formation of housing stock of good quality and its effective utilization in accordance with the purport of the Act, including support to municipalities' measures for empty houses. Furthermore, the government will work on enhancement of measures for housing acquisition through various tax measures, etc.

## Section 2 Creation of Favorable Living Environment by Promoting the Provision and Management of Good Residential Land

The government will promote the supply of good residential land, while trying to renew aged housing and public facilities and enhance functions to support living in new towns facing a decrease in various activities in the community and other challenges due to the progress of rapid population aging and decline.

## **Chapter 7 Promotion of Effective Land Use**

## Section 1 Promotion of Local Community Invigoration and Urban Renewal

In order to create vigorous communities and accelerate regional sovereignty reform, the government will promote efforts to achieve integrated and effective local revitalization, including comprehensive special zones, future eco cities, urban renewal, designated structural reform districts, local regeneration, and city center vitalization.

It will also promote city regeneration in areas designated for Emergency City Regeneration as well as city regeneration nationwide, while at the same time promoting development of super blocks based on the Super Block Guidelines, etc.

Section 2 Promotion of Urban Infrastructural Development and Disaster-resistant Urban Planning In order to promote urban infrastructure development, the government will promote utilization of civilian capabilities as well as utilization of space above and below ground level. In order to enhance and strengthen the warning and evacuation systems based on the Sediment Disasters Prevention Act, the government will advance development of disaster-resistant towns by promoting creation and publication of sediment disaster hazard maps by municipalities, grasping their progress, promoting evacuation drills, raising residents' awareness of disaster prevention and enhancing disaster preparedness in cooperation with relevant local governments.

## Section 3 Promotion, etc. of Use of Underutilized/unused Land

The government will promote redevelopment, etc. of underutilized/unused land, such as former factory sites, while encouraging use of underutilized/unused land in cities. Furthermore, the government will work to revitalize city centers through various systems, etc. established in fiscal 2014.

## Section 4 Development of Comfortable Residential Environment by Utilizing Farmland

In respect to farmland in urbanization promotion areas in regions with significant housing demand, the government will promote provision of residential land with a good living environment by utilizing farmland through the farming and residence association system.

## Section 5 Utilization of Land Owned by the Public Sector

The government will promote optimal use of national and public properties in cooperation with local governments by sharing information on national and public properties in certain areas and making coordination for optimal use of such properties while respecting opinions of relevant local governments, etc.

## Section 6 Facilitation of Public Land Acquisition

In order to generate the effects of public work projects at an early stage, the government will promote land acquisition in line with the "Land Acquisition Management," under which bottlenecks in land acquisition are examined and analyzed with careful preparations being made regarding all stages from the planning of projects to their future use, along with ensured schedule control.

## **Chapter 8 Promotion of Environmental Conservation**

## Section 1 Promotion of Measures Concerning Environment Conservation

The government will promote land-related measures for environmental conservation and give consideration to environmental conservation in various land-related policies and when selecting and implementing projects, based on the "fourth Basic Environment Plan."

## Section 2 Appropriate Conservation of Farmland

The government will promote improvement of land conditions through infrastructure-development projects for enhancing agricultural competitiveness, etc. and subsidies for development of rural areas.

## Section 3 Ensuring Appropriate Conservation and Utilization of Forests

In order to maximize the multi-functionality of forests, the government will provide guidance and advice to local governments and forest owners on the systematic development of forests based on the forest planning system provided by the Forest Act.

## Section 4 Proper Conservation of River Basins

In special river basins for comprehensive flood control measures, the government will establish river basin conferences consisting of the river divisions of the national, prefectural and municipal

governments, and other divisions related to city, housing and land, as well as create river basin improvement plans to encourage proper land use in river basins and the control of rainwater runoff. <u>Section 5 Promotion of Proper Protection of Cultural Property and Creation of Favorable</u> <u>Landscapes Taking Advantage of Local History, Culture, etc.</u>

As for historic villages and streetscapes, the government will provide guidance and advice to municipalities regarding the preservation and utilization of conservation zones for clusters of traditional structures. For landscapes created through interaction between people and nature, the government will advance the selection of important cultural landscapes while working to preserve and use them.

## Chapter 9 Measures for Recovery/Reconstruction from the Great East Japan Earthquake Section 1 Measure in Relation to Land Use

As measures concerning residential land, the government will promote measures against tsunami disasters, such as projects for promoting mass relocation for disaster prevention, projects to develop post-tsunami restoration centers and projects to enhance disaster prevention functions in fishery settlements and also support measures to prevent sediment disasters and liquefaction.

The government will also implement projects to recover farmland and agricultural facilities from the disaster, remove salt elements, and rearrange land in conjunction with the recovery and the removal, while supporting affected farmers who resume farming activities using devastated farmland in the place of their evacuation or other areas that escaped disaster. Moreover, for land use reconstructing, the government will promote utilizing various special provisions of land use based on land plan system prescribed by the law for special zones for reconstruction and support the smooth and prompt implementation of projects to develop urban areas and agricultural production bases.

## Section 2 Measures in Relation to Housing

The government will support the provision of public housing for disaster victims. It will also support disaster victims in rebuilding their residences by providing housing loans for disaster reconstruction and application of a special provision for disaster victims taking loans from the Japan Housing Finance Agency, as well as preferential measures on loaning for promotion of workers' property accumulation.

## Section 3 Efforts for acceleration of residence rebuilding and urban renovation

In order to ensure that construction of disaster public housing, development of land for private housing and other projects will advance according to the plan, the government will publicize "the package for breaking bottlenecks of house reconstruction and post-earthquake town reconstruction," while grasping the individual causes of delayed land acquisition and providing municipalities with finely-tuned practical support for measures such as use of receivership and land expropriation systems through the "land acquisition acceleration task force."

## Section 4 Measures in Relation to Land Information

The government will promote clarification of land boundaries through support for affected local governments in accordance with the implementation status of cadastral surveys and development of maps for registries. The government will also provide the land measures departments of lwate,

Miyagi and Fukushima prefectures and Sendai City with information on registration and prices of land transactions in the respective prefecture or city.

## Section 5 Tax Measures

The government will continue the tax measures at each stage of land acquisition, holding and transfer, as they are necessary to promote the reduction of burdens on victims of the Great East Japan Earthquake as well as efforts toward recovery and reconstruction.