

# Chapter 5 Creating a Comfortable Living Space

## Section 1 Realizing Affluent Residential Living

### 1 Securing Stability of Residential Living and Advancing its Betterment

The Basic Housing Policy (National Plan), which covers the period from FY2016 to FY2025 and was adopted by a Cabinet decision in March 2016, was devised in light of changes to the socioeconomic climate, namely the full-scale emergence of an aging society with falling birth-rates and declining population and families. The plan sets out eight targets and fundamental measures: From the perspective of inhabitants, (i) Anxiety-free housing situation for child-rearing households and member of young generation wishing to marry and have children, (ii) Housing that allows the elderly to live independently, and (iii) Ensure a steady supply of housing for individuals requiring special consideration from the perspective of housing stock, (iv) Structure a new housing circulation system exceeding the property ladder, (v) Upgrade to safe and higher-quality housing stock through rebuilding and renovation, (vi) Promote use or elimination of increasing vacant homes; and from the perspective of industry and community, (vii) Housing industry growth that contributes to a strong economy, and (viii) Maintain or improve the appealing aspects of residential area. Based on this plan, the MLIT is driving forward with efforts to provide residential living that meets the needs of each and every citizen, as well as measures toward the realization of safe, secure, high-quality living environments.

#### (1) Goals and Basic Policies

(i) Anxiety-free housing situation for child-rearing households and member of young generation wishing to marry and have children

To establish an environment in which child-rearing households and member of generation wishing to marry and have children can choose and be ensured of obtaining desired housing, we are executing support to enable them to live in a house meeting the required quality and area according to the income of household.

In addition, in order to establish an environment that enables people to want to have and raise children, leading to desired birthrate of 1.8, we are promoting measures to ensure families the ability to live with or near grandparents to enable childrearing with the help of grandparents.

(ii) Housing that allows the elderly to live independently

To improve and supply housing that elderly individuals can live in safety without anxiety, we are continuing work to promote barrier-free homes and heat shock measures (the effects of sudden increases in temperature on the human body), and promoting elderly housing with supportive services attached for elderly life support facilities.

We are also working to ensure housing in the area in which elderly residents wish to live and on environment where elderly individuals receive nursing, medical and life services.

(iii) Ensuring a steady supply of housing for individuals requiring special consideration

We are striving to establish an environment in which individuals with difficulty ensuring residence in the housing market independently can find housing and live without anxiety. Such individuals include low-income earners, elderly, handicapped, single-parent household, multiple birth households, public financial support recipient, foreigners, homeless, etc. (persons requiring special assistance in securing housing).

### a. Creating a new housing safety net that comprises private rental housing and vacant houses

In order to promote the offering of rental housing to persons requiring special assistance in securing housing, the MLIT established a new housing safety net consisting of a system in which private rental housing and vacant houses are registered as rental housing for persons requiring housing support in accordance with the amendment to the Act on Housing Safety Net (the Act to Partially Amend the Act on Promotion of Offering of Rental Housing to Persons Requiring Special Assistance in Securing Housing (promulgated on April 26, 2017, enacted on October 25, 2017)).

### b. Supplying public rental housing

To adequately support the delivery of public housing supplied by local governments to low-income earners in serious need of housing, and to promote the supply of quality rental housing to households consisting of elderly people who need special consideration to stabilize their housing in each area, the MLIT set up the Regional Excellent Rental Housing Program as a scheme that complements public housing by subsidizing the expenses required to develop public rental housing and reduce rents.

Figure II-5-1-1 Purposes and Results of Public Rental Housing

	Purpose	Number of houses managed
Public housing	Supplies quality rental housing to low-income earners who are in serious need of housing with low rent.	About 2.16 million houses (FY2016)
Improved housing	Supplies public rental housing to existing residents who are in serious need of housing in a deteriorating residential area.	About 145,000 houses (FY2016)
UR Rental Housing	Supplies quality rental housing that is conveniently located for access to work, focusing on family-oriented rental housing not in ample supply from private business operators, in major urban areas, as well as develops residential districts (In FY2002, a support program for privately supplied rental housing was launched to support the supply of family-oriented rental housing from private business operators.)	About 740,000 houses (FY2016)
Agency rental housing	Supplies quality rental housing to meet the regional demand for rental housing	About 132,000 houses (FY2016)
Quality regional rental housing	Provides subsidies to private land owners to fund maintenance and other expenses and cover rent cuts to provide quality rental housing for households consisting of elderly people, childraising families, etc.	- About 94,000 designated quality rental houses (FY2016) - About 42,000 designated quality rental houses for elderly people (FY2016)

(Notes) 1 The number of rental houses managed by the Urban Renaissance Agency includes designated quality rental houses for elderly people

2 The number of public rental housings does not include Specified Quality Rental Housing and Subsidized Quality Rental Housing for the Elderly.

3 The Specified Quality Rental Housing Institution and Subsidized Quality Rental Housing for the Elderly Institution were reorganized and the Quality Regional Rental Housing Institution was established in FY2007.

Source) MLIT

### c. Using private rental housing

In order to facilitate the promotion of smooth move-ins to private rental housing by elderly people, disabled people, foreigners and families with small children, we are providing housing assistance such as information services and consultation services through residential support corporations based on the amended Act on Housing Safety Net, in addition to the 70 Residential Support Councils nationwide (in 47 prefectures and 23 municipalities) established as of the end of FY2017 that comprise local government, real estate related organizations and housing assistance organizations.

#### (iv) Structuring a new housing circulation system exceeding the property ladder

The revitalization of the existing housing circulation market is crucial toward effectively using housing stock, creating economic effects from market expansion, and realizing prosperous residential living through the streamlining of the process of moving in different life stages; thus, we are developing measures to improve the quality of existing housing, to form markets that properly appraise high-quality existing housing, and to develop environments in which people can confidently purchase and sell existing housing.

### a. Improving the quality of existing housing

The MLIT pursues the dissemination of housing that is structured and equipped to meet or exceed certain levels of performance requirements, such as durability and ease of maintenance and management (“Long-life Quality Housing”) under the Act on the Promotion of Dissemination of Long-life Quality Housing. (Certified houses in FY2016: 109,373). In addition, in FY2016, we launched a system for certifying Long-Lasting Quality Housing regarding renovations and additions to existing housing. (Certified houses in FY2016: 127)

Furthermore, we provide support concerning aid and taxes for renovations that strive to extend the life, strengthen the earthquake resistance, or improve the energy efficient performance of existing housing.

#### b. Formation of markets that properly appraise high-quality existing housing

The general thinking in Japan is that housing has absolutely no market value 20 to 25 years after it is built; it is important to correct this convention and create an environment in which high-quality existing housing is properly appraised.

Toward that end, we are continuing to define and diffuse proper appraisal methods for real estate brokers and appraisers so that the performance and renovated condition of buildings is properly reflected in their appraisals.

In addition, in order to establish a market environment in which high-quality housing stock is appropriately assessed, we are providing support for integrated efforts to develop and diffuse systems for renovating, assessing, circulating and financing housing stock.

#### c. Developing environments in which people can confidently purchase and sell existing housing

A 10-year defect liability obligation has been mandated for the basic structural part of new housing in accordance with the Housing Quality Assurance Promotion Act. In addition, a housing performance marking program has been put into effect to objectively assess the basic performance characteristics of new and existing houses, such as earthquake-resistance, energy-saving measures, preventing measures against deterioration, etc.

In addition, to promote the smooth enactment of the amended Real Estate Brokerage Act (established in June 2016), which encourages real estate brokers, who are experts in real estate transactions, to use surveys of building conditions (inspections) by experts, we have held briefings about the details of the amendment throughout the country and undertaken other rigorous efforts to fully educate consumers and real estate brokers.

In addition, we established the “Anshin-R-Jutaku” program to bestow existing housing with recognition when its earthquake-resistance and other characteristics are of a high enough quality that consumers can purchase them with a sense of security. We began implementing the program in December 2017.

#### (v) Upgrade to safe and higher-quality housing stock through rebuilding or renovation

Housing investment has major ramifications for the economy, and plays a substantial role as a key element of internal demand. We are driving forward with housing investment to improve housing quality by encouraging the improvement of earthquake resistance, insulation and other energy-efficient properties, and durability through such efforts as rebuilding housing that is not sufficiently earthquake resistant and otherwise updating old stock, and renovating housing to make it universally accessible.

In addition, the Act to Partially Amend the Act on Special Measures concerning Urban Reconstruction, etc., for encouraging the reconstruction of housing complexes was established in June 2016 and enacted in September of that year.

#### a. Preparing the market environment in which consumers can remodel their homes without worry

Consumers planning to remodel their homes are concerned about how much the remodeling will cost them and how to select the right contractors. Reassuring worried consumers is essential to expanding the home remodeling market.

Efforts currently taken in this regard include the Check Quoted Remodeling Costs for Free service available from the Housing Telephone Consultation Desk at the Center for Housing Renovation and Dispute Settlement Support, in which consumers can receive consultation on specific quotations, and Free Expert Consultation Programs at local bar associations.

In addition, the MLIT is promoting initiatives so that consumers can remodel their homes without worry, such as the Remodeling Defect Liability Insurance Program, an insurance package that combines an inspection on remodeling works in progress with warranties against possible defects in the works or the large-scale repair work liability insurance program for large-scale apartment building repairs.

Also, the Association of Housing Warranty Insurers website features a list of general contractors who fulfill the requirements that make their work eligible for the insurance; consumers can refer to this list when selecting general contractors.

Further, under the “Housing Renovation Business Organization Registration System,” we are working on building an environment in which there is a healthy development of the housing renovation business and consumers renovate their

homes with confidence, by having housing renovation business operators that meet certain standards registered to ensure that the work of housing renovation businesses is properly managed and information can be provided to the consumers.

(vi) Promote the use or elimination of increasing vacant homes

The MLIT encourages municipal governments to develop the Vacant Housing Countermeasure Plan, depending on their local circumstances, based on the Vacant Houses Special Measures Act, which was fully enforced in May 2015 (447 municipalities have completed their plans (as of October 1, 2017)), which promotes the use and removal of vacant houses and buildings, and reinvigorates circulation of housing.

(vii) Housing industry growth that contributes to a strong economy

To contribute to the realization of a strong economy, we are encouraging the expansion of the housing industry by promoting the development of high-quality wooden housing and buildings, supporting the cultivation of skilled woodworkers and other people to build them, the development and diffusion of new technologies such as cross-laminated timber (CLT), and the creation and expansion of new business markets involving housing, such as the use of IoT.

(viii) Maintain or improve the appealing aspects of residential areas

In line with the features of the region, including nature, history, culture etc. aiming to create not only individual houses but also to enrich the living environment and the community and are striving to maintain and improve the appeal of residential areas by forming prosperous communities and improving the safety of residential areas by improving crowded urban areas and the like.

## (2) Comprehensive, Systematic Promotion of Measures

### (i) Housing finance

It is important that a variety of mortgages, which include short-term adjustable-rate or long-term fixed rate type, are stably available so that consumers can choose and obtain houses in the housing market.

The Japan Housing Finance Agency offers securitization support businesses to support the availability of long-term, relatively low fixed-rate mortgages from private financial institutions. Its operations include Flat 35 (Purchase Program), which consolidates housing loan receivables of private financial institutions, and Flat 35 (Guarantee Program), which supports private financial institutions themselves becoming originators<sup>Note</sup> to handle the securitization. For houses that are entitled to Flat 35, property inspections are carried out against a defined set of technical requirements, such as durability, to assure their quality. In addition, the framework of the securitization support service has been leveraged to launch Flat 35S, which reduces the interest rate of loans for the acquisition of houses that meet any one of the performance requirements: earthquake-resistance, energy-saving performance, barrier-free readiness, and durability/modifiability, for the first 5 years of repayment (for the first 10 years for long-life quality housing, etc).

The Agency also provides direct financing services in those areas that are significant in policy but difficult to be conducted by private financial institutions, such as financing housing designed for disaster recovery or elderly rental housing with supportive services.

**Note** A business enterprise that possesses assets to be liquidated. An originator raises funds by securitizing its assets, by transferring its credit, real estate properties, etc. to a special-purpose company.

## (ii) Housing tax system

In order to promote the circulation of existing housing and the invigoration of the market for renovated houses, the FY2018 tax reform introduced a two-year extension of the preferential tax measures for the registration and license tax in cases where buyback-resale businesses acquire existing housing that was improved to a certain level, and expanded the scope of preferential tax measures to reduce the real estate acquisition tax imposed on buyback-resale businesses when they sell existing housing that they have acquired and renovated to an extent to end-users to include the property as well as the house in cases where the house in question is a Anshin-R-Jutaku. The scope of preferential tax measures for the real estate acquisition tax imposed when existing housing that does not satisfy earthquake-resistance standards is acquired, and repair work to make the housing meet earthquake-resistance standards is performed prior to move-in, was also expanded to include the property as well as the house. Furthermore, in view of reducing the initial burden of those who acquire housing, improving residential standards and forming quality housing stock, the application of property tax reduction for new housing was extended for two years.

## 2 Supply and Utilization of Good Housing Land

### (1) Land Price Trends

The official land prices in Japan for 2018 (as of January 1, 2018) showed that the average residential land price increased for the first time in 10 years; the average prices of commercial land and those of all categories of land use increased for the third consecutive year. In each of the three major metropolitan areas, the average land price increased for both residential and commercial land. In Greater Osaka, although residential land prices increased only slightly, commercial land prices increased at the greatest rate of the three major metropolitan areas. In regional cities, the rate of decline of residential land prices continues to decrease, and commercial land prices increased for the first time in 26 years. In addition, the average land price of all categories of land use held steady against decline for the first time in 26 years. In the four cities of Sapporo, Sendai, Hiroshima and Fukuoka, the average land prices increased in all categories of land use, and are showing signs of increasingly strong growth.

### (2) Present Status and Problems in Housing Land Supply

We are steadily implementing housing land measures based on population and household trends. The Urban Renaissance Agency now works only on the new town projects that have already been initiated. The MLIT also supports the development of public facilities relevant to the development of housing land, and offers preferential tax measures to promote the supply of housing land furnished with a good dwelling environment.

### (3) Using Fixed-term Land Leases

A fixed-term land lease—in which the land lease ends for certain at the determined contract term and there is no renewal of the land lease—is an effective system for making residential acquisition at a low cost possible.

In order to spread this system smoothly, we are conducting the Fact-finding Investigations of the Use of Fixed-term Land Leases by Public Entities.

### (4) Revitalizing Aging New Towns

The large-scale urban housing areas (New Town) that were systematically developed mainly in the suburbs of the metropolitan areas during the economic boom period are facing issues of decline in community vitality resulting from the quickly aging population and the continued decrease in population. There is a growing need for renewing the dilapidated housing and communal facilities as well as improving the functions that support daily life, in order to renovate these new town areas into cities that are easy to live in for everyone.

Also, in order to promote initiatives by residents, business owners, landowners/leaseholders and others with the aim of maintaining and enhancing good regional environments and regional value to contribute to the revitalization of aging new towns, we establish liaison councils that comprise local governments, private business operators and others for the revitalization of housing developments, and provide information, hold discussions and make other efforts regarding methods of promotion and examples of initiatives.

## Section 2 Realizing Comfortable Living Environments

### 1 Developing City Parks and Creating a Good Urban Environment

City parks are key urban facilities that fulfill a wide variety of functions, from serving as recreation spaces for people and as hubs for regional tourism and activity to creating good urban environments and improving urban disaster preparedness. Thus, we are systematically establishing national parks throughout Japan, and using general subsidies for social infrastructure development to support local governments' efforts to establish city parks and the like.

In addition, in April 2016, Subcommittee for Urban Management for a New Era under the Panel on Infrastructure Development set out policies for improving stock effects, accelerating public-private collaboration, and creating more flexible usage of city parks and the like to realize the potential of city parks of the future.

As of the end of FY2016, city parks were maintained at 108,128 locations nationwide, covering approximately 125,423 ha, or about 10.4 m<sup>2</sup> per capita. In FY2017, 40.05 million people visited national parks, with 17 locations being developed and maintained.

Regarding green spaces, etc., in urban areas, the MLIT is providing comprehensive support in financial and technical aspects, pursuant to the initiatives based on the "Green Master Plan" formulated by municipalities to properly respond to global environmental issues, such as global warming and biodiversity preservation, and to aim at realizing green-rich city environments by preserving and creating good natural environments.

In addition, we are driving forward with efforts to realize city development in which cities coexist with greenery and agriculture, such as by surveying initiatives that contribute to the formation of good urban environments that are in harmony with green spaces and farmland and the exhibition of the multitude of functions of urban agriculture.

In addition, along with holding events such as national "Protecting Greenery" gatherings and National City Greening Fairs to gain public awareness regarding greening, the MLIT is working on various measures such as awarding certificates of commendation for people promoting greening, as well as evaluating/certifying greening/green area conservation efforts by businesses.

To intensify efforts to form a green urban environment, open spaces such as parks, green spaces and farmland must exhibit a multitude of functions, and measures must be taken to tackle various challenges, such as the existence of areas with low parkland area per capita, the progression of the deterioration of park facilities, and the decrease of urban farmland that constitutes valuable green space in cities. In addition, the Basic Plan on Promotion of Urban Agriculture was adopted by a Cabinet decision in May 2016, and urban policy has changed to include urban farmland as a crucial part of cities, while indicating the direction of important measures.

In light of the above, the Bill to Partially Amend the Urban Green Space Conservation Act was promulgated in May 2017, and portions of it were enacted in June of that year with the goals of further promoting the conservation of green spaces in cities, the greening of cities and the appropriate management of urban parks, and contributing to the formation of quality urban environments through efforts to systematically conserve farmland within cities. The bill contains provisions to, among other things, relax area requirements in productive green zones and to establish several systems, including a system to certify plans to establish and manage green spaces opened to citizens through the establishment of green spaces on the same level as parks by NPOs and other private entities using open land and the like, a system to determine through

Figure II-5-2-1

Miharashi Hills of Hitachi Seaside Park, a Reviving Tourism Base (Hitachinaka City, Ibaraki Pref.)



Source) MLIT

public invitation who can establish and manage park facilities, and a rural residential area system for preserving good living environments in harmony with agriculture. In addition, the FY2018 tax reform called for the implementation of measures required for the tax breaks associated with the enforcement of the rural residential area and specified productive green zone systems scheduled for April 1, 2018.

## 2 Advancing Roads that Prioritize Pedestrians and Bicycle Riders

### (i) Creating people-oriented, safe, and secure walking spaces

To achieve social safety and security, it is important to make people-oriented walking spaces that assure pedestrian safety. In particular, based on the results of an emergency joint inspection that was carried out in FY2012, we are advancing efforts to improve school routes used by children who walk to school. Schools, the Board of Education, road administrators, police, and other related organizations have worked together to implement traffic safety measures such as maintaining sidewalks, painting colors on curbs, and installing guardrails, as well as implementing joint periodic inspections based on the “School Route Traffic Safety Program” to ensure the safety and security of children through these enhanced measures.

In addition, on March 30, 2018, the Act to Partially Amend the Road Act was established with the addition of “cases where specifically required due to extremely narrow walkways” to the scope of occupancy restrictions in order to ensure the safe, smooth passage of pedestrians and wheelchairs.

### (ii) Creating a safe and comfortable cycling environment

Over the past 10 years, the total number of traffic accidents that resulted in death or injury has decreased by 40%, but the number of accidents involving bicycles colliding with pedestrians has decreased by 10%, which indicates a need for a safer, more comfortable cycling environment. Therefore, the MLIT is working together with the National Police Agency to spread the word about Guidelines for Creating a Safe and Comfortable Cycling Environment. In addition, the Act on Promotion of Use of Bicycles was enacted in May 2017, and efforts are continually made to promote the use of bicycles, such as the increased promotion of the creation of bicycle network plans and bicycle lanes, mainly in roadways, effective public awareness campaigns on compliance with the traffic rules, and the dissemination of information that contributes to the promotion of tourism in regions where bicycles are used.

### (iii) Developing quality walking spaces

The MLIT supports the development of pedestrian roads and rest facilities that create high quality pedestrian environments and that also tie together rich scenery and abundant nature with historical sites, in order to develop regions that are attractive and that promote health through walking.

### (iv) Developing road signs that are easy to understand

The MLIT is working on the installation of road signs that are easy to understand to help guide pedestrians who are in an unfamiliar place to their destinations.

### (v) Building a flexible system of road administration

To implement a flexible system of road administration that provides a diversity of road functions tailored to the needs of the local residents - including safe walking spaces and places of regional buoyancy and human exchange, and making motor-vehicle traffic smoother and safer - the MLIT is implementing: (a) preferential measures, such as the construction of new sidewalks on national or prefectural highways by municipalities other than the designated cities; (b) a system for suggesting that municipalities refurbish pedestrian safety facilities; (c) preferential measures for road occupancy, such as boulevard trees planted by NPOs or others, street lamps, etc.; (d) preferential measures for the administration of offstreet convenience facilities to keep roads and roadside facilities under integrated management; (e) preferential measures for road occupancy regarding facilities installed by road cooperation groups, etc.; and (f) flexible management of permits for road occupation for regional activities involving the use of roads.

## Section 3 Realizing Traffic with Enhanced Convenience

### (1) Advancing Implementation of Integrated Urban/Regional Traffic Strategies

Intensive city planning that ensures safe, smooth traffic requires a cross-sectional approach to the available transportation modes—such as cycling, railway, and bus—from the users' standpoint, rather than reviewing the transportation modes or their operators individually. To this end, each local government should inaugurate a council composed of public transportation operators and other stakeholders and allow the council to define a future vision of its cities and regions, and the types of transportation services to be made available, so that it can formulate “Integrated Urban/Regional Transportation Strategies” that cover relevant traffic measures and working programs, with the stakeholders taking their respective shares of responsibility for implementing measures or projects. (As of March 2018, Integrated Urban/Regional Transport Strategies had been formulated or were being formulated in 101 cities.) The national government is expected to support the implementation of integrated and strategic packages of traffic projects, such as the development of LRT<sup>Note</sup> pursued according to the Strategies, as well as city planning programs.

### (2) Approaches to Improve Public Transportation Usage Environment

For local public transportation, the MLIT supports the deployment of LRT, BRT, IC cards and other less constrained systems through the implementation of local public transportation assurance, maintenance and improvement projects, etc., to accelerate the improvement of local public transportation usage environment as part of its barrier-free community planning effort. In FY2017, efforts such as deploying light rail vehicles were made on the Iyo Railway and others.

### (3) Upgrading Urban Railway Networks

Traffic congestion in the major metropolitan areas during commuting to and from work and school by train is improving substantially as a result of efforts such as establishing new lines, quadruple tracking and adding cars onto trains. However, the rate of congestion on some routes exceeds 180%, and requires continued efforts to mitigate congestion. Efforts in progress include quadruple tracking of Odakyu Electric Railway's Odawara Line and the like funded by the Designated Urban Railway Development Reserve Program.

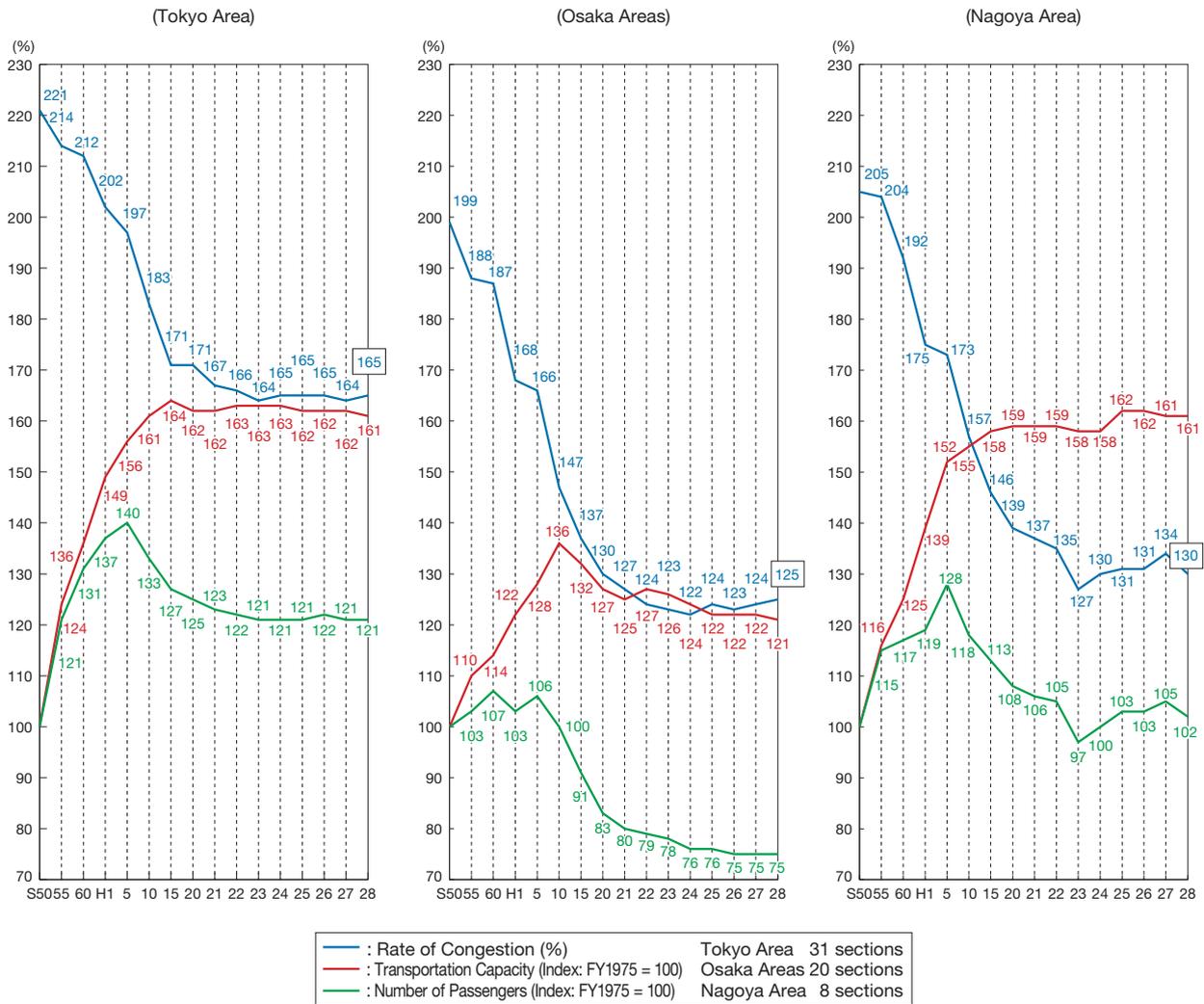
In addition, we are driving forward with efforts to improve user convenience by, among other things, continuing to develop the Kanagawa Eastern lines (Sotetsu - JR/Tokyu Through Line) by leveraging the Act on Enhancement of Convenience of Urban Railways, etc., a piece of legislation aimed at upgrading the speediness of existing urban railway networks, to further enhance the urban railway networks.

In April 2016, the Council of Transport Policy issued a report regarding the future of urban railways in the Tokyo Metropolitan Area, which sets out ways for urban railways and the like to contribute to the strengthening of competitiveness on the world stage and other ways for the urban railways of the Tokyo Metropolitan Area to reach their potential, and we are engaged in efforts to realize that potential.

**Note** Short for Light Rail Transit. A next-generation rail transit system that offers excellent characteristics derived from the use of light rail vehicles (LRV), improvements to rails or stops—such as ease of getting on and out—punctuality, speediness and passenger comfort.

Figure II-5-3-1

Changes in the Average Rate of Congestion, Transportation Capacity and Passenger Capacity in the Three Major Metropolitan Areas (Index: FY1975 = 100)



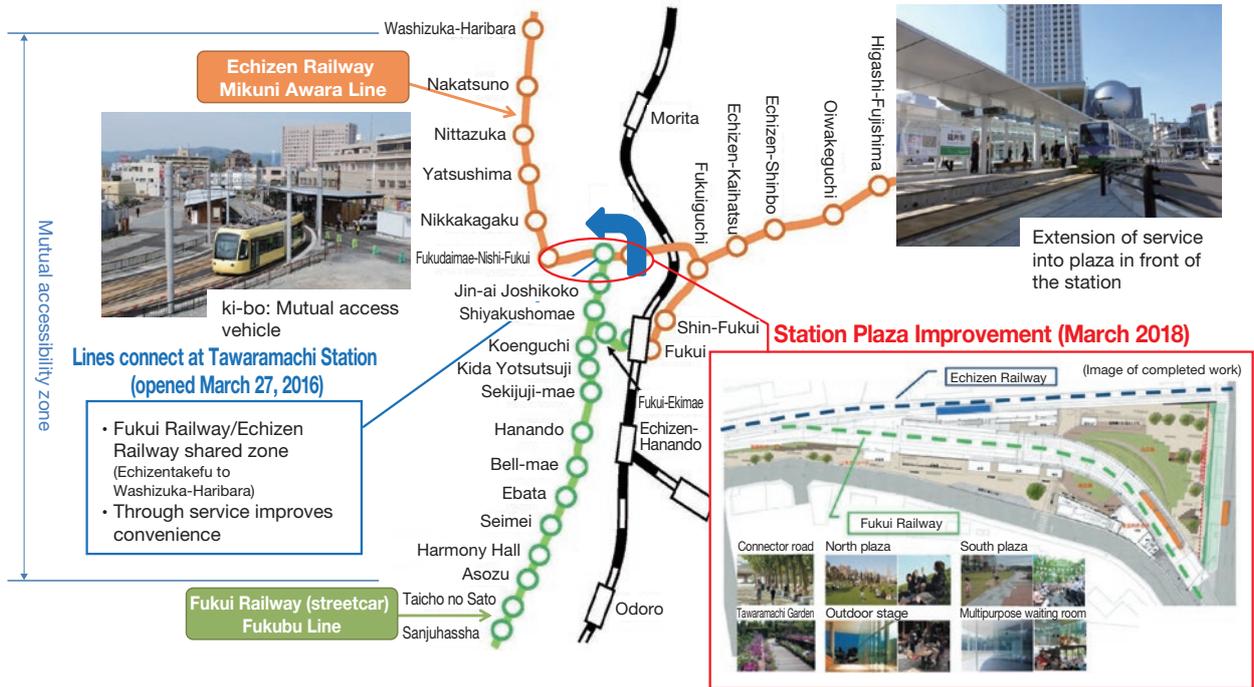
Source) Prepared by the MLIT from "Urban Transport Annual Report" compiled by the Institution for Transport Policy Studies and other relevant literature

#### (4) Development of Urban Monorails, New Transport Systems, and LRTs

The MLIT promotes the development of LRTs to encourage users' migration to public transportation facilities in order to streamline urban traffic flow, lighten environmental loads, and revitalize central urban areas, while keeping vulnerable road users assured of mobility in this era of aging population and falling birthrates. In FY2017, in Fukui City, the improvement of the plaza in front of Fukui Station that linked the streetcar and railway lines was completed. In many cities, efforts continue to rebuild public transportation networks through initiatives such as making streetcar services universally accessible.

Figure II-5-3-2

Development of Mutual Accessibility/Extension of Service into Plaza in Front of the Railway Station (Fukui City)



Source) Fukui City

(5) Augmenting the Convenience of Bus Usage

The convenience of bus usage has been augmented by improving the punctuality and speediness features of bus services by using a Public Transportation Priority System (PTPS) and bus lanes, introducing bus location systems that provide information about the location of buses in service, and IC card systems that facilitate smooth boarding and disembarking.