White Paper on
National Capital Region Development
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Summary

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Ministry of Land, Infrastructure and Transport
Entire Composition

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This document is a report of the situation relating to the formulation and implementation of the National Capital Region Development Plan pursuant to the provision of Article 30-2 of the National Capital Region Development Act (Act No. 83 of 1956).
Although population in Japan has been entering a downturn due to the advance of the declining birthrate and aging society, it is expected that population will increase over the next decade or so in the National Capital Region, especially in the Tokyo region. However, looking at population changes in the Tokyo region between 2000 and 2005, it is not that population has increased in the entire Tokyo region but population has been decreasing at the outer edge of the Suburban Development and Redevelopment Area while it has been on a strong increasing trend in the inner-city area of Tokyo (Figure 1). This reveals that there has been a significant change in the past population trends in which the Suburban Development and Redevelopment Area accepts population that flows in the National Capital Region, thereby contributing to restraining a rapid population increase in the Urban District.

Therefore, this section analyzes the status of household movements and characteristics thereof in each area, focusing on the inner-city area of Tokyo in which population trends have notably changed between 2000 and 2005 as well as municipalities where population is on the decrease in the Suburban Development and Redevelopment Area.
1. Status of household movements, etc. in the inner-city area

Looking at changes in population in the 23 wards of Tokyo between 1990 and 2005, population has turned upward (Figure 2).

Thus, the trends of households and characteristics thereof are analyzed below, focusing on three inner-city wards of Tokyo (Chiyoda Ward, Chuo Ward and Minato Ward) for which the population growth rate between 2000 and 2005 was particularly high at 15% or higher.
(1) Changes in the excess of move-ins/move-outs of households

Looking at the status of excess of move-ins and move-outs of households in the three inner-city wards in each period of five years up to 1993, 1998 and 2003, the number of households that moved out of these wards during the five-year period up to 1993 exceeded the number of households that moved in. However, that number decreased for the five-year period up to 1998, and the number of households that moved into these wards was in excess for the five-year period up to 2003. In particular, the trends of households have significantly changed in the Urban District (except the three inner-city wards) (Figures 3 and 4).

Figure 3 Status of excess of move-ins and move-outs of households in the three inner-city wards

Note: Covering households that moved during each period of five years up to 1993, 1998 and 2003.
Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing Survey” and “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

Figure 4 Status of excess of move-ins and move-outs of households in the three inner-city wards (1993 and 2003)

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing Survey” and “Housing and Land Survey” (Ministry of Internal Affairs and Communications).
Note: Covering households that moved during each period of five years up to 1993 and 2003.
In addition, looking at the excess of move-ins by ward for the five-year period up to 2003 when move-ins were in excess, the excess was particularly large in terms of Chuo Ward (Figure 5).

Moreover, looking at the percentage of households that moved into or out of the three inner-city wards by age of the head of household, households with a head aged 25-44 account for a high percentage, occupying over 50% (54.2% of households that moved in and 56.6% of household that moved out). Households with a head aged 65 and above make up a low percentage of the total households that moved in or moved out, accounting for 5.5% of those that moved in and 11.3% of those that moved out (Figure 7).
Figure 6 Status of excess move-ins and move-outs in the three inner-city wards by age of the head of household

Note: Covering households that moved during five years up to 2003.
Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

Figure 7 Percentage of households that moved into or out of the three inner-city wards by age of the head of household

Note: Covering households that moved during five years up to 2003.
Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).
With regard to households with a head aged 35-44 and those with a head aged 65 and above, looking at the status of households that moved into or out of the three inner-city wards by kind of house, move-ins to an owned house (residential complex) were in largest excess for households with a head aged 35-44. On the other hand, for households with a head aged 65 and above, move-outs from an owned house (detached house) were in largest excess, and these households moved out to various areas (Figure 8).

Note: Covering households that moved during five years up to 2003. The kind of house before move-out is indicated in the case of excess of move-outs while the kind of house after move-in is indicated in the case of excess of move-ins.

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

2. Status of municipalities where population is on the decrease in the Suburban Development and Redevelopment Area

With regard to municipalities where population has decreased between 2000 and 2005 in the Suburban Development and Redevelopment Area, the status of household movements and residential plans, etc. are analyzed below in units of municipalities (municipalities where population is on the decrease).
(1) Recent trends of household movements in municipalities where population is on the decrease

Looking at the status of household movements from municipalities where population is on the decrease during a five-year period up to 2003, move-ins from areas other than the Urban District and Suburban Development and Redevelopment Area were in excess. However, in relationship to the Urban District and the Suburban Development and Redevelopment Area, move-outs exceeded move-ins. Therefore, move-outs exceeded move-ins by about 11,000 on the whole. Looking at the destination of excess move-ins and move-outs, move-outs to the Suburban Development and Redevelopment Area (within 30km) were in excess by 1,600, while move-outs to other Urban Districts and Suburban Development and Redevelopment Areas (within 30-40km, and 40km or more away) were in excess by about 4,200-4,800 (Figure 9). On a basis of age of the head of household, move-ins exceeded move-outs for households with a head aged 65 and above while move-outs exceeded move-ins for households with a head aged less than 65. This situation is opposite to the situation in the three inner-city wards (Figure 10).

(2) Characteristics of households and houses in municipalities where population is on the decrease

Looking at the percentage of each kind of house in 2003, that of owned houses (detached houses) is higher in municipalities where population is on the decrease than in...
other Suburban Development and Redevelopment Areas, while that of private rented houses (residential complexes) is lower in municipalities where population is on the decrease than in other Suburban Development and Redevelopment Areas (Figure 11). In addition, looking at the percentage of households by age of the head of household, that of households with a head aged 65 and above is higher in municipalities where population is on the decrease than in other Suburban Development and Redevelopment Areas, and that of households with a head aged 55-64 is also high in municipalities where population is on the decrease (Figure 12). In municipalities where population is on the decrease, the percentage of households with an elderly head is expected to further increase in the future due to the trend of excess move-outs of younger generations and excess move-ins of elderly persons.

![Figure 11 Percentage of each kind of house in the Suburban Development and Redevelopment Area (2003)](image)

**Figure 11** Percentage of each kind of house in the Suburban Development and Redevelopment Area (2003)

- Owned house (detached house)
- Owned house (residential complex)
- Owned house (others)
- Public rented house
- Private rented house (detached house)
- Private rented house (residential complex)
- Private rented house (others)
- Company’s house
- Unknown

**Municipalities where population is on the decrease**

- 60 (6.0)
- 2.5
- 15.1

**Other Suburban Development and Redevelopment Areas (except municipalities where population is on the decrease)**

- 41 (4.1)
- 1.5
- 26.1

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

![Figure 12 Percentage of households in the Suburban Development and Redevelopment Area by age of the head of household (2003)](image)

**Figure 12** Percentage of households in the Suburban Development and Redevelopment Area by age of the head of household (2003)

- Under 25 years old
- 25-34 years old
- 35-44 years old
- 45-54 years old
- 55-64 years old
- 65 years old and above
- Unknown

**Municipalities where population is on the decrease**

- 14.4
- 28.0
- 24.1
- 20.6
- 22.5

**Other Suburban Development and Redevelopment Areas (except municipalities where population is on the decrease)**

- 14.6
- 18.7
- 18.8
- 20.0
- 65.0

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

In municipalities where population is on the decrease, the percentage of houses that are located 2,000m or more from the nearest station or in the areas other than the Urbanization Promotion Areas is higher compared to that in other Suburban Development and Redevelopment Areas (Figures 13 and 14).
(3) Status of vacant houses and recent supply of houses in municipalities where population is on the decrease

Looking at the changes in the rate of vacant houses in the Suburban Development and Redevelopment Area between 1998 and 2003, the rate decreased from 10.5% to 10.3% in other Suburban Development and Redevelopment Areas while it increased from 10.2% to 11.0% in municipalities where population is on the decrease (Figure 15). In addition, looking at the breakdown of vacant houses in 2003, the percentage of houses for rent or sale is lower in municipalities where population is on the decrease than in other Suburban Development and Redevelopment Areas (Figure 16).

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).
In municipalities where population is on the decrease, the percentage of vacant houses that are located in the areas less than 1,000m from the nearest station or within the Urbanization Promotion Areas is higher than the percentage of houses as a whole that are located in these areas, indicating that vacant houses are located near the urban areas in municipalities where population is on the decrease (Figures 17 and 18).

**Figure 17** Distribution of vacant houses and all houses in municipalities where population is on the decrease by distance from the nearest station (2003)

**Figure 18** Distribution of vacant houses and all houses in municipalities where population is on the decrease by type of city planning area (2003)

Data: Prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Housing and Land Survey” (Ministry of Internal Affairs and Communications).

Looking at the changes in the number of houses between 1998 and 2003 by type of ownership, in other Suburban Development and Redevelopment Areas, the number of houses increased for relatively varied types of ownership, specifically, owned house (detached house), owned house (residential complex) and private rented house (residential complex). However, in municipalities where population is on the decrease, increase in the number of owned houses (detached houses) is prominent (Figures 19 and 20).
Looking at the rate of change in the number of houses between 1998 and 2003 by type of city planning area, although the rate is lower in municipalities where population is on the decrease than in other Suburban Development and Redevelopment Areas, a certain amount of houses have been supplied there. Looking at the areas outside the Urbanization Promotion Areas, the rate decreased by 1.3% in other Suburban Development and Redevelopment Areas, while it increased by 1.8% in municipalities where population is on the decrease. It is assumed that housing supply is not concentrated on the urban areas but is of low density in municipalities where population is on the decrease (Figure 21).
Comparing residential trends in municipalities where population is on the decrease and in other Suburban Development and Redevelopment Areas based on the above results, as a characteristic of municipalities where population is on the decrease, it seems that the hollowing of existing residential land and the expansion of low-density residential land to peripheral areas are in progress in parallel with population decrease.

In municipalities where population is actually decreasing, there are districts that were converted into residential land all at once by the end of a decade starting from 1965, in which move-outs of younger population due to separation of households, as well as decrease in the number of households and increase in vacant houses and outlets incidental thereto have progressed and which are behind in the reconstruction and reutilization of these vacant houses and outlets.

On the other hand, in the periphery of these urban areas where population is on the decrease, there is the situation where households with a head aged 30s and 40s move in there as it is relatively easy to acquire residential land due to residential land development. This is considered to be an ineffective situation from the standpoint of municipalities as a whole.

It is necessary in the future to encourage people to have their residence downtown and to promote suppression of low-density development in the periphery of urban areas toward maintaining vitality in the suburbs of the National Capital Region.
Section 2 Trends of site location of the industry and universities

(Industry)

1. Regarding the trend of return to Japan in the industry

The Japanese economy has been on a recovery trend since the beginning of 2002, and equipment investment, production and export have also been increasing in the manufacturing industry. Amid further globalization of the world economy, manufacturers conduct sharing of functions with the aim of producing products in the best suited area in the world and selecting the best suited location for selling products in the areas where the products are needed. Under such circumstance, manufacturers have been increasing their site locations within Japan on the basis of reacknowledgement of the superiority of Japan in terms of the business environment. Behind the reevaluation of domestic site locations for the manufacturing industry is the necessity for the ability to gather information to precisely understand increasingly sophisticated and diversifying domestic consumer needs in a short time and for the input of products in the market in a short period through smooth transition to production based on a direct connection between the market and production.

2. Regarding the trends of site locations in the industry

Within the National Capital Region, the share of the manufacturing industry in the Tokyo region (Saitama Prefecture, Chiba Prefecture, Tokyo Metropolis and Kanagawa Prefecture) to nationwide has been on the decline so far. However, amid the return to Japan phenomenon in the manufacturing industry, both the amount of planned equipment investment in the Tokyo region and its share to nationwide in fiscal 2005 significantly increased (Figure 1).
Figure 1 Amount of investment in the Tokyo region and its share in the amount of investment nationwide

Note: Figures up to fiscal 2004 are actual showing while figures for fiscal 2005 are those planned.
Note: The survey covers all types of business, excluding the agricultural industry, forest industry, finance and insurance industry, and pharmaceutical industry, targeting in principle private businesses with a capital of 100 million yen or more.
Note: Equipment investment means domestic investment in one’s own tangible fixed assets that are made for purchasing, or improving or developing buildings, architectures, machineries and equipment, or land (excluding those for subdivision for sale in the real estate industry).
Data: Prepared by the National and Regional Planning Bureau based on the data of the Development Bank of Japan.

Furthermore, in recent years, there have been increasing site locations for research institutes and R&D-based plants in the manufacturing industry.

Equipment investment in the manufacturing industry in the Tokyo region increased for electric machinery and general machinery, including home information appliances and electronic components, based on the purpose of increasing the capacity of equipment and promoting investment in R&D. Equipment investment in the non-manufacturing industry has been increasing mainly for real estate, railway, transport, etc. On the other hand, equipment investment in the manufacturing industry in the Northern Kanto area (Ibaraki Prefecture, Tochigi Prefecture, Gunma Prefecture and Yamanashi Prefecture) increased for iron and steel, general machinery, and chemicals, based on the purpose of improving equipment and increasing capacity. Equipment investment in the non-manufacturing industry increased for electricity and transport, based on the purpose of promoting security and safety measures.

In addition, possible causes of increasing site locations for research institutes and R&D-based plants in recent years are as follows: (i) businesses emphasize mainly the ensuring of engineers and other personnel and proximity-based collaboration among R&D departments, main office, existing plants, affiliated businesses and users; (ii) it has become easy to ensure required land due to decline in land prices and liquidation in real estate transactions; and (iii) regulations on site locations for plants were relaxed due to
abolition of the system to restrict plants, etc. in July 2002.

Example of a research institute in the Tokyo region (Techno Hub Innovation Kawasaki)

R&D at the Techno Hub Innovation Kawasaki

Photo: Kawasaki City

Photo: Kawasaki City

(University)

1. Regarding site locations for universities, etc. in the inner-city area

In recent years, universities, etc. in the Tokyo region have tended to be relocated from the suburbs to the inner-city area and to reinforce their functions in the inner-city area (Figure 2).

Figure 2 Trend of campuses of universities, etc. in the inner-city areas

Data: Prepared by the National and Regional Planning Bureau based on the data of the Research Institute for Urban & Environmental Development, Japan and the data of the National and Regional Planning Bureau.
The following facts can be cited as the causes of such trends: (i) against the backdrop of relaxation of location regulations due to abolition of the system to restrict plants, etc. in 2002, universities, etc. were required to relocate their campuses to highly convenient sites for ensuring of undergraduate students which has become increasingly difficult due to declining population of those aged 18 and (ii) cost reduction was aimed at through aggregation of campuses.

Moreover, industry-academia-government collaboration has been promoted in parallel with such reinforcement of functions in the inner-city area, and universities have been developing increasingly multifaceted functions in addition to the ensuring of adult students through establishment of new professional graduate schools.

Section 3 Trends relating to measures against earthquakes that occur directly under the capital

In terms of the National Capital Region, Great Kanto Earthquake-class earthquake (magnitude 8), which has been observed on a 200 to 300-year cycle, and magnitude 7-class inland earthquakes that occur during the interval are assumed. In particular, a magnitude 7-class earthquake is expected to occur several times in the next 100 years. Furthermore, since central political, administrative, and economic functions, etc. are cumulated in high density in the National Capital Region, it is expected that a large-scale earthquake will cause enormous human/physical damages as well as economic damages. It is an urgent task to reduce such expected damages, and thus, relevant organizations have been making various efforts.

1. Efforts by the Central Disaster Prevention Council

The Central Disaster Prevention Council established the “Task Force on Measures against Earthquakes that Occur Directly under the Capital” in 2003 to promote consideration on measures against inland earthquakes from the viewpoint based on the characteristics of the capital, and published assumed damage to be caused by earthquakes that occur directly under the capital in February 2005. Regarding earthquakes that occur directly under the capital, it was estimated that a magnitude-7.3 earthquake centered on the north of the Tokyo Bay would cause up to 11,000 deaths and 0.85 million buildings completely destroyed or destroyed by fire.

Based on such assumed damage, the “Outline of Measures against Earthquakes that Occur Directly under the Capital” (Figure 1) was formulated in September 2005. Based on the outline, the “Earthquake Disaster Prevention Strategy,” which sets quantitative disaster reduction goals and specific measures, and the “Guidelines for Emergency
Measure Activities,” which set the specific role, etc. of each organization at the time of occurrence of an earthquake, were formulated in April 2006. Consideration on the “Guidelines for Economic Measures at the Time of an Earthquake” is scheduled to be started in fiscal 2006.
Figure 1 Brief overview of the Outline of Measures against Earthquakes that Occur Directly under the National Capital

Chapter 1 Ensuring of continuous central capital functions

Central capital functions

Political center

Administrative center

Economic center

Lifeline and infrastructure

Goal

Ensuring continuous functions during a period of around three days from the occurrence of a disaster when emergency measures are taken

Example:
(Central organizations of the capital)

- Improving earthquake resistance of buildings
- Improving back-up functions
- Formulating and implementing BCPs (business continuity plans)

(Lifeline/information infrastructure providers and traffic infrastructure providers)

- Multiplexing and improving earthquake resistance
- Prioritized restoration

Chapter 2 Response to massive damages

Promoting preventive measures in a planned and prompt manner

- Improving earthquake resistance of buildings
  (National and local governments)
  - Utilizing subsidy systems and considering the establishment of a tax system
  - Developing related systems (instruction on and public announcement of modifications for improving earthquake resistance, etc.)
  - Improving earthquake resistance of public facilities

- Measures against fire
  (National and local governments)
  - Area-wide development
  - Improving evacuation sites and zones for blocking spread of fire
  - Increasing the fireproof level

- Measures for ensuring lifeline and infrastructure
  (Lifeline/information infrastructure providers and traffic infrastructure providers)
  - Multiplexing and improving earthquake resistance

Chapter 3 Effective promotion of measures

Promoting measures against earthquake disasters through broad collaboration

- Formulating strategies for preventing earthquake disasters
- Guidelines for emergency measure activities
- Guidelines for economic measures at the time of an earthquake

Developing people’s movement

- Self-help
- Mutual help
- Public help

Reducing disasters through cooperation in the entire society

Coping with a mass of evacuees and those having difficulty in returning home

- Measures for evacuees
  (Local governments)
  - Ensuring evacuation centers
  - Presenting a wide range of menus, including use of vacant houses

- Measures for those having difficulty in returning home
  (National and local governments)
  - Notifying all citizens of the basic principle, that is, “do not blindly start moving”
  - Accommodating employees for a certain period of time

Improving the disaster prevention capacity of communities and companies

- Improving the disaster prevention capacity of communities
  (Local governments)
  - Supporting voluntary disaster prevention activities

- Improving the disaster prevention capacity of companies
  (Companies)
  - Formulating and implementing BCPs
  - Making contributions to communities

Establishing a wide-area disaster prevention system

- Wide-area collaboration system in the National Capital Region
- Maintaining security

Restoration and reconstruction measures

- Measures for disposing of waste due to an earthquake disaster

Data: Cabinet Office
2. Efforts by relevant ministries and agencies
(Improving earthquake resistance of buildings)

According to assumed damage from an earthquake that occurs directly under the capital, the number of buildings completely destroyed by shocks and the number of deaths are estimated to reach 0.15 million and about 3,100, respectively (in the case of a magnitude-7.3 earthquake centered on the north of the Tokyo Bay). Therefore, it is important to reduce damage by improving earthquake resistance. However, it is now estimated that approximately 25% of all houses do not have sufficient earthquake resistance. In addition, although improved earthquake resistance of public facilities, including public elementary and junior high school buildings, is requested, as these facilities serve as evacuation centers or bases for emergency operations at the time of an earthquake disaster, in fact, earthquake resistance has been improved at only about 50% of such facilities in many municipalities (Figure 2).

The Ministry of Land, Infrastructure and Transport revised the “Act for Promotion of Modification for Improving Earthquake Resistance of Buildings” in October 2005, and has promoted planned improvement of earthquake resistance and reinforced guidance to the owners, etc. of buildings, as well as expanded systems to support improvement of
(Improvement of earthquake resistance of traffic facilities)

For emergency/recovery operations after the occurrence of an earthquake disaster, smooth transport of people and supplies is indispensable. Therefore, ensuring of traffic functions becomes a challenge. Thus, improvement of earthquake resistance of traffic facilities has been promoted through formulation of a “Three-Year Program for the Anti-Seismic Reinforcement of Bridges for Emergency Transportation Routes and Others.”

(Development of core wide-area disaster prevention bases)

It is necessary to develop local disaster headquarters, which serve as the core of disaster control activities, including wide-area relief efforts and acceptance of supplies and other support from all over the country and other countries. The establishment of core wide-area disaster prevention bases has been promoted based on a park project in the Ariake-no-Oka district in Tokyo Metropolis and based on a port improvement project in the Higashi Ohgishima district at the Kawasaki Port.

(Support for continued business of companies after the occurrence of an earthquake disaster)

With the aim of supporting the formulation of BCPs (business continuity plans), the Cabinet Office published the “Business Continuity Guidelines” in August 2005 and the Ministry of Economy, Trade and Industry published the “Guidelines for Formulation and Implementation of BCPs by SMEs” in February 2006, so as to ensure that companies can continue their minimum necessary operations even after the occurrence of an earthquake disaster and can resume their business over as short a period of time as possible.

(Establishment of a system for wide-area dispatch of disaster medical assistance teams)

Disaster Medical Assistance Teams (DMATs) have been formed in various locations in the National Capital Region so as to ensure that doctors and nurses, etc. who have completed specialized training can offer medical services, including emergency medical care, at the emergency rehabilitation stage after the occurrence of an earthquake disaster. The Ministry of Health, Labour and Welfare provides training for doctors, etc. who participate in DMATs and register them, as well as formulated the “Guidelines for DMAT Activities in Japan,” which serve as guidelines when prefectural governments, etc. set an operational plan for DMATs, in April 2006 to promote strengthening of DMAT-related system.
3. Efforts by local governments

(1) Efforts at eight prefectures and cities

Eight prefectures and cities (Saitama Prefecture, Chiba Prefecture, Tokyo Metropolis, Kanagawa Prefecture, Yokohama City, Kawasaki City, Chiba City and Saitama City) have concluded the “Agreement on Mutual Support among Eight Prefectures and Cities at the Time of a Disaster,” which is an agreement on mutual support concerning wide-ranging matters that require collaboration at the time of an earthquake disaster. In addition, these prefectures and cities have concluded an agreement on support for people having difficulty in returning home at the time of a disaster with 13 businesses, including 24-hour stores, in 2005. According to this agreement, outlets of these businesses are positioned as “stations for supporting people to return home at the time of a disaster” and will offer running water and lend restrooms as well as provide information on evacuation at the time of occurrence of a disaster in order to support those having difficulty in returning home, etc.

(2) Efforts by the Tokyo Metropolitan Government, etc.

(Assumption of damage more specific to relevant areas)

Regarding assumed damage that should be presupposed when considering measures against earthquakes that occur directly under the capital, the Tokyo Metropolitan Government compiled assumed damage based on data more specific to the relevant areas on March 28, 2006. The government will launch the revision of its regional disaster prevention plan, etc. in light of the results.

(Efforts to improve earthquake resistance of buildings)

To promote improvement of earthquake resistance of buildings, including houses and condominiums, cities and wards in Tokyo Metropolis have their own subsidy systems (subsidy system for evaluation of earthquake resistance: 23 wards and 12 cities; subsidy system for improvement of earthquake resistance: 19 wards and seven cities).

The Tokyo Metropolitan Government started providing cities and wards in Tokyo with subsidies for costs for evaluation of earthquake resistance of wooden houses and condominiums in fiscal 2006. In particular, regarding evaluation of earthquake resistance of condominiums, the Tokyo Metropolitan Government has set a goal of urgently evaluating about 5,500 condominiums within three years from fiscal 2006.

(Efforts relating to measures for people having difficulty in returning home)

Shinjuku Ward and Chiyoda Ward carried out a drill on measures for people having difficulty in returning home on January 1, 2006 in cooperation with companies within the respective ward. In that drill, a drill on returning home on foot was conducted with
regard to each of four directions, specifically, Chiba, Saitama, Tama and Kanagawa. In conjunction with this drill, operational drills were conducted at the bases for supporting those having difficulty in returning home, including parks, and drills on the transmission of information about the status of traffic and disaster were also conducted.

4. Efforts by private organizations, etc.

Not only the government but also various bodies have been making efforts, including voluntary efforts of citizens’ groups to increase the awareness of disaster prevention, efforts of companies in the district relating to measures for those having difficulty in returning home, and medical experts’ efforts to provide medical support at the time of a disaster.

Companies located in Otemachi, Marunouchi and Yurakucho in Chiyoda Ward established a “neighborhood association for disaster prevention around Tokyo Station,” and have been carrying out the sharing of disaster prevention information and technology and disaster drills also in the normal situation in order to support those having difficulty in returning home at the time of a disaster. On January 17, 2006, the association hosted evacuation drills for those having difficulty in returning home targeting foreign residents in Tokyo. With the participation of about 60 foreign residents, practical drills were conducted, including emergency relief drills and drills on the transmission of English messages concerning evacuation by using cell phones.

Section 4 Review of the system of the metropolitan areas development plan

In the past, various systems based on the National Capital Region Development Act have aimed at controlling the concentration of industries and population mainly to the Urban District and deconcentrating central management functions. However, in the National Capital Region in a mature society, it is required to flexibly cope with wide-area issues while effectively utilizing existing accumulations and stocks.

Therefore, it was determined to consider desirable systems for metropolitan areas, including the National Capital Region, while ensuring consistency with the New National
Land Sustainability Plan. In March 2006, the “Expert Committee on the Study of Systems for Metropolitan Areas” was established in the National Capital Region Development Section, the Kinki Region Development Section and the Chubu Region Development Section within the National Land Council, and started specific considerations.
Chapter 2 Current State of the National Capital Region

This chapter describes the current state of the National Capital Region in terms of fields such as the industry, residency, the environment, and infrastructure investment.

Section 1 Status of population and the number of households

According to the preliminary figures of the Population Census in 2005, population in the National Capital Region was 42.37 million as of October 1, accounting for 33.2% of population nationwide and showing an increase of 1.05 million compared to the previous Population Census in 2000. In addition, although the population growth rate in each period of five years has continued to decrease in the past, it slightly expanded for this period from 2000 to 2005, reaching 2.5% (Figure 1).

Looking at the population growth rate by prefecture, population increased in the period from 1995 to 2000 in all prefectures in the National Capital Region. However, for the period from 2000 to 2005, the growth rate increased only in Tokyo Metropolis (4.2%) and Kanagawa Prefecture (3.5%), and population decreased in Gunma Prefecture, Ibaraki Prefecture and Yamanashi Prefecture (Figure 2).

According to the preliminary figures of the Population Census in 2005, the number of households in the National Capital Region as of October 1 was 17.23 million, accounting for 34.8% of households nationwide and showing an increase of 1.15 million households compared to the previous Population Census in 2000 (Figure 3).
Figure 2 Population growth rate by prefecture  

Figure 3 Changes in the number of households and the number of members per household in the National Capital Region  
(1970-2005)

Data: Figures 1 to 3 were prepared by the National and Regional Planning Bureau of the Ministry of Land, Infrastructure and Transport based on the “Population Census” (Ministry of Internal Affairs and Communications). However, figures for 2005 are preliminary figures based on the summary sheets.
Section 2 Status of functions that contribute to creating vitality

1. Recent trends of supply and demand of offices

The rate of vacant rented offices in the 23 wards of Tokyo rose by 0.8 points in 2003 due to a large supply of large-scale buildings in the 23 wards of Tokyo in 2003, and reached 6.9%. However, since then, the rate has turned downward along with economic recovery, and it was 4.0% at the end of 2005, the same level as in 2000 when IT-related businesses, etc. were showing active demand.

In addition, the rate of vacant rooms in good buildings with a certain scale and facility further significantly decreased due to a decline in the rate of vacant rooms for the 23 wards of Tokyo as a whole, and it was 1.1% as of the end of 2005. This is probably because relocation to a building in a better location or a higher-grade building is proceeding due to recent economic recovery (Figure 1).

2. Trends of agglomeration of software-related IT industries

The growth rate of the number of business offices for software-related IT industries around the Yamanote Line in Tokyo Metropolis (business offices located within a 1km radius from major terminal stations (standard stations)) in the past one year (October 2004-September 2005) was high in the eastern part of the Yamanote Line, covering from Akihabara, Kanda and Kudanshita to Ginza and Hamamatsucho, indicating a continuous steady growth of the number of business offices in the eastern part of the Yamanote Line. On the other hand, although the number of business offices has decreased in many areas in the western part of the Yamanote Line in the past, it is on the...
increase mainly around Ikebukuro, Shibuya and Ebisu (Figure 2). Though business offices for software-related IT industries around the Yamanote Line have tended to be sited mainly in the eastern large-scale redevelopment areas in the past, it seems that there have arisen movements toward siting business offices also in the western part.

The causes of a growing number of business offices for software-related IT industries in the eastern part of the Yamanote Line are the fact that a business environment involving many business chances is being created there due to improvement of the area’s impression through large-scale redevelopment and existence of diversified spaces where working, living, playing and studying are close to each other, in addition to the fact that the area is highly convenient in conducting business activities due to proximity to customers that arises from the agglomeration of many affiliated companies of software-related IT industries and other companies in the same trade.

On the other hand, it seems that business offices for software-related IT industries increased around Shibuya since software-related IT industries that are aware of the superiority of site locations in Shibuya, which is still a major agglomeration of software-related IT industries, recovered corporate performance in response to recent economic recovery and office rents in Shibuya are also on the decrease.
3. Current state of agriculture, forestry and fishing
(Example of efforts by allotment gardens for farming experience and exchange activities)

In Nerima Ward of Tokyo Metropolis, advanced efforts are ongoing for farms for providing farming experience (farm utilization system) in order to maximize the function and role of urban agriculture. Farmers themselves open, manage and run these farms taking initiative in cultivating. Through such farming experience, exchange between farmers and users lead to an understanding of urban agriculture and also contributes to the sustainable development of agriculture in urban areas.

Section 3 Development of various activities led by individuals

1. Actual conditions of NPOs

Looking at the status of certification of incorporated NPOs in the National Capital Region by field of activity, many of them are in the field of enhancement of health care, medical care and welfare, promotion of social education, or support for other bodies. The growth rate in 2005 is high for NPOs falling into Nos. 14-16, which were certified through application on and after the enforcement date of the revised NPO Act (Figure 1).
2. Support for elderly persons, etc. concerning community development

Regarding public traffic facilities, the Traffic Barrier-Free Act\(^1\) went into effect in November 2000, and efforts have been made to increase convenience and safety in terms of movement of elderly persons, disabled persons, etc. 61 municipalities in the National Capital Region have created their basic plans based on said Act as of the end of December 2005, accounting for about 14.5% of all municipalities in the National Capital Region (Figure 2).

Section 4 Coexistence with the environment

1. Progress of the Grand Design for Urban Environmental Infrastructure

With the aim of building a network of water and green in the National Capital Region to enrich urban areas, the “Grand Design for Urban Environmental Infrastructure in the National Capital Region” (hereinafter called the “Grand Design”) was formulated in March 2004.

Based on the Grand Design, various bodies, such as the government, citizens and NPOs, are advancing efforts, including consideration on the designation of new Suburban Green Zone Preservation Areas.

Figure 1 Future of urban environmental infrastructure in the National
(Example of regional efforts)

With the aim of ensuring habitat/nursery environment for diversified living beings and offering citizens a forum for having intimate contact with nature, Chiba City carried forward a biotope development project covering fallow fields along the river in cooperation with citizens, and started placing the biotope in service in fiscal 2005. Under the project, mowing, maintenance of marshes and building of earth canals and ponds were conducted through incorporation of local residents’ opinions from the very beginning of planning. The biotope will be maintained, managed and run based on the activity agreement concluded with citizens’ groups in the future. It is expected to become a place for environmental learning and observation of nature, including observation of Japanese fireflies.

Sakazukigawa Biotope  Living beings are important friends.

Guide plate of Sakazukigawa Biotope

(Designation of a new Suburban Green Zone Preservation Area)

Koajiro area (about 70ha) in Miura City, Kanagawa Prefecture, located in the Miura Peninsula zone that was extracted in the Grand Design as a natural environment to be preserved, was newly designated as a Suburban Green Zone Preservation Area in September 2005.

Koajiro area is a precious large-scale green zone remaining in the suburbs of the National Capital Region, which is called the “Forest of Koajiro” by peripheral people and has been popular among them. The area is a place where observation of nature, including observation of release of children by crabs (Akategani), as well as environmental learning and other activities are active. It also forms the only complete catchment basin, in which forests, marshes, mud flat and sea are merged in their natural state centering on the water system, in the Kanto region, and it maintains a precious ecosystem, involving goshawks and other rare species.
Koajiro area was the first area newly designated in 32 years since 1973, and it is the 19th area designated in the National Capital Region (as of the end of fiscal 2005: 19 areas covering 15,763ha).

Section 5 Development of a safe, comfortable and high-quality living environment

(Flood control measures in the National Capital Region)

A torrential rain with rainfall of 100ml or more per hour during the period from the evening of September 4, 2005 to the early hours of September 5 caused extensive damages, specifically, about 114ha wetted surface and about 3,700 flooded houses, in Suginami Ward, Nakano Ward, etc. On November 18, 2005, a special emergency project for measures against serious river disasters was adopted for the Kanda River (Myoshoji River and Zenfukuji River) from the standpoint of preventing reoccurrence of disasters. The project aims at significantly increasing safety in flood control by effectively retaining flooding water, as well as improving the capacity of flow of the

Near Kitahara Bridge over the Myoshoji River

Photo: Nakano Ward
rivers within about five years through development, including riverbank improvement in the relevant area, establishment of a water intake facility in the Myoshoji River and excavation of river bed.

In addition, at the time of said torrential rain, about 420,000 m$^3$ rainwater was retained in the first-period zone (zone in use) of the underground detention pond below Ring Road No. 7 for the Kanda River that had been developed for some time and the second-period zone thereof that was yet to be used but urgently used after confirming safety, and this contributed to lessening damage. For example, it is estimated to have reduced wetted surface by 30ha.

Section 6 Development of infrastructure to be inherited in the future

1. Development of traffic systems
(Development of three ring roads)

Regarding the Central Circular Route of Metropolitan Expressway, development of the Central Circular Shinjuku Route (from Aobadai in Meguro Ward to Kumancho in Itabashi Ward: extension of about 11km) is in progress. In addition, for the Central Circular Shinagawa Route (from Yashio in Shinagawa Ward to Aobadai in Meguro Ward: extension of about 9km), for which a city planning decision was made in November 2004, construction of some portion thereof was launched under a Tokyo Metropolitan Government street project in 2005. The construction will be promoted through amalgamated execution by the Tokyo Metropolitan Government and Metropolitan Expressway Company Limited in and after fiscal 2006.

Moreover, regarding Tokyo Gaikaku Kanjo Expressway, in the section from Joban Expressway to Higashi Kanto Expressway, the section from Misato to Misato Minami
(extension of about 4km) was put into service in November 2005, and development is in progress for the section from Misato Minami to Takaya Junction (extension of about 16km) toward putting the section in service at an early date. On the other hand, regarding the section from Kanetsu Expressway to Tomei Expressway, the Ministry of Land, Infrastructure and Transport and the Tokyo Metropolitan Government announced their views toward materializing the plan in September 2005 after going through public involvement (PI) efforts. Consideration will be carried forward toward development thereof while listening to the opinions of persons concerned.

**Figure 1 Status of development of three ring roads**

![Figure 1 Status of development of three ring roads](image)

<table>
<thead>
<tr>
<th>Three ring roads</th>
<th>Explanatory note</th>
</tr>
</thead>
<tbody>
<tr>
<td>Section in service</td>
<td>In service</td>
</tr>
<tr>
<td>Section under construction</td>
<td>Under construction</td>
</tr>
<tr>
<td>Section in preparation for commencing work</td>
<td>Under construction</td>
</tr>
<tr>
<td>Section under survey</td>
<td>Under construction</td>
</tr>
<tr>
<td>Expressway</td>
<td>In service</td>
</tr>
<tr>
<td>General toll road</td>
<td>Under construction</td>
</tr>
<tr>
<td>Metropolitan Expressway</td>
<td>Under construction</td>
</tr>
</tbody>
</table>

Data: Prepared by the National and Regional Planning Bureau based on the data of the Ministry of Land, Infrastructure and Transport.
Furthermore, regarding Metropolitan Inter-City Expressway, extension of about 266km out of the entire extension of 300km has already been under construction, and extension of about 32km has been opened to traffic so far. For the remaining section from Taiei to Yokoshiba, procedures relating to city planning and environmental assessment are ongoing. For the section now under construction, a target for project progress for each fiscal year and the degree of achievement thereof as well as a target for opening have been announced based on the “Target Declaration Project,” and development is being promoted toward opening to traffic in about the next 10 years.

(Utility of information and communications technology)

At present, the use of ETC (electronic toll collection system) has been expanding. For example, the number of cars with ETC equipment installed nationwide exceeded 11 million in March 2006. In particular, in the National Capital Region, ETC gates have been put in place at almost all tollbooths, except those of some prefectural road public corporations. The rate of utilization of ETC for Metropolitan Expressway reached 65.4% (average between March 24 and 30, 2006).

**Figure 2 Changes in the utilization of ETC**

<table>
<thead>
<tr>
<th>Month</th>
<th>No. of cars utilizing ETC (10,000 cars per day)</th>
<th>Utilization ratio</th>
</tr>
</thead>
<tbody>
<tr>
<td>March 24-30, 2006</td>
<td>About 4.65 million cars per day</td>
<td>56.5%</td>
</tr>
<tr>
<td>December 2001, after expansion throughout Japan</td>
<td>About 50,000 cars per day</td>
<td>0.9%</td>
</tr>
</tbody>
</table>

Data: Ministry of Land, Infrastructure and Transport.
(Efforts contributing to easing congestion in trains and increasing convenience)

Tsukuba Express of Metropolitan Intercity Railway Company started operation on August 24, 2005 as a new railroad that cut longitudinally the northeastern part of the National Capital Region. It takes 45 minutes to go from Tsukuba to Akihabara (58.3km) by the fastest train, and Tsukuba Express is used by about 150,000 persons per day (average for the period of about six months after the start of operation).
1. Development of Business Core Cities

The basic concept for Kasukabe/Koshigaya Business Core City was agreed on in March 2006. Thus, the number of areas for which a basic concept has been approved and agreed so far reached 12, including Chiba, Kisarazu, Saitama central urban area, Tsuchiura/Tsukuba/Ushiku, Yokohama, Hachioji/Tachikawa/Tama, Kawasaki, Atsugi, Kumagaya/Fukaya, Narita/Chiba New Town, and Machida/Sagamihara. For Ome City, Kawagoe City and Kashiwa City, relevant prefectural governments, etc. are now preparing for creation of a basic concept.

Moreover, in Kazusa Academia Park within Kisarazu Business Core City, the Joint Biotechnology Research and Development Center of the Kazusa DNA Research Institute was completed in May 2005.

2. Development of Tsukuba Science City

In fiscal 2005, regarding public facilities, efforts were made to advance construction work for the Tsukuba Station of Tsukuba Express, Metropolitan Inter-City Expressway (from Tsukuba Interchange (tentative name) to Edosaki Interchange (tentative name) (excluding the section now in service (from Tsukuba Junction to Tsukuba Ushiku Interchange), and Ushiku Tsuchiura Bypass on Route 6.

3. Consideration on the relocation of the Diet and other organizations

The “Inter-party Conference Committee of Both Houses on the Relocation of the National Diet and Related Organizations,” established within the Diet, is now promoting consideration on the relocation. In December 2004, the “Chairman’s Report” was compiled, and it stipulated that said committee would conduct surveys and hold discussions to deepen the method of thinking of decentralized relocation and disaster prevention, in particular, prioritized relocation of the core of crisis management function (or back-up function).
4. Promotion of appropriate and reasonable utilization of deep underground

In July 2005, the Ministry formulated the “Guidelines for the Promotion of Barrier-Free Access and Improvement of Amenity concerning the Public Utilization of Deep Underground.” Moreover, the Ministry has completed the development of a deep underground information system designed to collect and integrate information on installation of underground facilities for the National Capital Region, and is also now promoting the improvement of the environment for utilization of the system, including consideration of technical problems.

In addition, this chapter describes promotion of various measures based on policy areas, etc. and relocation and redevelopment of government offices, etc.