## WHITE PAPER ON LAND, INFRASTRUCTURE, TRANSPORT AND TOURISM IN JAPAN, 2008

(Outline)



Ministry of Land, Infrastructure, Transport and Tourism

## WHITE PAPER ON LAND, INFRASTRUCTURE, TRANSPORT AND TOURISM IN JAPAN, 2008 (Outline)

#### Ministry of Land, Infrastructure, Transport and Tourism (MLIT)

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#### Preface

#### (Our daily life and MLIT's policies)

We live our daily life, living in home town and having our residences as a basis for life. We are also active in society, working, shopping, enjoying leisure activities, and traveling from one place to another. It is clear that we can not live our daily life without relationships with others, such as our families and friends. The relationships with those others are influenced by local-/national-/global-living environments..

The mission of the MLIT is to utilize, develop and conserve land in Japan in an integrated and systematic way; develop infrastructure necessary for attaining those goals; implement transportation policies; promote the progress of meteorological tasks; and maintain marine safety and security.

#### (Our daily life and living conditions in the current severe economic climate)

In recent years, our daily life and living conditions are changing significantly in a rapidly aging society with fewer children, increasingly diversified and sophisticated values, lifestyles and needs, people's enhanced awareness of safety and security, and increasing global connections.

In particular, with the global recession resulting from the global financial crisis last year, the Japanese economic and social climate is rapidly deteriorating. This now directly affects our daily life, and resulted in the growing public concerns about employment stability, and our growing anxiety toward the future.

Facing our daily life and understanding the current situations, public administration is required to steadily address long-term changes in economic and social situations, and at the same time respond immediately to serious problems, so as to support our daily life and living conditions.

#### (Outline of the White Paper)

Part I of this White Paper analyzes current situation and problems related to our daily life and living conditions relevant to MLIT policies, referring to public needs in people's daily life, and presents future directions of MLIT policies and its major policy measures. In analyzing the current situation and problems, we have paid close attention to the diversity of values and changing environments, trying to adopt everyday-perspectives of every person as far as possible.

Part I is consisted of three chapters. Chapter 1 analyzes the current conditions from everyday-perspectives, by highlighting our ways of living in "Living in home town," "Being active in society" and "Traveling from one place to another". Chapter 2 presents future directions of MLIT policies and its major policy measures from the viewpoints of (1) ensuring safety and security in people's daily life, (2) enhancing safety net functions in people's daily life, (3) enhancing daily comfort, (4) enhancing various lifestyles, and (5) supporting responses to extensive and global-level development.

Part II presents recent trends in MLIT's policies.

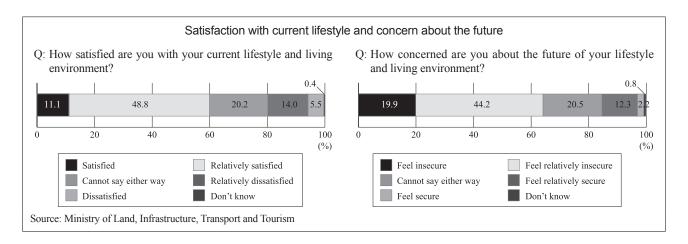
#### Part I

MLIT policies in the severe economic climate for supporting our daily life and vitalizing our society

#### Chapter 1: Current situations and problems related to daily life

#### (The majority of people are content with their daily life, but they feel less secure about their future)

An MLIT survey on attitudes on community-based lifestyles and surrounding living conditions revealed that nearly 60% of people surveyed found their present living conditions satisfactory or relatively satisfactory (hereinafter also referred to as "satisfactory"). At the same time, more than 60% of the surveyed said that they "feel insecure" or "relatively insecure" about their future.



The survey on attitudes addressed people's satisfaction with various environmental factors in daily life, and remarkable differences in satisfaction were found in a number of issues, including employment opportunities and workplaces, community-based economic climate, barrier-free environments in home town, facilities and services for nursing care and welfare, facilities and services for raising children, as well as vitality of home town. Facing the recent difficult socioeconomic situations, people seem to feel insecure about their future, partly due to public recognition of the lack of present and future economic bases, of adequate support for the elderly and people with disabilities and vitality of home town.

People have mixed feelings toward their daily life, with satisfaction in their present lifestyles and much concerns about future prospects. In addition, viewpoints vary according to generations.

Sections below analyze the current situations, highlighting our ways of living in "Living in home town," "Being active in society" and "Traveling from one place to another" to discuss what we think about our daily life and what we need in our daily life.

#### (1) Living in home town

#### Understanding needs of people living in home town

#### (Living environments in home town)

We investigated people's attitudes on various factors that support living, by asking them whether they found each factor important and whether they were satisfied with the each factor.

The people surveyed found the level of importance in items relevant to basic environments surrounding their residences, including the "natural environment and environment conservation" and improvement of streetscapes and landscapes. They also found importance in items relevant to their safety and security, such as "public security and anti-crime measures" and "preparedness against natural disasters,". In addition, what they considered as things of high importance includes daily necessities, including "convenience of everyday shopping," "medical facilities, including hospitals and clinics," and "convenience of public transport," "improvement and development of residential roads and arterial roads" and "safe space for pedestrians and bicycles."

Meanwhile less than 50% of the surveyed voiced their satisfaction with the majority of issues surveyed.



#### (Level of importance and satisfaction by city size)

When focusing on the level of importance and satisfaction by city size, results in urban areas and those in rural areas indicated the same tendency in many items. Yet many respondents in rural areas voiced their complaints concerning services relevant to convenience in everyday lives, such as convenience of everyday shopping and medical facilities, including hospitals and clinics.

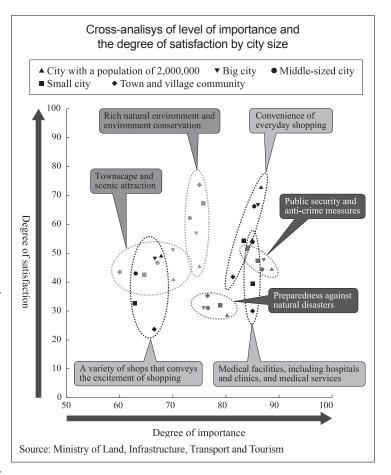
## (Level of importance and satisfaction for the elderly and households with small children)

What holds importance for each person varies with her/his age and family structure, for example whether she/he is now raising children or not.

The elderly voiced the importance, in particular, of "medical facilities, including hospitals and clinics," barrier-free environments in a local community, and facilities and services for nursing care and welfare, which are increasingly essential as the population grows older.

For families raising small children are important items, such as facilities and services for raising children, including the improvement of kids' play areas and nursery schools, and school education opportunities in a local community.

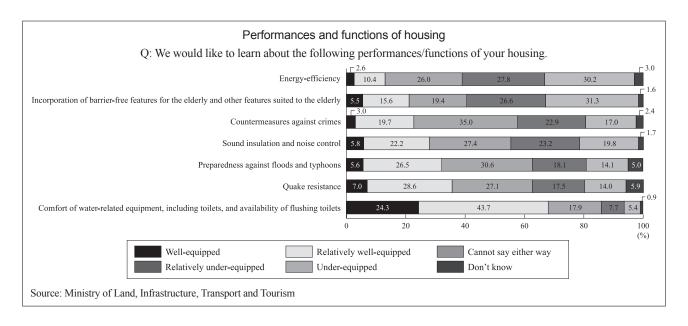
It is important to adequately understand the needs of those who tend to feel inconvenience in their daily life.



#### (Their awareness concerning their residences)

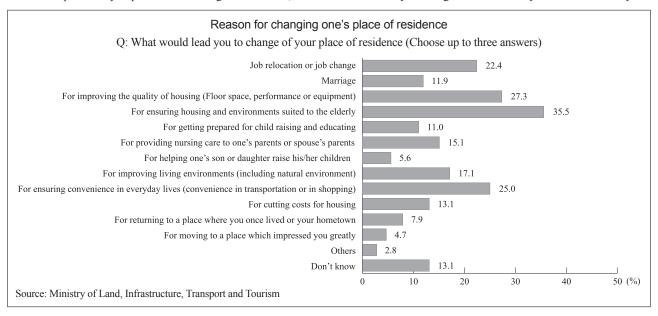
Regarding functions and performances of housing, only 20 to less than 40% of the surveyed felt assured of the safety of their housing against earthquakes, typhoons and floods, and crime.

Although there are increased needs for security, only slightly more than 20% of the surveyed across all generations felt that measures prepared for aging, including barrier-free environments, which have become increasingly important, were sufficiently ensured. This suggests the lack of sufficient measures prepared for an aging society.



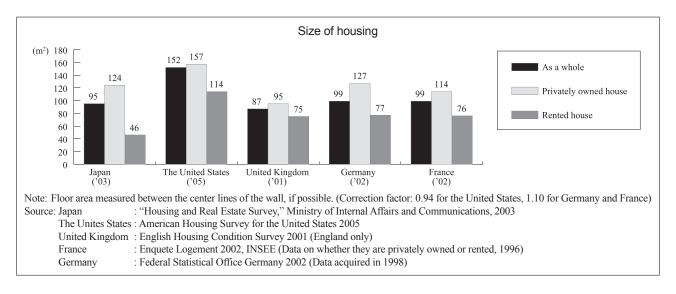
#### (Attitudes toward living)

Major motivations for changing one's home includes the need for user-friendly housing and environments for the elderly, the need for "improving the quality of housing," and the need "for ensuring convenience in everyday lives." This suggests that people have the intention to proactively improve their housing environments, rather than the tendency to change their homes only when it is necessary.



## O Current situations and problems related to housing (Please refer to Chapter 2, (1)(a), (2)(a) and (4)) (Housing stock)

As of 2003, housing stock stood at approximately 54 million, while the total number of households was approximately 47 million. This suggests an adequate housing stock in terms of quantity. While the average floor area per unit of housing is 95 m², equivalent to that of European counterparts, the average floor area of a privately owned house is 124 m² while that of a rental dwelling is relatively small, only 46 m².



#### (Housing performance)

As much as 25% of existing houses lack sufficient quake resistance. In addition, only 5.4% of housing stock consists of sophisticated barrier-free homes, which have no uneven surfaces on the floor, hallways spacious enough for wheelchair access, and two or more handrails per home. Furthermore, energy-efficient housing is gradually on the rise in newly constructed homes.

It is necessary to address aging homes, for example, by renovating or reconstructing old homes. In particular, as many as 730,000 condominium apartments were 30 years old or older as of the end of 2008, and the number will rapidly increase to 2 million by the end of 2020.

#### Housing performance (Quake resistance, barrier-free features and energy efficiency) Housing stock insufficient in quake resistance (Estimated) Number of houses likely to be insufficient in quake resistance: Approximately 11.5 million Total number of houses: Approximately 47 million 25% of the total number of houses Number of houses built up to 1981: Approximately 18.5 million Source: Estimated by Ministry of Land,

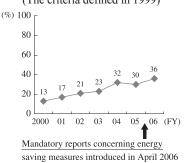
Infrastructure, Transport and Tourism, based on "Housing and Real Estate Survey," Ministry of Internal Affairs and Communications, 2003

#### Current features of barrier-free housing

	All housing	Privately owned houses	Rented houses	Housing for the elderly
A. Two or more handrails	15.3%	21.5%	5.9%	23.9%
B. No uneven surfaces on the floor	13.1%	17.0%	7.2%	13.2%
C. Hallways spacious enough for wheelchair access	12.6%	17.2%	5.7%	16.7%
One of A, B or C fulfilled	25.5%	34.5%	11.9%	34.3%
Two of A, B or C fulfilled	21.6%	29.3%	10.0%	28.9%
All of A, B and C fulfilled	5.4%	7.3%	2.6%	6.7%

Source: Estimated by Ministry of Land, Infrastructure, Transport and Tourism, based on "Housing and Real Estate Survey," Ministry of Internal Affairs and Communications, 2003

Percentage of newly built houses fulfilling the energy-efficiency criteria\* (The criteria defined in 1999)



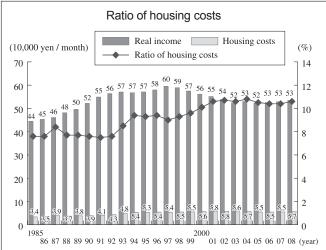
\* Percentage of the number of houses fulfilling the criteria (defined in 1999) among houses evaluated in terms of energy efficiency

Source: Ministry of Land, Infrastructure, Transport and Tourism, 2006

#### (How to secure housing and the cost of doing so)

In the average workers' household budget, housing costs (including house rent and mortgage repayments) accounted for an increased share of real income, as real income had been on the decline. However, the ratio of housing costs remained almost unchanged, at around 10%, for the period from 2003 to 2008. Of households who have purchased homes or rented private sector housing, homeowners (only those who are paying mortgage repayments) pay as much as approximately 18% of their real income as housing costs, and those renting private-sector housing pay 15%.

Regarding costs for the purchase of housing in the Tokyo metropolitan area, in recent years, house prices have been on the rise due to a steep rise in land prices and material prices. In 2007, the average prices of a condominium apartment and a stand-alone house reached six times the average annual earnings. In addition, regarding mortgage repayments, the amount of risk management loans, including nonperforming loans, provided by Japan Finance Housing Agency (former Japan Housing Loan Corporation) has somewhat been on the rise recently.



Note1: Ratio of housing costs = Housing costs ÷ Real income Housing costs = House/land rent + repair expenses + mortgage repayments

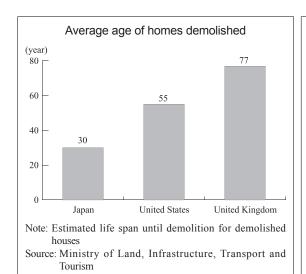
Note2: Working households with two or more family members were surveyed.

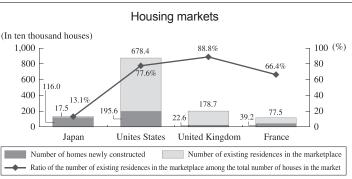
Source: "Household Expenditure Survey," Ministry of Internal Affairs and Communications

#### (Housing for long-term service)

For how long these homes are being used? In Japan, the average age of homes demolished is only 30 years old, shorter than that of homes in the United States. This means that Japanese people bear higher housing costs than their U.S. counterparts, and to ease the burden, it is necessary to lengthen the life of homes and to shift our society into a stock-based society.

In the housing market, almost all of transactions are those concerning newly built homes. This, as a result, limits options for consumers, In the future, it will be necessary to provide more reasonably-priced existing homes suited to people's needs, by more properly evaluating the market value of existing homes to facilitate housing transactions.





Note1: Sources for "the number of homes newly constructed": Data as of 2003 for Japan, data as of 2004 for the United States and the United Kingdom, and data as of 2005 for France

Note2: Sources for "the number of existing residences in the marketplace": Data as of 2003 for Japan, data as of 2004 for the United States and the United Kingdom, and data as of 2000 for France

Japan : "Statistics on new housing starts," Ministry of Land, Infrastructure, Transport and Tourism, Japan, 2003; and estimations by Ministry of Land, Infrastructure, Transport and Tourism, based on "Housing and Real Estate Survey," Ministry of Internal Affairs and Communications, 2003

U.S. : "Statistical Abstract of the U.S. 2006"

U.K. : Ministry of Home Affairs regional community website

(http://www.communities.gov.uk/)

France: Ministry of Maritime Transport and Tourism Facilities website

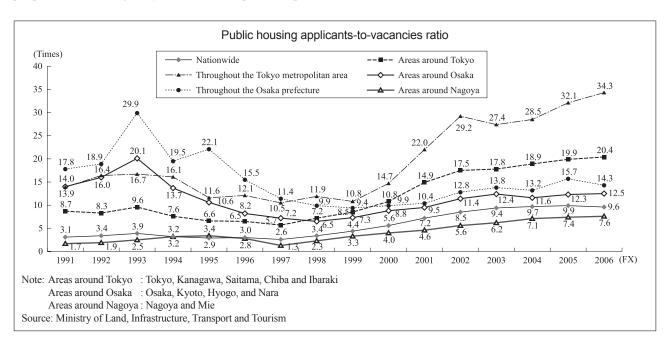
(http://www.equipement.gouv.fr/)

#### (Difficulties in securing housing)

Publicly-operated housing is provided to low-wage earners who find it difficult to secure housing. However, the applicants-to-homes ratio is extremely high, particularly in urban areas. For example, the ratio stands at 34.3:1 in the Tokyo Metropolitan area, and the ratio has been increasing over the last ten years. In particular, due to recent economic difficulties caused by employment uncertainty, the need for lower-priced housing has become increasingly urgent. Accordingly, it is necessary to address this need together with employment policies.

On the other hand, when it comes to private rental housing, sometimes elderly would-be tenants are turned away, because landlords fear that the elderly tend to be late in paying rent.

To secure housing forms the very foundation of our daily life, and it is necessary to address issues concerning housing, from the perspective of extending safety nets to those in a precarious position.

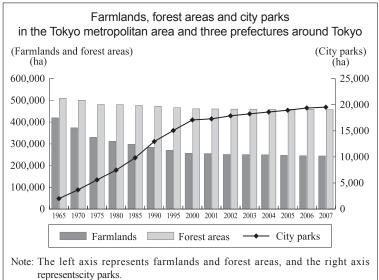


OCurrent situations and problems related to environments surrounding Japanese housing (Please refer to Chapter 2, (1) (a) and (b), (3)(a) and (5)(c)

#### (Green spaces, watersides and streetscapes)

Green spaces, including farmlands and forest areas, in the Tokyo metropolitan area and three neighboring prefectures has been on the decline, while at the same time, since 1965, city parks have been on the rise. City parks play an important role in forming a healthy urban environment, yet there are concerns about playground accidents associated with playground equipment, and it is necessary to improve city parks so that children can play there more safely.

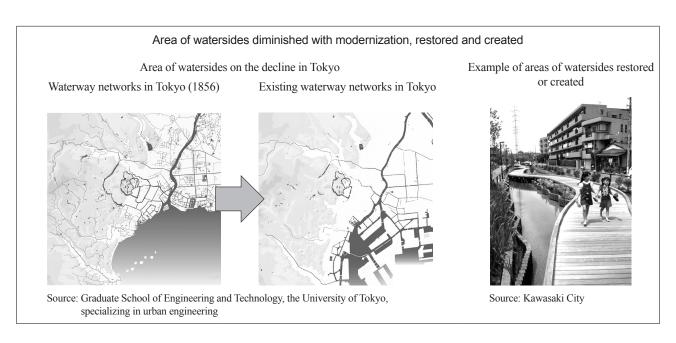
The area of watersides has been on the decline due to recent urbanization, which sometimes covers water surfaces such as rivers or other water passages, and depletes sources of spring water. Approximately 40%



representscity parks.

Source: Ministry of Land, Infrastructure, Transport and Tourism

of first-grade rivers are considered inaccessible or difficult to access. It is necessary to improve and develop waterside spaces so that people can more easily enjoy such areas in rapport with nature. To enhance streetscapes, it is still necessary to create better townscapes by regulating outdoor advertising.



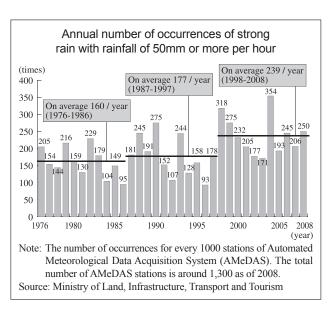
#### (Human relationships in home town)

Human relationships in home town are important factors for daily life. However, according to the survey on attitudes, the satisfaction index concerning communities and human relationships is as low as 20%. In fact, an increasing number of people are less likely to get along well with their neighbors, as communications between neighbors have declined. To support living within a local society, it is necessary to maintain and restore local communities.

#### (Natural disasters)

We have experienced a number of floods because of typhoons and heavy rains, and in recent years, there have been indications that disaster risks are on the rise due to global warming. There is concern that large-scale floods due to typhoons will be more frequent, and recently urban areas have often experienced floods, including overflows of neighboring urban rivers and submersion of low land due to concentrated heavy rainfall and local heavy rain.

In addition, the elderly are more likely to suffer from flood damage, and accordingly, new measures are required, with an increasing number of people requiring special care and help in case of a disaster, as our society is increasingly and rapidly aging.



#### (Public security and order, and crime prevention)

Even in peace time, the risk of being a victim of a crime is everywhere. Many consider that public security and order in Japan have been slipping in the last decade. According to a public opinion poll on public security and order, people feel uncertain about everyday places, such as streets and parks. In addition to housing with enhanced crime-prevention features, it is necessary to realize town development that attaches importance to the safety of urban environments, by eliminating blind spots in urban areas, as far as possible.

#### (2) Being active in society

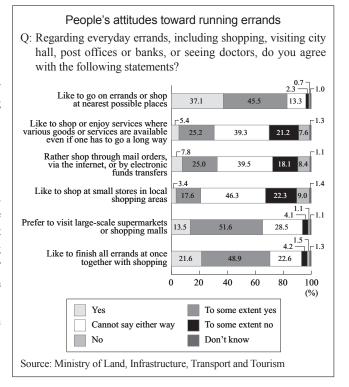
## O Understanding the needs of people who are being active in society

We will discuss a variety of people's daily activities, by classifying them into running errands, working, and enjoying leisure time.

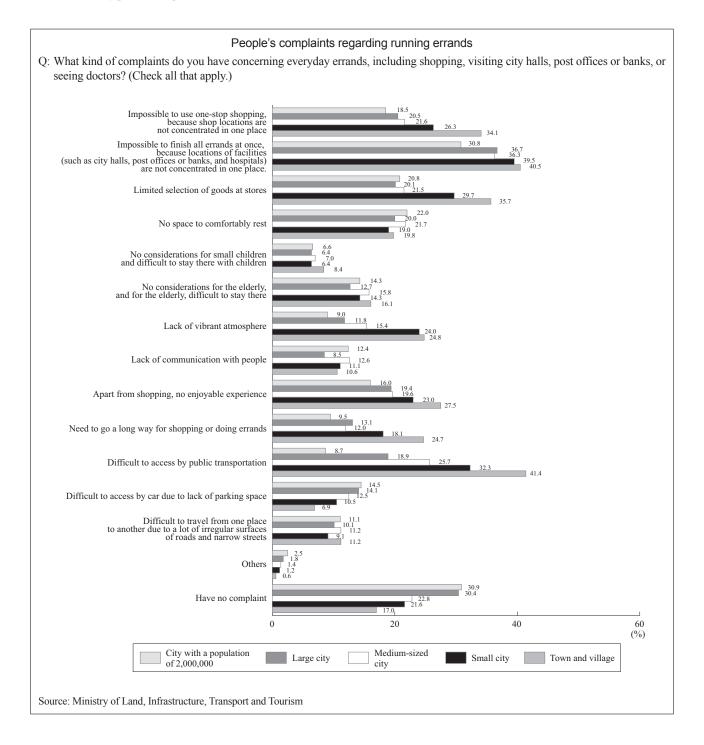
## (What people need and what people complain about concerning their errands)

Every day, people go on errands: shopping, visiting city halls, post offices or banks, and seeing doctors. According to the responses, it seems to be ideal to "go on errands or shop at nearest possible places" or at "large-scale supermarkets or shopping malls," and to "finish all errands at once together with shopping." This indicates that they attach importance to convenience in finishing their errands.

We found the same tendency concerning the above issue both in urban areas and rural areas.



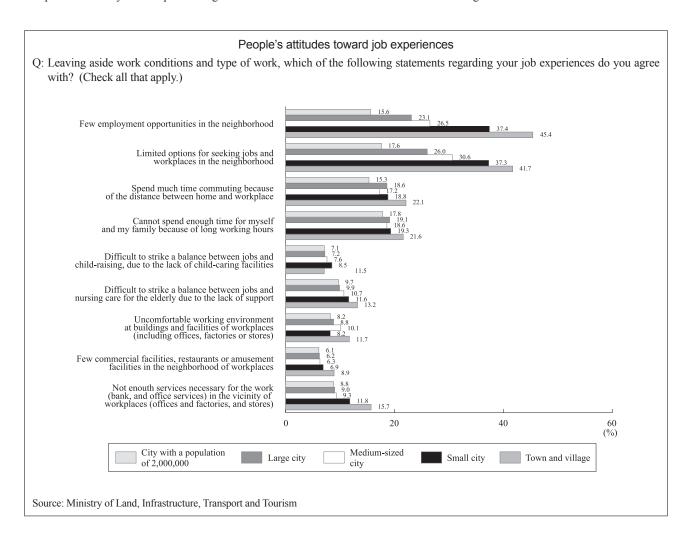
On the other hand, mainly in rural areas, the people surveyed complained about the inconvenience and the lack of variety in goods, for example, by saying it is "impossible to use one-stop shopping," "impossible to finish all errands at once," and there is a "limited selection of goods at stores." They also complained about the lack of accessibility, saying that it is necessary to go a long way when doing errands, and that access by public transport is difficult.



#### (What people need and what people complain about concerning working)

There are more people who want to give priority to their own free time, their children, nursing care, and families and living environments and living conditions over their jobs than those who always give priority to their jobs. This tendency is particular strong among younger generations.

Regarding what people complained about concerning their jobs, an increasing number of the people surveyed said that there are few employment opportunities in their neighborhoods, and limited options for seeking jobs and workplaces they like. In particular, in small municipalities, more than 40% of those surveyed voiced such complaints. Clearly employment is a crucial issue.1 In addition, they also complained that they cannot spend enough time for themselves and their families because of long work hours.

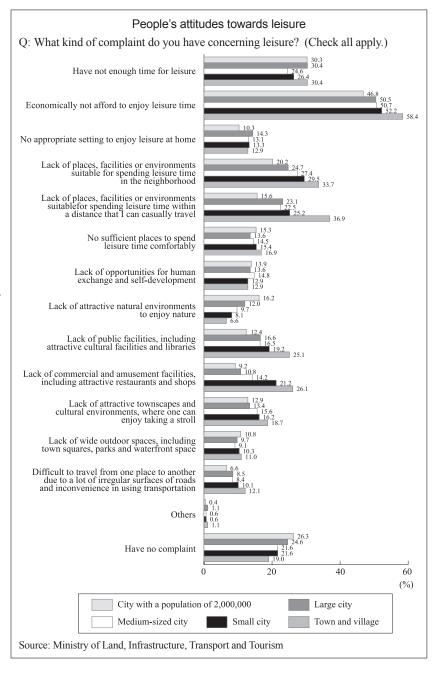


<sup>\*</sup> The economic climate has deteriorated since the time when the survey was conducted (November and December, 2008), and accordingly, the employment situation has become more severe.

#### (What people need and what people complain about concerning their leisure time)

When asked about how they liked to spend their leisure time, many of the people surveyed expressed the need to reduce the burdens of everyday life, through actions including: getting rest and relieving fatigue, and spending time at some comfortable places; doing something good for health and recreation; and refreshing themselves.

Regarding what people complained about concerning their leisure time, many said they "can not financially afford to enjoy leisure time," and "do not have enough time for leisure." In addition, particularly in rural areas, they pointed out the lack of places, facilities or environments suitable for spending leisure time in their neighborhood, or within a distance where they can casually visit.



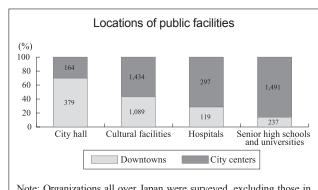
## OCurrent situations and problems concerning being active in society

This section will discuss current situations concerning people's being active in society.

## What supports people when they are running errands (Please refer to Chapter 2, (2)(b), (3)(a) and (b), and (5)(a))

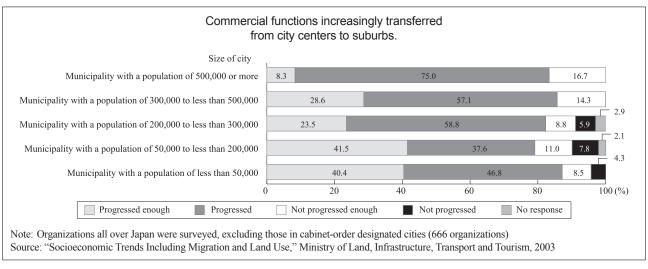
#### (Declining city centers)

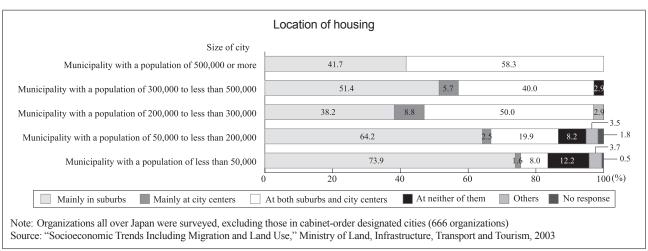
While city centers have been playing the role of the base of everyday activities, increasingly, public functions and commercial functions have been transferred from city centers to suburbs. Regarding public functions, about 30% of city halls and 70% of



Note: Organizations all over Japan were surveyed, excluding those in cabinet-order designated cities (666 organizations)

Source: "Socioeconomic Trends Including Migration and Land Use," Ministry of Land, Infrastructure, Transport and Tourism, 2003

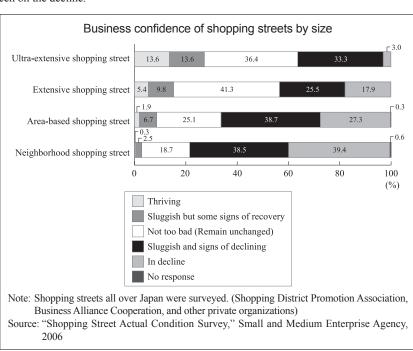




publicly run hospitals are now in suburbs. Regarding commercial functions, particularly at municipalities with a population of less than 200,000, around 40% of the people surveyed said that the transfer from city centers to suburbs has gone far enough. It reflects the increasing development of housing in suburbs. Even the users of such functions find that the number of shops at city centers is decreasing, and popularity, vitality and attractiveness have been on the decline.

In addition, neighborhood communitybased shopping malls, which people visit for everyday shopping, have been declining remarkably.

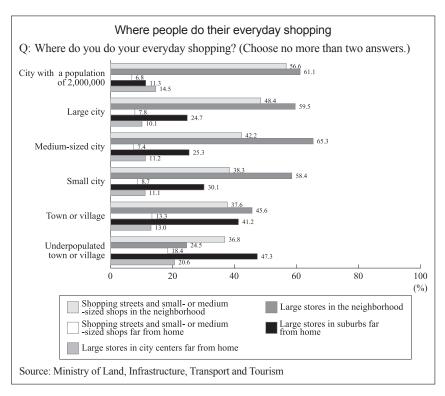
It is concern that places that have traditionally supported everyday life will decline. In order to invigorate city centers and shopping malls, there is a need to enhance the attractiveness of shopping malls as a whole, make commercial and public-welfare related functions more user-friendly by concentrating them, improve living spaces and enhance accessibility via public transport.



#### (Convenience in rural areas)

In underpopulated municipalities, an increasing number of people prefer to visit large-scale shops in suburbs. It reflects that there are fewer places that can support people's everyday lives in their neighborhood.

It is also necessary to take into account people who have fewer choices.

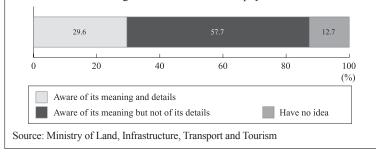


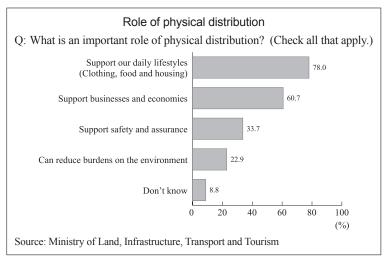
## (Physical distribution that supports everyday activities)

According to the survey on attitudes, only a small number of people recognized the importance and the many-sided role of physical distribution. Yet our lifestyles and activities are being supported by physical distribution, which works behind the scenes. Efforts toward cutting costs and saving time in physical distribution through streamlining and acceleration as well as efforts toward higher efficiency, ensuring the security of physical distribution and reducing environmental burdens are indispensable for Japan's industrial activities and affluent lifestyles in today's communities, which are becoming globally connected. It is essential to work hard for further enhancing the functions of physical distribution. It is important to functionally enhance physical distribution.

#### Awareness of physical distribution

Q: Physical distribution is the transportation of products from areas of production to customers, from factories to stores. To what extent are you aware of the meaning and details of the term "physical distribution"?





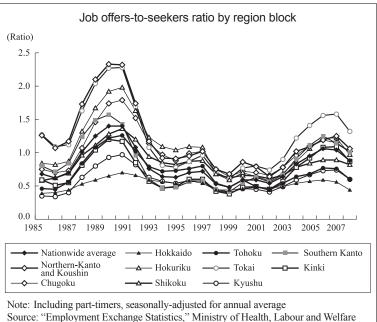
#### What supports working people?

(Please refer to Chapter 2, (3) (a) and (b), (4) and (5)(a) and (b)

#### (Current employment opportunities)

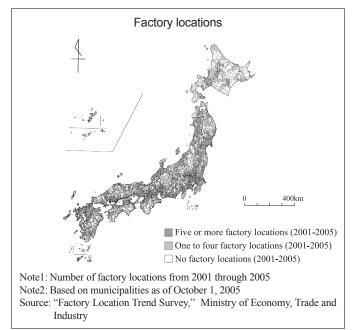
The number of persons in employment has been on the rise for more than 20 years, as a whole. However, this is due to an increasing number of irregular workers, and the number of regular employees has been on the decline recently. Accordingly, the position of people in employment is increasingly becoming unstable.

The job-offers-to-seekers ratio has been on the decline on a nationwide basis, due to recent economic downward trends, especially in the Hokkaido, Tohoku, Shikoku and Kyushu regions.



However, it would not be accurate to generalize that there are fewer job opportunities in rural areas. When taking into account the number of factory locations, a lot of plants have been installed in some rural areas as well as urban areas and their suburbs.

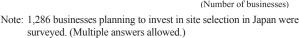
There is a close relationship between factory locations and regional peculiarity, and it is necessary to pay attention to a variety of positions where rural areas stand.



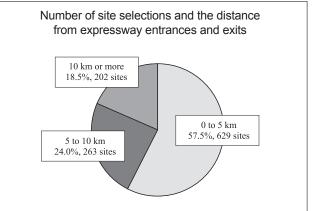
#### (Foundations that support regional vitality and secure job opportunities)

When selecting factory locations, businesses that plan investment in new plants now place importance first on "traffic accessibility," and then on the "surrounding residential environment." In fact, more than 80% of new factories are within 10 km from expressway entrances and exits. This reflects the importance of accessibility. In particular, for rural areas, tourism that makes better use of natural environments and traditional culture plays an important role in creating job opportunities. Employment deeply affects the foundation of our lifestyles, and MLIT policies are playing a significant role in improving environments in order to ensure and create job opportunities. It is important to support people's lifestyles through MLIT polities so as to restore regional vitality and create foundations for future growth in this severe economic climate.





Source: "Survey to Measure Feelings About Site Selection," Teikoku Data Bank Ltd., 2005



Note: Number of factories newly located during the period from January through December, 2006

Source: "Factory Location Trend Survey," Ministry of Economy, Trade and Industry, 2006

#### (Time spent for working and for oneself and one's family)

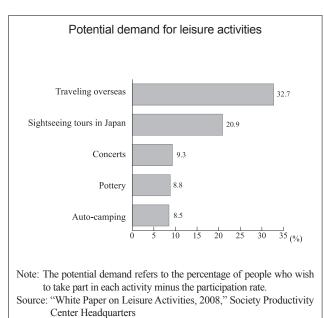
According to the survey on attitudes, many people complained about the lack of time spent for themselves or for their families due to long work hours. The total amount of work hours per year is as long as 2,000 hours, significantly longer than those in other developed nations. One-third of those who complained about the lack of time also complained that it took them a lot of time to commute. For example, about 40% of those living in the suburbs of Tokyo spend one hour or more to commute from home to work.

The more time a person spends working and commuting, the less time he/she spends with family. It is necessary to realize lifestyles that strike a balance between work and private life, for example, by promoting telework.

#### What supports people's enjoying leisure time? (Please refer to Chapter 2, (3)(a), (4), and (5)(a) and (b)) (What people want from leisure time)

The highest percentage of people surveyed wish to focus most on leisure in their future lifestyles, yet the number of such people is declining. The type of leisure activities they experience most frequently is "sightseeing tours in Japan," which 50% of the surveyed have experienced. Among potential demand, demand for traveling both in Japan and overseas ranked high.

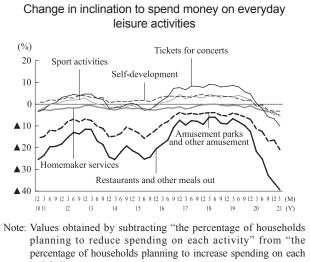




#### (Lack of money and time)

Up until 2007, people were willing to increase spending on concerts, self-enlightenment and sport activities, among everyday leisure activities. Yet, in 2008 their attitudes suddenly changed and they started to decrease spending on such activities, and this attitude remains. There has been a tendency for people to decrease spending on restaurants, meals out and amusement parks for some time, but this tendency has become stronger recently.

As people have become worse off, they tend to spend less time on leisure activities; people now have less money and less leisure time.

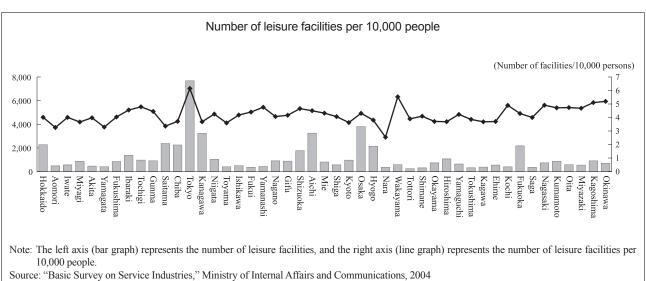


activity'

Source: "Survey of Consumer Behavior," Cabinet Office

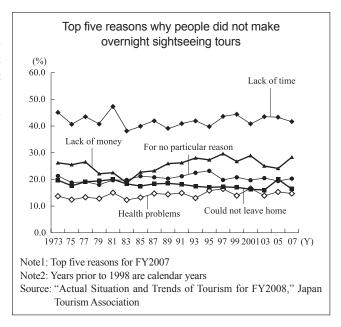
#### (Places and opportunities to enjoy leisure)

The overwhelming majority of facilities for leisure activities are in Tokyo, yet regarding the number of facilities per 10,000 persons, there is actually not a big difference between Tokyo and other regions. The survey on attitudes revealed that some respondents in rural areas complained about the lack of leisure facilities in their neighborhood. This is probably because in densely-populated urban areas there are more different leisure facilities with a variety of functions and services, which contributes to leisure facilities in urban areas being more attractive. One can see that there are some disparities in leisure opportunities between regions, and it is necessary to make immediate neighborhood areas more attractive, promote the improvement of information and communication infrastructures in rural areas, and improve transport facilities.



#### (Potential demand for leisure trips)

As above mentioned, among leisure activities, there is high demand for leisure trips. Many respondents pointed out a lack of money or time as the reason that they did not stay overnight at tourist destinations. In spite of high demand for leisure trips, this suggests that in reality, the lack of money and time plays an important role in leisure activities.



#### (What people want from tourism)

According to the survey on attitudes, people expected that tourism would contribute to the realization of healthy and affordable lifestyles, the creation of local communities that people feel proud of and have affection for, international mutual understanding, and creation of new job opportunities.

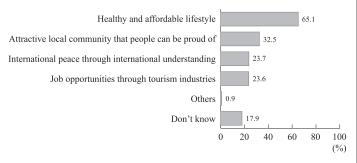
Those in underpopulated areas have stronger expectations for tourism to create more vibrant and attractive communities and provide new job opportunities, than those living in other regions. This probably reflects difficulties in maintaining the functions of a local community or in finding job opportunities in sparsely populated areas.

## (The tourism industry contributing to more job opportunities)

People's spending on tourism is expected to directly create jobs for 2.11 million people, 3.3% of total employment. In the future, with a full-scale aging society, fewer children and a declining residential population, incorporating the tourism market to support local economies and societies will lead to the creation of a positive cycle for community development and the expansion of human exchange associated with tourism, since the spending on tourism for FY2007 is estimated to be 23.5 trillion yen. Accordingly, fully understanding people's needs for tourism as listed above, it is important for the Japan Tourism Agency, which was established in October 2008, and other interested parties to continuously work hard toward realizing a tourism-oriented country.

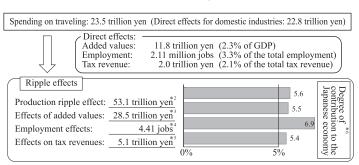
#### What people want from tourism

Q: What kind of effects do you expect from tourism, at the tourist spots you visit and the spots in your area or neighborhood visited by tourists? (Check all that apply)



Source: Ministry of Land, Infrastructure, Transport and Tourism

#### Economic ripple effects of spending on travel (for FY2007)



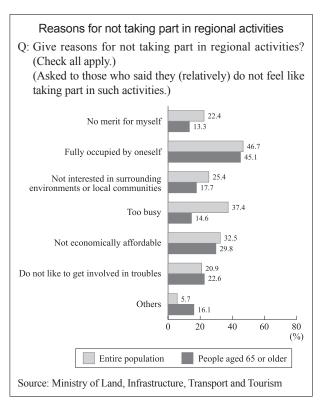
- \*1: Spending on travel: 23.5 trillion yen (including overnight tours (15.3 trillion yen), one day trips (4.9 trillion yen), overseas trips (for domestic industries, 1.8 trillion yen), and foreign visitors from overseas (1.5 trillion yen)
- \*2: Corresponding to the amount of domestic production of the interindustry table, which was 949.1 trillion yen (2000)
- \*3: Corresponding to the nominal GDP in national economic accounting, 515.1 trillion yen, for FY2007
- \*4: Corresponding to the number of employees in national economic accounting, 64.25 million persons, for FY2006
- \*5: Corresponding to national taxes and local taxes, 93.0 trillion yen, for FY2007 \*6: The degree of contribution refers to" a share in all industries."

Source: Ministry of Land, Infrastructure, Transport and Tourism

#### (Participation in regional activities)

Various regional activities in which residents take part are believed to increase their importance in the future as a tool to support a local society. However, at present, only 30% of the survey respondents voiced their willingness to participate in regional activities. This shows that people cannot take part in regional activities, as they are busy with their own private lives, do not have enough time, or do not have enough money.

Yet the elderly are slightly more willing to take part in regional activities. More than 40% of the elderly surveyed voiced their willingness. Regional activities serve as opportunities to deepen exchanges and will be likely to serve as a new public factor. It would probably be effective to make better use of elderly people's willingness for enhancing town development and welfare.

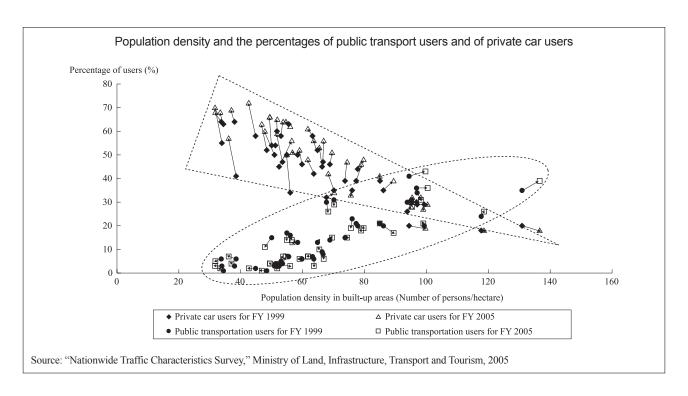


#### (3) Traveling from one place to another

#### O Users' needs in traveling from one place to another

#### ~ Urban areas and rural areas ~

In urban areas, the lower the population density is, the less frequently people use public transport and the more frequently they use privately-owned cars. The rate of motor vehicle increase is also higher.



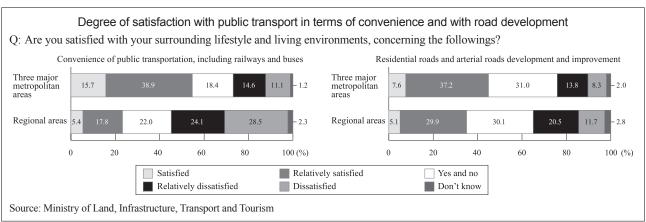
The larger the size of a population is, the more frequently people use public transport, and among cities with similar size populations, people living at the center of urban areas are more likely to use public transport.

#### Percentage of transport devices used, by city size (on weekdays) Central cities Three major metropolitan areas Peripheral cities 1 33.8 11.2 55.9 Peripheral cities 2 Central cities 46.7 22.3 Regional urban areas 53.0 Peripheral cities Regional urban Central cities 54.3 20.7 18.3 areas with a population of 400,000 or more Peripheral cities 70.2 10.9 14.4 Regional urban 60.1 Central cities areas with a population of less than 400,000 Peripheral cities 63.8 Areas surrounding regional 68.0 14.3 14.9 urban areas and other cities Nationwide 13.6 47.6 0 20 40 60 80 100 Railway Private car Bus Two-wheeler On foot or others Source: "Nationwide Traffic Characteristics Survey," Ministry of Land,

Infrastructure, Transport and Tourism, 2005

#### (Trends in people's attitudes)

The survey on attitudes revealed that people living in rural areas were less satisfied with public transport in terms of convenience and road development.

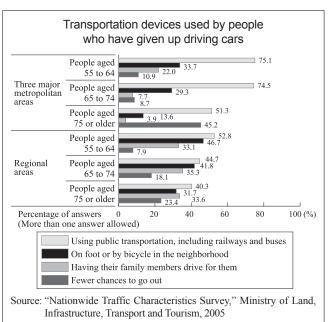


## $\sim$ Characterization and trends of transportation of the elderly $\sim$

At present, the elderly are going out more frequently than before, and in particular, those in the three major metropolitan areas are more likely to go out frequently than those in regional cities and towns.

The rate of increase in the frequency of using privatelyowned cars for going out is higher among the elderly than in other generations. In particular, the elderly in regional cities and towns are more likely to go out by car than those in the three metropolitan areas.

The vast majority of elderly people who have given up driving cars use public transport in the three metropolitan areas, while those in regional cities and towns are more likely to have their family members drive for them.



## OCurrent situations and problems related to local transport

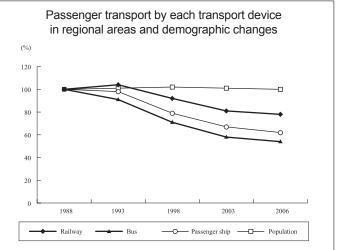
~ Present situation and problems related to ensuring community-based transport facilities in rural areas ~ (Refer to Chapter 2, (2)(b))

## (Current situations and problems related to public transport)

In rural areas, public transport services have become less convenient partly because less profitable public transport services have been curtailed or abolished in rural areas.\*

The number of passengers carried by public transport facilities is significantly declining, and this, in turn, negatively affects the profitability of public traffic routes. The end result is less-convenient publicly-run routes.

According to the survey on attitudes, people placed importance on improvement and development of public transport, the distance from their home to a station and its location, safety, the number of services, and routes. On the other hand, they mainly complained about the number of services, improvement of public transport, and fares.



Note1:72 commercial railway operators were surveyed, and they all had few changes in their train lines in the period from 1987 to 2006. (Commercial train lines are often changed due to newly developed routes or decommissioned routes.)

Note2: Buses surveyed were passenger buses using fixed routes in prefectures except the three metropolitan areas.

Note3: Passenger transport by regular and non-regular services nationwide were subject to the survey.

Sources: Railways and passenger ships:

Ministry of Land, Infrastructure, Transport and Tourism

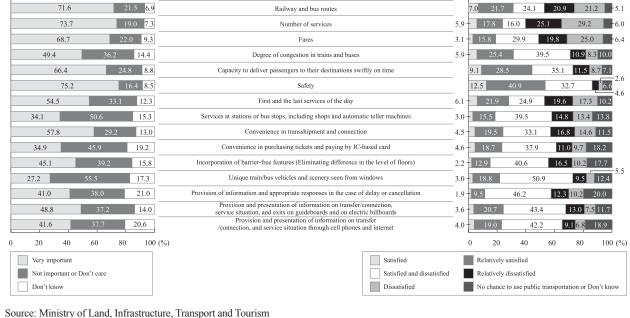
Buses: "Vehicle Transport Statistic Survey," Ministry of Land,

Infrastructure, Transport and Tourism

Population : "Demographic Estimate," Ministry of Internal Affairs

and Communications

# Importance and degree of satisfaction with public transport in regional areas Q: How far are you satisfied with public transport, including railways, buses and passenger ships, in terms of the following? And how important are they for you? Degree of importance 77.1 16.2 6.7 Development and importance of public transportation 75.3 18.4 + 6.3 Location and distance to stations or bus stops 71.6 21.5 6.9 Railway and bus routes 73.7 19.0 7.3 Number of services 73.7 19.0 7.3 Number of services

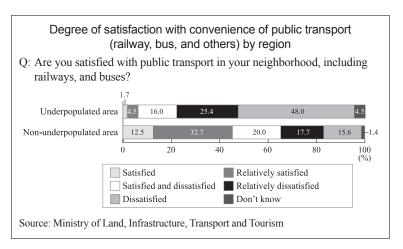


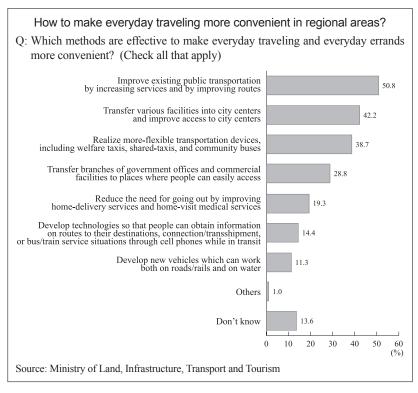
<sup>\*</sup> For example, since 2000, when relevant regulations were eased so that abandoning unprofitable public transport routes shall require only notification to authorities in advance instead of regulatory approval, as much as 633 km of rail routes was decommissioned as of December 2008, mainly following the abolishment of local lines.

In particular, in underpopulated areas, the degree of satisfaction with convenience of public transport is very low.

This suggests that in underpopulated areas, improvement of public transport, which serves as an everyday means of transport, is highly required. In response to such needs, the national government has to continuously support the enhancement of public transport, which is essential to ordinary lives in underpopulated areas.

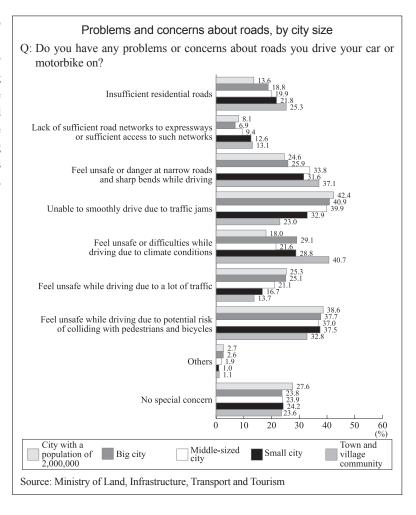
According to the survey on attitudes, the improvement and increase of railway and bus services and routes, the concentration of facilities in city centers and improved accessibility, and the realization of adaptable traffic services such as welfare taxis ranked high in terms of enhancing the convenience of daily transport.





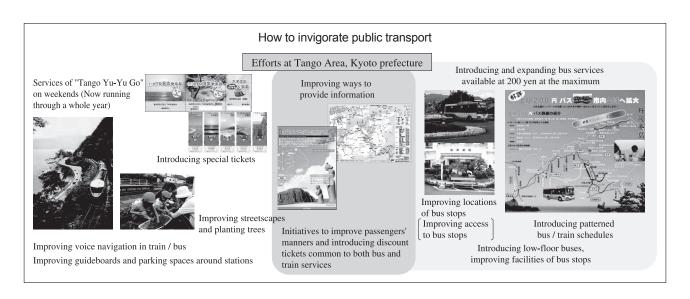
## (Current situations and problems related to road traffic)

The survey on attitudes revealed that many people did not feel safe when driving cars or riding motorbikes on rural roads because of climate conditions, such as rain or snow, and due to limited road width and many sharp bends. Other issues are that, in some areas, emergency vehicles (including ambulances) are unable to reach their destinations smoothly and quickly, and that there are obstacles to the safe operation of fixed route buses.



#### (How to ensure everyday transportation)

In order to secure everyday transport devices, first of all, it is necessary to understand the needs of local residents and the reality of existing public transport. In addition, residents, people in charge of projects, and parties concerned with administration need to thoroughly discuss how to continuously maintain transport devices for local residents, taking into account the necessity of community-based public transport and the potential effects on tourism promotion. For this purpose, the national government has to continuously support essential programs and give necessary advice.



#### $\sim$ Current situations and problems related to everyday transportation in metropolitan areas $\sim$

(Refer to Chapter 2, (3)(a) and (b))

## (Current situations and problems related to public transport)

The percentage of public transport users in the three metropolitan areas is high, yet, on average, the time needed for commuting to offices or schools by rail is one hour or longer for commuter pass users. The congestion rate has been improved due to enhanced carrying

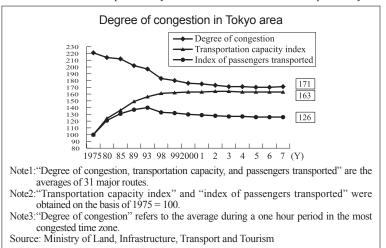
## Average time necessary for commuting to work/school by train (commuter ticket users only)

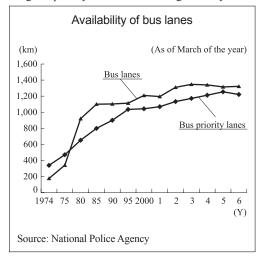
				(Unit: minutes)
	1990	1995	2000	2005
Tokyo metropolitan area	66.1	68.9	68.2	68.0
Chukyo metropolitan area	65.3	68.5	64.3	65.2
Kinki metropolitan area	63.7	67.7	64.9	66.0

Source: "Big City Traffic Census," Ministry of Land, Infrastructure, Transport and Tourism, 2000, 2005

capacity by rail. However, in the Tokyo metropolitan area, the congestion rate remains too high and it is necessary to further improve the congestion rate.

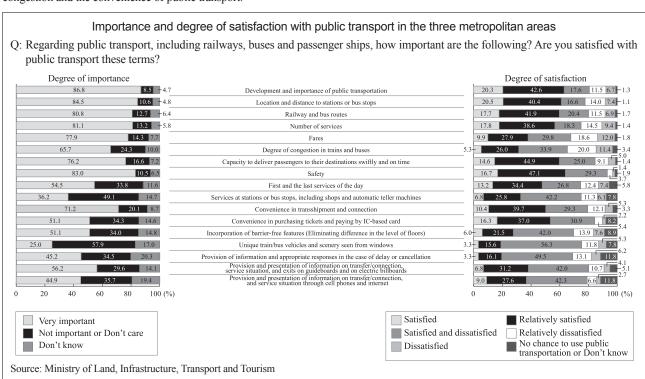
The convenience and punctuality of bus services has been also improved by establishing bus priority lanes and extending bus-only lanes.





In addition, according to the survey on attitudes, the degree of satisfaction with evaluation items that people feel are important was generally high. However, frustration with congestion, fares and the number of services is relatively high.

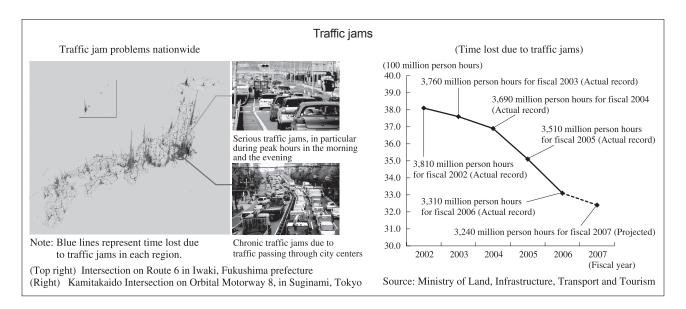
It is important to further improve the capacity to deliver passengers to their destinations swiftly, the capacity for transport, the degree of congestion and the convenience of public transport.



#### (Current situations and problems related to road traffic)

As findings from the survey on attitudes suggest, the influence of traffic jams on driving is a problem.

Although lost time resulting from traffic jams has been on the decline in recent years, traffic jams are still serious in the three metropolitan areas. In addition, among all the railway crossings around the country, nearly 600 are called "railway crossings that are practically always closed." In 23 wards in Tokyo, the number of railway crossings is approximately 50 times as many as there are in Paris. Indeed there are much more railway crossings in Tokyo than in any other major city in the world. Traffic jams also block the smooth circulation of buses. Accordingly, it is necessary to take measures to ease traffic jams.



#### $\sim$ Reality and problems related to efforts for ensuring safety and security $\sim$ (Refer to Chapter 2, (1)(b))

The number of casualties in traffic accidents associated with public transport is shown below. Casualties in railroad accidents and in road accidents have been declining in the long term.

Casualties in traffic accidents associated with public transport																			
	(Number of										nber of	people)							
	FY 1989	1990	1991	1992	1993	1994	1995	1996	1997	1998	1999	2000	2001	2002	2003	2004	2005	2006	2007
Railway	1,274	1,029	1,874	1,323	1,101	858	832	804	947	714	751	686	824	726	694	722	1,397	790	726
Motor vehicle	3,451	3,221	2,831	2,967	2,882	2,741	2,779	2,279	2,437	2,232	1,976	2,497	2,062	2,220	2,532	2,150	2,397	2,400	2,201
Aircraft	0	1	0	3	12	0	1	4	6	3	1	9	1	6	1	2	1	1	3
Marine accidents	59	59	23	82	95	65	207	63	63	69	45	31	38	31	25	35	74	161	53

Note1: Railway: Casualties due to operation of trains

Motor vehicle: Casualties due to serious accidents involving buses and taxis

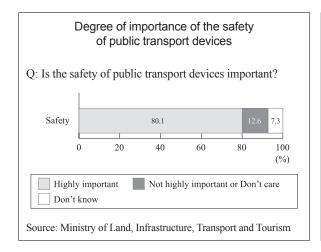
Aircraft: Casualties among passengers and crew due to aircraft accidents involving designated domestic air carriers, except those in

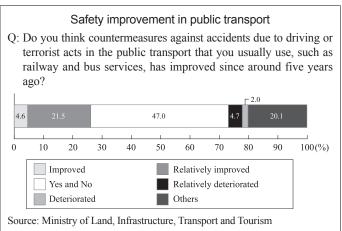
foreign territories and excluding deaths from natural causes and minor injuries

Marine accidents: Casualties among people aboard passenger ships due to accidents, including missing persons Note2: Numbers of casualties associated with motor vehicles and marine accidents displayed for the calendar year

Source: Ministry of Land, Infrastructure, Transport and Tourism

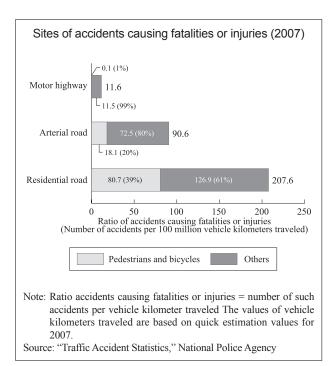
On the other hand, with increasing public concerns over potential risks, according to the survey on attitudes, the level of importance of public transport safety was as high as 80.1%. However, the degree of safety enhancement compared to around five years ago remains low. When an accident occurs in public transport, which supports people's daily life and the country's economy, it will cause considerable damage and casualties, and will profoundly affect our society. Accordingly, we must take further measures to prevent accidents, and in case of an accident, we must promptly ascertain the cause of the accident and prevent similar incidents.

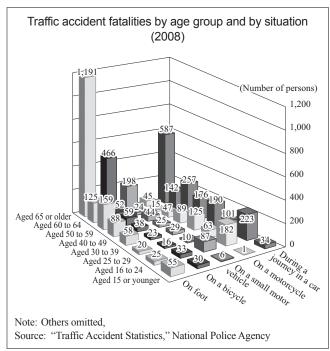




Casualties in road traffic accidents have been on a long-term decline. The number of fatal traffic accidents on residential roads and those resulting in injuries is almost twice as many as those on arterial roads. When classifying accidents by the age groups of those killed in road accidents, we found that the elderly frequently fall victim to accidents while walking. According to the survey on attitudes, too, the level of importance of pedestrian space was high enough, yet the degree of satisfaction with pedestrian space was low.

For this reason, it is important to secure the safety of pedestrians, especially elderly pedestrians, by removing the flow of through traffic of vehicles from residential roads and by improving sidewalks.

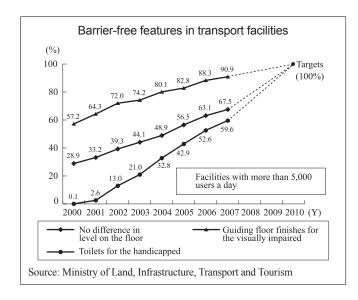


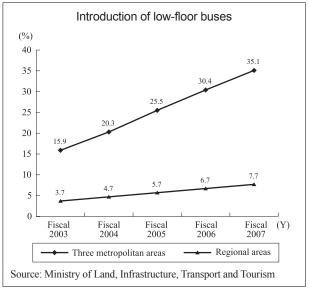


#### $\sim$ Problems in creating more barrier-free spaces $\sim$ (Refer to Chapter 2, (2)(c))

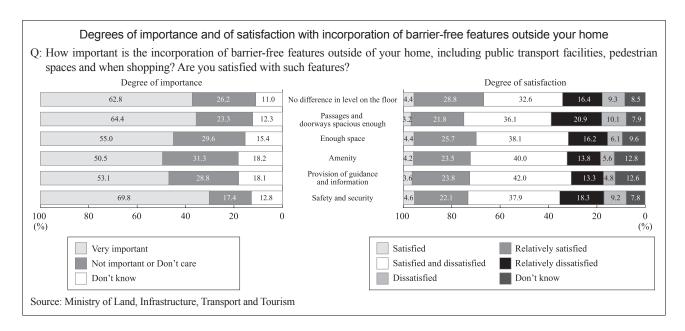
In efforts to reduce barriers in public transport facilities, following the enforcement of the Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc. in November 2000, increasing barrier-free spaces has been actively promoted.

However, according to the degree of the penetration of low-floor buses, it is evident that in rural areas, the progress in creating more barrier-free transport facilities has been much slower.

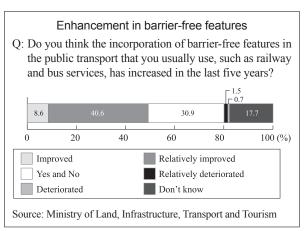




According to the survey on attitudes, people were very concerned with ensuring safety and security at railway station platforms and guardrails on sidewalks, ensuring enough space for passage, entrance and exit, and eliminating differences in the level of floors. Concerning these issues, the level of frustration was high.



The degree of improvement in barrier-free features compared to about five years ago remains at less than 50%. This also points out the necessity of further efforts for barrier-free transport facilities.

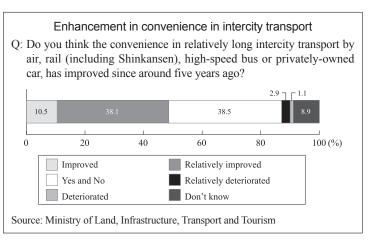


#### O Problems related to long distance traffic

#### (Current situations and problems related to intercity transport) (Refer to Chapter 2, (5)(a))

Improvement of intercity transport networks reduces travel time and increases destinations within a oneday round trip and time spent at one-day round trip destinations.

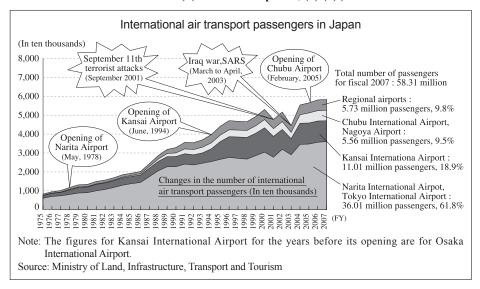
The survey on attitudes revealed that the degree of improvement in convenience in intercity transport, compared to around five years ago was 48.6%. Given the importance of intercity transport networks, partly as transport devices necessary for promoting tourism, it is necessary to further improve convenience.



#### (Current situations and problems related to international traffic) (Refer to Chapter 2, (5) (a).)

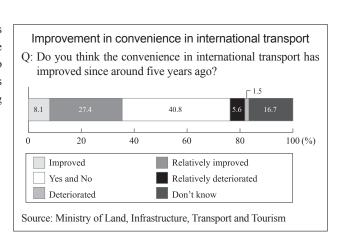
The number of international traffic passengers, in general, has been on the rise since 1989, to 1.8 times as many as the level of 20 years ago. This increase is in spite of the negative effects from terrorism, wars, economic downturns and other political and economic conditions.

In recent years, the number of international airlines using regional airports has been on the rise due to a recovery and increase in demand for airliners since around 2004, and due to efforts to realize aviation



liberalization based on the Asia Gateway Initiative. The increasing arrivals and departures of international airliners at regional airports offers international tourists more direct access to regional areas and therefore is a major factor promoting the development of Japan as a tourism-oriented country and increasing convenience for residents.

According to the survey on attitudes, compared with findings from around five years ago, the degree of improvement in the convenience of international traffic is 35.5%. It will be necessary to further improve the convenience of international traffic as a means of transportation for promoting tourism, appropriately addressing users' needs and responding to further globalization in the future.



#### Summary

Chapter 1 discussed how people feel about their daily life and living conditions, based on findings from the survey. The survey highlights the ways of living in home town, being active in society and traveling from one place to another.

#### (People's lifestyle needs)

Concerning living in home town, both in urban and rural areas, people attach importance in particular to fundamental living conditions, including things concerning everyday lifestyles and safety and security. The degree of satisfaction concerning convenience and other matters is generally lower in rural areas. Concerning housing, the performance of housing, including the incorporation of more barrier-free features, must be enhanced, while at the same time, how to secure housing poses serious issues in this severe economic climate. Regarding the surrounding environments, developing more greenery and waterside areas and ensuring of safety and security are essential.

With regard to being active in society, in terms of carrying out everyday activities, realizing convenience and additional enjoyment is important. Concerning job experience, severe employment situations and difficulties in striking a good balance between work and private life are again highlighted. Regarding leisure, people need it to refresh their minds, though economic conditions and other factors often prevent them from enjoying leisure. Generally speaking, people in rural areas are more disadvantaged when it comes to convenient lifestyles, job opportunities, and facilities for leisure activities.

Concerning traveling from one place to another, it is essential to continuously maintain transport services for people in rural areas, as rural public transport is weakening. On the other hand, in urban areas, it is necessary to further mitigate congestion and increase capacity in order to deliver passengers to their destinations swiftly. It is also necessary to continuously reduce traffic jams on roads. People are well aware of needs for ensured safety and security and the incorporation of more barrier-free features.

#### (Essential features of people's needs)

As mentioned above, people's needs cover a wide variety of topics, from concerns over safety and security in daily life to relaxation and enjoyment. In addition, their needs vary according to regions, living conditions and basic values on daily life. Furthermore, people anxiously like to know whether they really have safety nets for times of need.

#### (How we have to address people's needs)

As mentioned above in this chapter, there are many problems and needs that we have to address. However, it would be unrealistic to try to satisfy all parties, and implementation of such unrealistic measures would cost too much. Furthermore, there are some trade-off relationships between individual needs among people, for example, the affluence of natural environments and the variety of facilities for leisure activities.

On the other hand, there are increasingly new measures to address needs, such as the use of newly advanced technologies, including ICT, to address the decline in mobility. In addition, it is to be noted that recently more and more people are voluntarily playing a leading role in regional activities.

Based on the above findings, public administration must improve environments so that people's needs be addressed and, if necessary, firmly satisfied.

#### (How MLIT policies address people's needs, especially those of people in rural areas)

The section below refers to people's needs concerned about yet not very satisfied with. To conclude this chapter, we present how we have improved the convenience up until now and our future plans and measures.

Based on this chapter, in Chapter 2, we will present MLIT policies for addressing a variety of needs from five viewpoints.

#### What is required in daily life?

#### $\sim$ Of what people are not satisfied despite its importance people attach to it $\sim$

By analyzing the current situation through highlighting our ways of living, we found that people attach a high level of importance to the convenience in daily life, and that the degree of satisfaction with the convenience is low in particular in rural areas. This section discusses factors behind such findings, and will briefly refer to recently-introduced measures to address the issue.

## (Lack of satisfaction on deterioration of daily-life-convenience in rural areas, and former policy measures and their problems)

As mentioned in (1) and (2) above, people attach a high importance to services and convenience in daily life, Yet the degree of satisfaction with such convenience is low, in particular in rural areas. As mentioned in (3) above, particularly in rural areas, people feel high-level of frustration with public transport in community.

Factors behind this lack of satisfaction include deteriorating convenience in daily life due to the transfer of public functions and commercial and other functions from city centrals to suburbs, the decline of downtowns, increasing motorization, and reductions in public transport services.

Each of these factors has already been pointed out previously. MLIT has taken various measures aimed at (1) invigorating downtowns areas through the enactment of the three laws for town development and (2) vitalizing regional public transportation through comprehensive projects involving light rail transit (LRT) systems. However, from the viewpoint of people's interests, the essential point is whether the quality of their daily life is improved or not, and the above findings reveal that we still have problems to be solved.

We needed to explore appropriate measures by understanding structures and functions of "a town" and roles of transport linking towns, as much as grasping in accordance with local conditions. We had to reinforce our policies in order to fulfill the requirements that we so far failed to satisfy.

#### (New policy measures of MLIT to address above-mentioned issues)

Based on the above conditions, we decided to push forward various policy measures to expand urban functions in downtowns, including the improvement of traditional urban districts, the revitalization of commercial districts, the improvement of facilities to make urban areas more convenient and improvement of cooperative dwellings, following the revision of the three laws of town development in 2006, in a comprehensive and effective manner. In addition, from the viewpoint of town development, MLIT reviewed existing zoning restrictions so as to make it easier to properly allocate urban functions, such as large-scale facilities attracting many people and public facilities, which would have profound influence on the urban structure.

Concerning regional public transport systems, following the enforcement of the Act on Revitalization and Rehabilitation of Local Public Transportation Systems in 2007, MLIT created, in 2008, as a budgetary measure; "local public transport systems and rehabilitation comprehensive project". These moves were designed to advance the introduction of new transport services developed through flexible concepts in accordance with circumstances of each town, as well as to incorporate various parties concerned in a process of recognizing common problems in order to make efforts to invigorate and rehabilitate public transport systems, taking account of diversity of interests among peoples concerned within each town.

#### (Improving convenience and fostering a feeling of security through comprehensive policy measures)

For people living in home town, it is important that they have well-arranged commercial and public services essential for their lifestyles within in an easily accessible distance, and it is also essential for those living in suburbs to have an easy access to these functions through public transportation.

For this reason, MLIT will comprehensively and strategically push forward the above-mentioned measures by coordinating them, MLIT will encourage the local people concerned, including both service providers and service users, to reach a consensus with them. The many parties concerned are now discussing and pursuing desirable responses, in a cross-sectional manner. We would like to take advantage of this fact to improve convenience in people's daily life and foster a feeling of security, by rehabilitating and invigorating each town and its traffic system.

#### Chapter 2: Future directions of MLIT Policies for our daily life

In order to address various needs listed in Chapter 1, MLIT has to take necessary measures by coordinating various tools that employ equipment and facilities as well as know-how and expertise. Chapter 2 presents directions and major measures to address these needs. (MLIT is taking measures in addition to those presented in this chapter. For the overview of the measures MLIT has been taking, please refer to Part II.)

#### (Ensuring the basis of our daily life)

First of all, it is necessary to secure the basis which supports our daily life.

Our daily life is being threatened by natural disasters, crime and accidents on roads or in public transport, and accordingly, we are required to ensure safety and security, which constitute the very basis of our daily life.

Securing fundamental functions that support our daily activities is the minimum necessity. It is essential to secure housing and minimum quality. In addition, it is necessary to maintain and sustain daily transport devices supporting everyday activities, particularly in rural areas. In addition, we need to incorporate various viewpoints, including those of the elderly.

While recent social conditions are difficult, with social structural changes like the aging society and fewer children, this section presents how the ministry is working toward (1) ensuring safety and peace of mind in daily life and (2) improving and expanding safetynet functions in daily life, in order to ensure the basis of our daily life and to eliminate people's anxiety.

#### (Further enhancing the quality of daily life)

After having ensured safety and peace of mind as well as the safety-net functions in daily life, it is necessary to further improve daily life. People need convenience and affluence as well as enjoyment in various activities in their daily life. It is necessary to revitalize urban areas, which are where people carry out daily activities, and make them more attractive. In addition, we need to make traveling from one place to another more convenient and comfortable, as well as easing congestion and other problems, so as to meet people's demands.

Furthermore, as views on life are becoming more diverse, how to strike a balance between work and private life has attracted much attention. It is also necessary to create an environment where people can choose various lifestyles in terms of housing and jobs.

Sections (3) "enhancing daily comfort" and (4) "formation of infrastructures that support a variety of life styles" present what we have to do to enhance the quality of life and further enhance affluence in daily life in the above areas.

#### (Discussing surrounding connections)

Our daily life is also being supported, by what is invisible and intangible, in extensive connections.

It is necessary to reinforce functions of networks that support the flow of people and products. In addition, tourism is expected to bring about new opportunities to regions. Section (5) "supporting responses to extensive and global-level developments" refers to how to create and reinforce the maintenance of connections that support daily life.

Measures taken from the five viewpoints above are being correlated in a multi-layered manner and together support our daily life. At present, we are required to form infrastructures for people's daily life, eliminate anxiety and frustration in daily life and further enhance the quality of life. We intend to address these issues through our policy measures.

#### (1) Ensuring safety and security in daily life

Our daily life is always threatened by possible natural disasters and accidents. Ensuring safety and peace of mind is the most basic necessity in daily life, and we are going to habitually enhance preparedness against various disasters. When disaster strikes, we will promptly provide emergency measures for victims of the disaster, get prepared for speedy rehabilitation and reconstruction, and promptly ascertain the cause of the disaster and other problems so as to be further prepared for another disaster. In this way, the ministry will take measures to protect the foundations of our daily life and enhance safety and peace of mind.

#### (a) Preparedness against natural disasters

#### (Preventing damage from flood disasters and sediment disasters)

Due to global warming, there are concerns about more frequent heavy rainfalls and localized heavy rains resulting from typhoons. To protect our daily life from flood disasters and sediment disasters that may threaten communities and to minimize damage caused by large-scale disasters, the ministry improves river banks, dams and sewage lines, functionally enhances existing facilities, and improves and installs stormwater storage and water infiltration facilities to control stormwater runoff at parks. In addition, the ministry also improves and develops hazard maps, controls and regulates land use in at-risk areas, makes our lifestyles resilient to disaster through teaching people safer ways of living, and other measures that focus on know-how and expertise to make us more prepared.

The ministry also takes measures for preventing damages from sediment disasters caused by earthquakes and volcanic eruptions.

#### (Preventing earthquake damages)

In order to prevent, as much as possible, grim casualties following earthquakes, such as people trapped under ruins and rubble or those buried alive, the ministry works to make homes, buildings and housing sites more quake-proof. The ministry has established a system that addresses both seismic upgrades and asbestos abatement in an integrated manner, to ensure the comprehensive safety of existing housing and other buildings.

In order to prevent injuries at transport facilities and to secure transport capacity in an emergency, the ministry makes major railway stations more quake-proof, enhances the quake resistance of airport facilities, improves and expands earthquake-proof berths at port facilities, and makes bridges more quake resistant so as to make transport infrastructures more quake resistant.

In addition, the ministry makes river structures, coastal levees and sewage lines more quakeproof, so as to realize the quake preparedness of social infrastructures and to make our national territory more disaster resistant.

#### (Enhancing preparedness against disasters in urban areas)

In order to prevent devastating blazes and other damages caused by failed efforts for evacuation or rescue in the case of earthquakes, the ministry forms safer residential areas in urban districts by improving densely-populated, at-risk urban districts and by promoting the elimination of narrow roads.

The ministry also promotes the improvement of disaster prevention parks and other facilities that will serve as disaster preparedness centers and evaluation spots in times of disaster, and it pushes forward the formulation of extensive disaster prevention networks so as to secure access.

#### (Preventing damages from tsunamis and from storm surges)

In coastal areas, in order to prevent damage from tsunamis and storm surges, the ministry improves old levees and other structures yet to be renovated, and also promotes the implementation of measures concerning know-how and expertise, including support for the development of hazard maps.

#### (Provision of more detailed and precise information on disaster prevention)

In order to gather precise information on disasters in advance, as much as possible, and address them more properly, the ministry provides sophisticated weather information for disaster-prevention, including municipality-based weather warnings of heavy rains and other extreme weather conditions and the severe thunderstorm nowcast (a one-hour forecast on severe thunderstorm and hazardous wind such as tornado), through various means such as terrestrial digital broadcasting. By doing so it realizes information networks that allow anyone, any time, anywhere to gain access to information on rivers, including very short-range forecasts and warnings of potential floods.

To enhance our preparedness against earthquakes, the ministry reinforces monitoring systems and information service systems, for example, by improving next-generation earthquake and tsunami monitoring systems and by improving the accuracy of earthquake early warnings.

#### (Creating systems capable of prompt action in times of disasters)

In order to address a large-scale natural disaster by examining the extent of the damage immediately after an incident, the ministry will promptly deploy an emergency disaster rescue team (TEC-FORCE). In addition, to make it possible to implement emergency projects in order to prevent damage from spreading, the ministry enhances emergency response systems.

In addition, the ministry pushes forward the improvement and development of essential and extensive disaster prevention bases, which will serve as bases for emergency response and the formation of governing structures.

To enhance preparedness against an epicentral earthquake in a metropolitan area, central ministries and agencies, including MLIT, have formulated a Business Continuity Plan (BCP) so that they will be able to continue their jobs without interruption, as much as possible, and to restore their functions as rapidly as possible, even if central ministries and agencies as a whole are damaged by a disaster.

In addition, in order to allow important functions, including public transport, physical distribution, and building industries, to continuously work even in a time of disaster, the ministry facilitates the wider use of BCPs in concerned organizations.

#### (b) Ensuring safety in people's daily life

#### (Enhancing the safety of public transport facilities)

In order to further enhance the safety of public transport facilities, transport operators themselves work hard to reinforce safety audit and to enhance transport safety management systems for the purpose of formulating and improving security management systems. The ministry reinforces precautionary measures, including safety improvement of air traffic control.

In addition, the Japan Transport Safety Board was established in October 1, 2008, to enhance investigation into causes of accidents and preventative measures in land, sea and air transport (airliners, railways and ship navigation).

In order to protect accident victims, the ministry also considers the implementation of information services for victims immediately after an incident and of measures to provide moral support to them.

#### (Enhancing safety in our daily life)

In order to allow people to walk and ride bicycles more safely and comfortably, the ministry promotes sidewalk improvement, especially on school routes, the improvement of bicycle lanes set apart from both pedestrians and vehicles, and the removal of utility poles. Furthermore, by tightening standards designed to protect those on foot or in vehicles, the ministry pushes forward precautionary measures for vehicles.

To prevent accidents involving children at parks, the ministry works toward ensuring the safety and security of play equipment at parks.

Regarding crime-prevention, the ministry proceeds with the development of crime-preventative towns, in order to enhance the crime prevention features of entire communities.

#### (Maintaining the function of social capital stock)

In order to make it possible to always safely and comfortably use social capital stock that supports our daily life, such as roads, rivers, sewage systems, ports and harbors, and publicly-operated housing, the ministry pushes forward strategic maintenance measures, including preventive maintenance management, given the anticipated rapid aging of these structures.

### (2) Enhancing safety-net in daily life

Securing housing and smoothly processing what is needed for everyday lifestyles must always be ensured as safety nets in people's daily life. With an aging society and fewer children, changes in household composition and declining public transport facilities in rural areas, factors which have supported our society are at a turning point. The ministry maintains and ensures functions concerning the very foundations of our daily life to maintain functions and convenience in our daily life, and pushes forward necessary measures to gain regional vitality.

#### (a) Housing

#### (Formulating safety nets to ensure housing)

In order to allow those who need special attention in securing housing, including low income earners and the elderly, to easily secure homes, the ministry formulates safety nets in terms of housing, including the appropriate provision of publicly-operated housing. Good Quality Regional Rental Housing, UR-affiliated housing and the provision of information services concerning private rental housing that accepts elderly tenants. In addition, the ministry also stabilizes the provision of housing for those displaced workers compelled to leave employer's housing by taking into account employment measures and pushing forward the better use of available housing in publicly-operated housing.

#### (Providing convenient housing for the elderly)

To support aging in place in collaboration with welfare policies, the ministry promotes providing barrier-free rental housing with lifestyle supports / nursing care services and redeveloping public rental apartment complexes as community-based welfare facilities. The ministry also financially supports private sectors and NPOs to carry out leading business models.

#### (Rebuilding apartment buildings)

To utilize existing apartment buildings as high-quality housing stock, the ministry supports condominium association boards and other parties concerned that work hard for the maintenance and rehabilitation of existing apartments. The ministry also offers support to apartment building rehabilitation projects to meet residents' needs, including the incorporation of more barrier-free features and seismic upgrades.

#### (b) Maintaining transport devices to support our lifestyles

#### (Maintaining and rehabilitating local public transport systems)

To maintain and rehabilitate public transport, which serves as a community-based means of transportation, the ministry pushed forward comprehensive measures conducted by consultative meetings, which consist of public transport operators and relevant municipalities. In addition, the ministry also supports measures (the establishment of community-based railways) to make community-based, local railways more convenient, in collaboration with consultative meetings, and assists the restructuring of transport businesses through publicly managed privatization.

With the local bus industry facing a difficult business environment, the ministry is striving to maintain existing bus routes and promotes more efficient bus services.

The ministry improves ports and harbors for improving the services on sea routes to and from remote islands, which are indispensable for people living there, and pushes forward related structural reforms, including the promotion of management reforms, such as the privatization of publicly-run entities, the integration of calling ports and the construction of energy-efficient vessels.

#### (Enhancing residential roads)

In order to realize safe and comfortable traveling from one place to another within a local community, the ministry pushes forward the improvement and development of road networks leading to the center of residential areas, which will support people's everyday activities, such as commuting and hospital visits, and the improvement of road networks indispensable for urgent rescue activities. The ministry also proceeds with the elimination of bottlenecks by increasing the width of existing roads and improving bypasses.

#### (c) Promoting the incorporation of more barrier-free features

#### (Comprehensively promoting the incorporation of more barrier-free features)

In order to allow everyone to freely and easily travel from one place to another in urban areas, the ministry proceeds with the incorporation of more barrier-free features in an integrated and comprehensive manner, into railway facilities, hospitals, welfare facilities and other buildings as well as into routes connecting them and in buses and taxis.

The ministry pushes forward the incorporation of more barrier-free features at public transport facilities, including the installation of elevators at railway stations used by more than 5,000 passengers a day and at other stations of regional importance. The ministry also proceeds with the introduction of low-floor buses, and pushes forward the development and popularization of bus and taxi vehicles of everyone, including the elderly and the disabled, and everywhere.

MLIT also pushes forward the incorporation of more barrier-free features into buildings used on a daily basis by the general public, particularly the elderly and the handicapped, including hospitals and welfare facilities.

The ministry also promotes the incorporation of more barrier-free features into roads connecting these facilities and public sector facilities, by making pedestrian space more user-friendly through, for example, improving slopes and eliminating differences in levels on existing sidewalks.

#### (Making use of ubiquitous technology)

In order to formulate environments where all pedestrians can obtain information necessary for traveling from one place to another, anytime, anywhere, including the routes most suited to one's physical ability, information on facilities and shopping and information from easy-to-use services at traffic nodes, the ministry pushes forward the improvement of ubiquitous information technologies.

## (3) Making daily life more comfortable

In order to make use of various regional characteristics and formulate attractive and comfortable living areas, the ministry supports, in a comprehensive manner, the creation of vitality in town areas, the improvement of convenience in rural transport and the autonomous development of regions.

#### (a) Development of areas full of vitality and attractiveness

#### (Creating vitality in urban areas)

The ministry pushes forward invigoration of core urban districts and rehabilitation of urban areas, through the integration of urban functions in downtowns by making use of projects to rehabilitate people's daily life and prosperity; through the promotion of people's settling in city areas by financing projects to improve housing therein; and through support for town development, which private sector bodies and local communities take part in and which makes use of community-based originality and ingenuity through town development subsidies.

In addition, the ministry fundamentally reviews the existing system for urban planning in order to reconstruct the system so that it can adapt to a declining population and global environmental problems in the future.

#### (Creating a beautiful and attractive town)

In order to create beautiful and attractive townscapes, the ministry pushes forward support for: the creation of popular riverside spaces combined with town development and for waterside activities, including environmental education; the improvement and functional enhancement of city parks; the removal of utility poles by using a number of techniques, such as using space under eaves and hidden wiring; and the comprehensive creation of historic townscapes making use of historic and cultural heritages in local communities.

#### (Ensuring comfortable and convenient traveling from one place to another)

In order to push forward comprehensive and strategic traffic measures in urban and rural areas together with town development, the ministry pushes forward the improvement and development of LRT and environments where bus services exist, improvement of traffic nodes, and well-planned improvement of bicycle paths. In addition, the ministry facilitates the elimination of traffic jams and railway crossing accidents associated with what are termed "railway crossings that are almost always closed."

#### (Pushing forward the autonomous development of extensive areas)

In order to create a national territory where various extensive areas can autonomously develop into spaces beautiful and convenient for living, the ministry pushes forward the embodiment of extensive regional planning through the use of comprehensive support systems for regional self-reliance and invigoration. At the same time, the ministry promotes support for the formulation of living areas where people can live independently while being able to satisfy their daily needs without traveling far, the ensuring of functions necessary for daily life through support to measures concerning the new public-sector, and the construction of communities.

#### (b) Improving convenience in people's daily life

#### (Constructing relaxed urban traffic)

To realize comfortable and relaxed urban life, the ministry pushes forward the improvement of connecting lines' capacity to deliver passengers to their destinations swiftly, through the effective use of existing urban railway routes; the sophistication of traffic node functions through the improvement of railway stations together with their surrounding areas; and the improvement of urban railway routes, including subway lines. The ministry also promotes off-peak commuting.

#### (Innovation through the use of ICT)

The ministry pushes forward the improvement of environments so as to facilitate the use of ICT (including the formulation of geospatial information infrastructures, the international use of IC-based tickets, and the promotion of ITS) and ICT-related innovation, to ensure high productivity, even in the face of a declining population, through the best use of ICT.

## (4) Enhancing various life-styles

As people's views of life and lifestyles become more diverse, so do their. People's needs in daily life will also vary according to the stage in life and their milestone experiences, including employment, marriage, child-raising and retirement. In order to satisfy these diversified needs, the ministry facilitates support for those who are to secure or renovate housing, the support for those who are willing to live in two regions at the same time or to make "UJI turns" (move back to their rural hometown or other rural areas after living in a city), and the realization of a good balance between work and private life.

#### (Housing best suited to each life stage)

Through mortgage tax breaks, tax breaks associated with barrier-free renovation, and a system to support high-grade home acquisition, the ministry supports people to secure and renovate housing at reasonable prices and improves their living standards in accordance with their life stages.

Furthermore, to promote the shift into a stock-based society, the ministry works to increase the life of housing. The ministry also promotes the housing performance indication system and the improvement and the popularization of housing history information to improve the housing market environment, so that existing homes will be more properly evaluated in the market and effectively used for a longer period of time.

#### (Supporting a variety of life styles)

For the purpose of realizing a wider variety of people's daily life and diversified life styles, and also of increasing the number of people who will lead local cultural activities and the creation of new demands in rural societies, the ministry promotes the support for those who are willing to live and be active in two regions at the same time or to make "UJI turns," for example by facilitating the provision of timeshare housing.

#### (Realizing a balance between work and private life)

By facilitating the introduction of information technology-based telework, which allows flexible ways of living unconstrained by workplace and time, the ministry works toward realizing harmony between work and private life (striking a balance between work and private life.)

## (5) Supporting cross-regional and global-level activities of our life

Apart from support measures in living areas, the ministry comprehensively supports people's daily life among extensive connections, through, for example, the improvement and development of arterial roads and Shinkansen lines, the improvement of international aviation functions, the streamlining of physical distribution, the development of a tourism-oriented country, and reinforced countermeasures against global warming, and other rather intangible support measures.

## (a) Construction of infrastructures, including extensive infrastructure improvement that supports people's daily life and Japan's economy

#### (Improvement, effective use and enhancement of road networks)

In order to support industrial promotion, which is essential for regional self-reliance and enhanced competitiveness, and to improve access to tourism destinations and sophisticated medical facilities, the ministry pushes forward the improvement and development of high-standard arterial roads and other road networks. At the same time, it promotes the improvement of residential arterial roads, so as to formulate self-reliant areas by organically connecting regional resources through road networks.

In addition, to respond to policy issues, such as regional invigoration, the streamlining of physical distribution and the elimination of severe traffic jams in urban areas, MLIT pushes forward the effective use and enhancement of existing expressway networks, through the improvement of ring road systems and the reduction in expressway tolls.

#### (Improving and developing Shinkansen lines)

The ministry pushes forward the improvement of Shinkansen lines, which are high-speed, safe and environment-friendly mass-transport facilities serving as the framework of Japan's national territory. In this way, MLIT works to realize regional invigoration and closer ties between regions by significantly reducing travel times and welcoming more tourists.

#### (Enhancing convenience in international travel)

By making the best use of increases in airport capacity in metropolitan areas following the completion of Haneda airport's offshore runway, which is set to commence operation in 2010, and the extension of the northern parallel runway at Narita airport, and by promoting the integrated use of the two airports, the ministry will expand the maximum use of international aviation in metropolitan area to 24-hour operation. The ministry also works toward making the best use of Kansai International Airport and Chubu International Airport, which operate round the clock, as they are geographically and economically closer to other Asian countries. In addition, the ministry continuously pushes forward negotiations toward aviation liberalization based on the Asian Gateway Initiative.

#### (Improving access to airports)

The ministry pushes forward the development and installation of the Narita New High-Speed Railway, which will have world-class capacity to swiftly deliver passengers to the airport, so that the railway will go into service in FY2010. The ministry also proceeds with the examination and discussion on how to cut the travel time between Narita and Haneda airports to less than one hour, and how to reduce

the travel time between the city center and either of the airports to less than 40 minutes by improving rail access through the use of the Narita New High-Speed Railway.

## (Constructing ports and harbors to serve as nerve centers superior to other major port facilities in Asia in terms of costs and services)

The ministry pushes forward the improvement of next-generation, high-standard container terminals and the development of coastal physical distribution bases, and also promotes the comprehensive intensive reform program of container-based physical distribution centered on Super-hub Ports, so as to formulate seamless physical distribution networks connecting both domestic and overseas destinations.

#### (Streamlining physical distribution, and invigorating areas surrounding airports, ports and harbors)

The ministry supports efforts among physical distribution transport operators, cargo owners and municipalities aimed at streamlining physical distribution in a local community or an urban area where physical distribution facilities converge, such as airports, ports and harbors.

In addition, in order to revitalize regions surrounding airports, ports and harbors, the ministry facilitates the development of transit tours that make better use of lay-over times at airports and of other local tourism promoting measures; the promotion of distribution of community-based specialty goods; and the enhancement of airport functions, including the upgrading of airport terminal functions. The ministry also promotes the improvement of multi-purpose international terminals at ports and harbors, and the formulation of coastal industrial areas aimed at reinforcing ties between waterfront industries and port facilities, so as to promote the establishment of industries and capital investment at waterfront areas and the creation of job opportunities and income opportunities.

#### (b) Promoting Japan as a tourism-oriented country

# (Creating internationally-competitive and attractive tourist destinations and fostering human resources capable of contributing to tourism)

In order to establish self-reliant local economies through an increasing population who interact through tourism, the ministry comprehensively supports the efforts of a variety of local parties concerned, including efforts to develop experience programs making use of tourism resources and efforts to improve accommodation services. In this way, the ministry aims to increase the number of days tourists spend at tourist destinations and the frequency of overnight tours of visitors from both Japan and overseas, so as to develop and improve tourist attractions for extended stays of two nights or more.

In addition, the ministry supports "tourism charisma schools," regional measures to foster tourism-related human resources and other measures for human resource development to promote tourism, so as to establish a mechanism which makes Japan's tourism industry more sustainable and promising.

#### (Expanding international tourism exchange)

In order to attract 10 million tourists from overseas a year by 2010, the ministry is engaged in publishing Japan's attractive points and improving the degree of satisfaction of visitors to Japan from overseas, as a part of Visit Japan Upgrade Project activities. In addition, the ministry works to attract and hold international conferences. The ministry also proceeds with a strategy that aims at attracting 20 million foreign visitors a year by 2020.

#### (Improving environment for sightseeing tours)

In order to promote the development and distribution of new forms of tour products, including eco-tourism, health tourism and industrial tourism, the ministry works to popularize and cultivate "new tourism" by formulating manuals aimed at marketing new tourism tour products.

In addition, the ministry implements, in a demonstrative way, specific measures contributing solutions to a number of problems, such as the equalization of tourism demand and the creation of environments that encourage people to go on vacation.

#### (c) Creation of people's daily life suited to the age of the global environment

#### (Enhancing the monitoring and projection of the global environment)

In order to contribute to mitigation measures and adaptation measures for addressing the impact of global warming, the ministry enhances environmental observation and monitoring on the land, in the air and in the sea. In addition, the ministry distributes detailed information on greenhouse gases concentrations and provides long-term environmental observation and monitoring climate change. It also strives to project global warming over the next thirty years, including anticipated extreme weather related to climate change anticipated in Japan.

#### (Enhancing countermeasures against global warming)

In order to realize a low-carbon society, MLIT enhances countermeasures against global warming, for example, by: promoting the use of public transport and bicycles; streamlining physical distribution, mitigating traffic jams; promoting the wider use and development of low-emission vehicles and energy-efficient railway vehicles; promoting "cool shipping" (incorporating more low-carbon features into the whole process of marine transport); promoting the improvement of aeronautical safety systems; improving the energy efficiency of housing and buildings; promoting the shift to low-carbon urban structures where people can run errands on foot; and implementing measures based on the Hokkaido Environmental Initiative. At the same time, the ministry enhances adaptation measures to get more prepared for increasing risks associated with disasters.

#### (Conserving and rehabilitating waters and green space, which preserve the variety of ecosystems)

For the purpose of conserving and rehabilitating waters and green space, which preserve the variety of ecosystems, the ministry promotes the creation of rivers rich in natural environment, the intensive implementation of nature-rehabilitation projects, the securing of green space, the promotion of afforestation, the restoration of waterside landscapes by making use of the improvement and development of sewage lines and used water, the restoration of sea grass beds and tidelands, and the creation of coastlines by paying attention to habitat environments.

#### (Formulating a Sound-Material-Cycle Society)

The ministry promotes the formulation of a Sound-Material-Cycle Society, by promoting the recycling of building materials, the effective use of sewage sludge, and the formulation of venous distribution networks.

#### Conclusion of Part I

#### (Realizing people's anxiety-free daily life, whereby they feel safe and affluent and have peace of mind)

As mentioned above in Chapter 1, we discussed what kind of frustration and needs people have in their daily life, in this severe socioeconomic climate and other changing environments, through the analysis from three viewpoints. Then in Chapter 2, we presented prime measures thereto among MLIT policies.

At present, our economy and employment situations are in a severe difficulty. Now is the time to invest in the future for the sake of future generations. MLIT is determined to carefully and vigorously address a variety of problems in order to remove people's fears, both tangible and intangible, in their daily life; to realize people's daily life in which they can really feel safe and affluent, and have serenity of mind; and to allow the country as a whole to restore its vitality and to prepare for the new era. We will do so by taking every necessary measure in terms of equipment and facilities and of know-how and expertises.

The implementation of policy measures always incurs costs, which will eventually be born by the people. Always aware of this, we will evaluate the necessity, validity and efficiency of policy measures, and improve them.

We always explore the way policy measures should function, seeking better approaches and discovering any existing weaknesses. Though the positive effects of policy measures do not always reach everyone straight away, we are determined to carefully and steadily address problems. Thus, we would like to address various issues in order to realize better daily life for people, step by step, together with other government institutions, local public agencies and private sector.

## Part II

Trends in MLIT policies

## Chapter 1: New MLIT Policies Accommodating the Needs of the Times

# (1) Formulation and promotion of the future vision on Japan's national territory and social capital

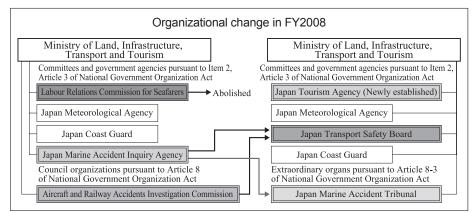
MLIT formulates and promotes National Spatial Strategies and National Land Use Plan in order to use, improve and conserve the national land from comprehensive viewpoints including our economy, society and culture, with consideration for natural conditions.

In addition, based on the Priority Plan for Social Infrastructure Development (the Second Plan was formulated following the expiration of the First Plan.), which has incorporated plans for nine business fields, the ministry promotes social capital improvement projects in a focused and efficient manner.

### (2) Reorganization in FY2008

#### **Establishment of the Japan Tourism Agency**

The Japan Tourism Agency was inaugurated on October 1, 2008, to demonstrate Japan's sincere attitude toward realize the creation of a Tourism Nation, and to improve and develop systems for facilitating the collaboration with other government agencies and for clarifying and integrating the government's contact points related to tourism.



#### **O** Establishment of the Japan Transport Safety Board and Marine Accident Tribunal

The Japan Transport Safety Board and Marine Accident Tribunal were established on October 1, 2008, to improve systems that enhance the sophistication of policy planning and implementation functions, the accident-prevention functions and the comprehensive investigation into causes of railway, aircraft and marine accidents.

## (3) Promotion of new ocean policies (ocean-oriented country)

The Basic Plan on Ocean Policy, which was approved by the Cabinet in March 2008, refers to policy objectives, basic policies, and measures that the government should take in a comprehensive and well-planned manner. MLIT is responsible for a wide range of activities concerning ocean policy, including conservation of the marine environment, the securing of ocean transport, the securing of maritime security, the promotion of oceanographic activities, the development of maritime industries, the comprehensive management of coastal areas and the conservation of remote islands. In FY2008, the tonnage based taxation system was established for ensuring stable international maritime transport, and the Act on Navigation of Foreign Ships through the Territorial Sea and Internal Waters was enacted to maintain and ensure the orderly manner of foreign ships.

## (4) Result-oriented policy development

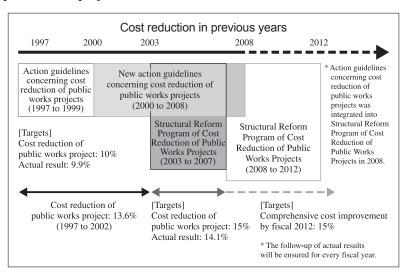
MLIT implements policy assessment (i.e. ex ante evaluation), policy checkup (i.e. performance measurement), and policy review (i.e. program evaluation) and so on. In August 2007, the evaluation process was reviewed so that the units of policy evaluation (measures) and those of the items shown in the budget and account settlement documents will be amended to correspond to each other.

As for individual public works, an integrated project evaluation system has been established, including evaluation at the project approval stage, and reevaluation and ex-post evaluation after project completion. Also, reviews of the demand forecast and examinations are being made to enable further sophistication of evaluation technique.

## (5) Efficiency and competitiveness-oriented policy development

#### O Promoting reform of the cost structure of public works projects

MLIT and its affiliated organizations almost achieved their cost reduction target, attaining a reduction rate of 14.1 % in their total cost reduction efforts in FY2007 compared to the level as of FY2002. Starting in FY2008, efforts will be made to achieve an overall cost improvement of 15% over a five-year period compared to the level as of FY2007, based on the MLIT Public Work Cost Structure Reform Program, which includes additional evaluation items, putting an emphasis on the optimization of VFM.



#### **Ensuring the quality of public works and implementing appropriate tender contracts**

To ensure the enhanced quality of public works, as a general rule, a comprehensive evaluation is conducted for every public works project, and a comprehensive evaluation method has been fully implemented in construction consultant. In addition, MLIT has, as countermeasures to bidding at dumping prices, revised the benchmark prices provided by the system of examining unreasonably low tender prices, and expanded the trial implementation of examination throughout the working processes.

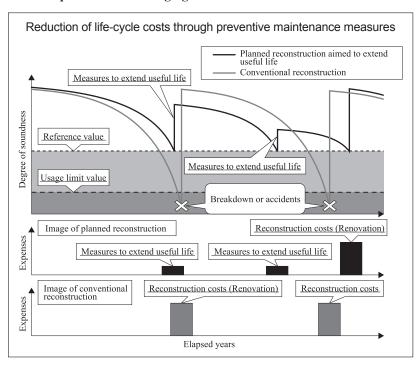
In order to further improve the system of tender contracts, MLIT has been promoting the application of diversified ordering methods, including expanded general competitive bidding, further utilization of the comprehensive evaluation method, use of the bid bond scheme, and application of package contracting for design and construction works, as well as the CM method.

In addition, the ministry asks local public agencies to promote the introduction of the comprehensive evaluation method and the elimination of bidding at dumping prices.

#### OStrategic maintenance and renovation of social capital in the era of aging infrastructure

Some indicate that there will be difficulties in maintaining and renovating existing facilities in the future due to rapidly aging social capital and a sharp rise in maintenance and renovations costs. In addition, with an increase in the proportion of old facilities, there will be a remarkably increased risk of serious accidents and fatal damage.

Accordingly, MLIT has shifted its focus from traditional ex-post management to preventive maintenance management in order to ensure safety and security, and to reduce the life-cycle cost of infrastructure stocks.



# O Reform of independent administrative agencies, overhaul of special accounting and the incorporation of tax revenues earmarked for road improvement into general revenues

As for the reform of independent administrative agencies, efforts will be made to integrate four traffic-related research organizations.

Special accounts were revised by integrating, during FY2008, five special accounts (special accounts of loans for road development, river improvement, port improvement, airport improvement and urban development) into the Special Account for Social Capital Improvement Projects, and integrating the special accounts for motor vehicle liability insurance business and motor vehicle inspection and registration into the Special Account for Motor Vehicle Safety.

As for the system of tax revenues earmarked for road improvement, based on On Shifting the Earmarked Revenues for Road Improvement into General Revenues, which was approved by the government and the ruling parties on December 8, 2008, the system is to be abolished, and all of the tax revenues earmarked for road improvement are to be shifted to general revenues in the FY2009 budget.

# (6) Establishing new relationships among national government, regional governments and the private sector

# New relationships between the national government and regional governments, and utilization of the creativity and ingenuity of the private sector

Taking the appropriate role sharing between the national and regional governments into consideration, MILT is promoting the establishment of flexible standards and criteria to make appropriate options for the regions in accordance with their own circumstances (i.e. introduction of local rules).

MILT has proactively introduced the PFI method to utilize private financial resources and capabilities to provide quality public services, and has reviewed regulations on a timely basis to accurately cope with the changes of the times.

#### O Administrative operation open to people, and promotion of interactive government

The MLIT Hotline Station has been set up to obtain a broader knowledge of the nation's opinions and demands. For the purpose of disclosing, in an easy to understand manner, negative information, including the history of punishments imposed on business operators, the Internet Search Site for Negative Information is provided on the MLIT website. Furthermore, for the purpose of ensuring the transparency and fairness of social capital development projects in their planning and subsequent stages, new guidelines were established in FY2008 that show the standard philosophy on how the technical and professional studies of the project schemes and the process of scheme examination should be carried out, in addition to the existing procedures to invite the nation's participation.

## Chapter 2: Realizing a Tourism Nation

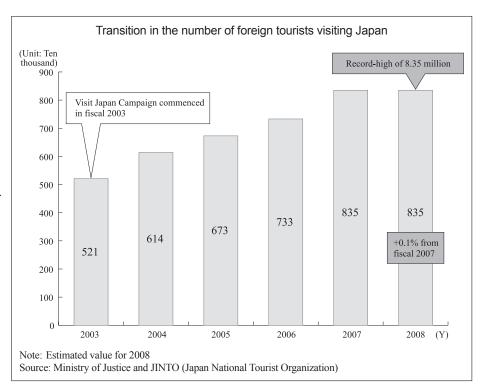
### (1) Tourism trends

#### OSignificance of building a Tourism Nation

Tourism not only contributes to the revitalization of rural economies, an increase in employment opportunities and the development of all other areas of the nation's economy, but also has significance in promoting mutual understanding with other nations. Accordingly, the realization of a Tourism Nation is an important pillar in our land planning for the 21st century.

#### O International tourism today

Thanks to the efforts of the Visit Japan Campaign, the estimated number of foreign tourists who visited Japan in FY2008 was approximately 8.35 million, registering an increase of 5,000, or 0.1% over the previous year. The number of visitors from overseas in FY2008 was the highest ever recorded, in spite of the influence of the recession and the appreciation of the yen in the second half of the year.

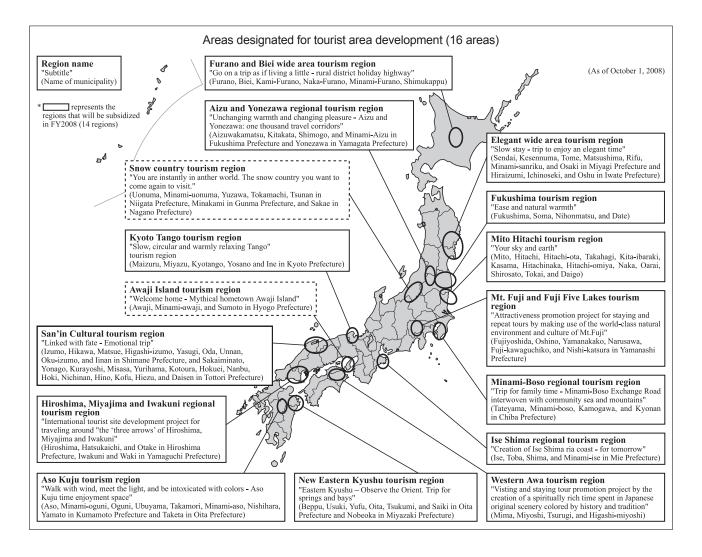


## (2) Efforts to realize a Tourism Natio

In order to take measures as a nation to realize a Tourism Nation in a comprehensive and well-planned manner, the Japan Tourism Agency (JTA) was inaugurated in October 2008. JTA will lead the formation of internationally-competitive, attractive tourist destinations, the enhancement of international competitiveness in the tourism industry, the fostering of human resources conducive to tourism development, the promotion of international tourism, and the improvement of environments for promoting sightseeing tours, in order to realize a Tourism Nation.

#### O Creation of internationally-competitive, attractive points of interest

JTA is engaged in support for tourism projects through the "tourism regions development subsidy system" pursuant to the Act on Promotion of Tourists' Visits and Stays through Development of Tourism Regions, which was enacted in July 2008, support through tourist destinations creating plans, intensive consulting by the tourism town development advisory conference, and the "tourist regions producer" model projects.



# O Improving the international competitiveness of the tourism industry and developing human resources to contribute to the promotion of tourism

JTA is engaged in the implementation of demonstration experiments with the aim of formulating new business models for the tourism industry and populating and developing them, establishing tourism charisma schools and a "human resource development symposium for creating tourist destinations," generating support through the development of mailing lists concerning human resource development for creating tourist destinations, promoting cooperation among the government, industry and academia to train tourism-related workers, and promoting education on the concept of a tourism-oriented country.

#### O Promotion of international tourism

In addition to promoting the attractiveness of Japanese tourism, the Visit Japan Upgrade Project is under way with the goal of enhancing the satisfaction of visitors from overseas, and the ministry works to increase international conferences to be held or invited to be held in Japan, to enhance the convenience of public transport for foreign tourists, and to improve facilities to accept foreign tourists to Japan more smoothly.

#### O Improvement of environments to promote tourism

JTA works toward the equalization of tourism demand; the creation of environments that encourage people to go on vacation; the promotion of tourism based on the concept of universal design; the development of a system to provide information on tourist destinations; the protection of consumers with respect to changing environments concerning tour transactions, such as the description of tour prices, including fuel surcharge prices; developing measures to encourage Japanese people to travel overseas; the creation of new forms of tours; and the preparation of tourism statistics.

## (3) Developing scenic landscapes and other aesthetic land planning

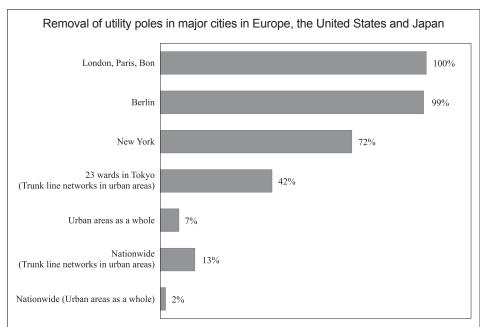
#### O Developing pleasant landscapes

We work hard to develop pleasant landscapes based on the Three Laws on Landscape and Greenery in order to introduce the registration system of outdoor advertisement businesses pursuant to the revised Outdoor Advertisement Act, and promote the outdoor advertisement related administration, including the enactment of ordinances to regulate outdoor advertisements by municipalities that are landscape administrative organizations.

In FY2007, MILT fully introduced a landscape assessment system for projects under the ministry's direct jurisdiction and management.

#### O Development of attractive landscapes the public can be proud of

MLIT is moving forward with the removal of power poles to improve the appearance of townscapes; the promotion of the Scenic Byway Japan project aimed at various parties promoting tourism and contributing to the invigoration of local communities; and the development of waterside spaces. In addition, flexible budget allocation measures are made available throughout the fiscal year to facilitate the effective implementation of various government offices' projects aimed at developing pleasant landscapes.



- Note1: Data on cities overseas is based on "Federation of Electric Power Companies of Japan for 1977." (Based on cables extended)
- Note2: Data on cities and urban areas in Japan is from "Quick estimate for FY2007 by Ministry of Land, Infrastructure, Transport and Tourism" (Based on roads extended)
- Note3: Trunk lines (Arterial roads)are general national highways and prefectural roads "As a whole" refers to roads in urban areas

#### O Creation of local communities that make better use of the local natural environment, history and culture

MLIT is involved in the improvement and development of "The Asuka-Nara Palace Site Historical National Government Park(Nara Palace Site)" the preservation of historic landscapes in ancient cities, and the promotion of town development through the preservation and improvement of historic scenic beauty pursuant to the Historic Town Development Act enforced in November 2008.

## Chapter 3: Promoting Regional Revitalization

### (1) Initiatives toward regional revitalization

The Cabinet has recognized regional revitalization as one of the most important issues facing Japan. With the aim of proactively dealing with regional differences, the implementation structures of the four headquarters established in the Cabinet in connection with regional revitalization (Headquarters for Urban Renaissance, Headquarters for Promotion of Specified Zones for Structural Reform, Headquarters for Regional Revitalization and Headquarters for Revitalization of Central City Areas) were integrated to promote measures across ministries and across policies. In December 2008, the Regional Rehabilitation Strategy was revised to present new policies that incorporate three important pillars: local growth potential enforcement, ensured infrastructures in daily lives at a local community and the creation of a low-carbon society.

In order to invigorate regions, we are determined to proceed with concentrated investment in really indispensable social capital, making use of the framework of National Spatial Planning. In addition, it is necessary to promote comprehensive and strategic traffic measures, to invigorate core urban districts and rehabilitate urban areas, to shift existing cities into more intensive urban structures, to support community-based creative measures to promote tourism, and to promote construction businesses. For the purpose of invigorating regions with a rapidly declining and aging population, the ministry will create areas where people feel at ease in their daily lives from their viewpoints, through support to regional construction activities by "the new public sector."

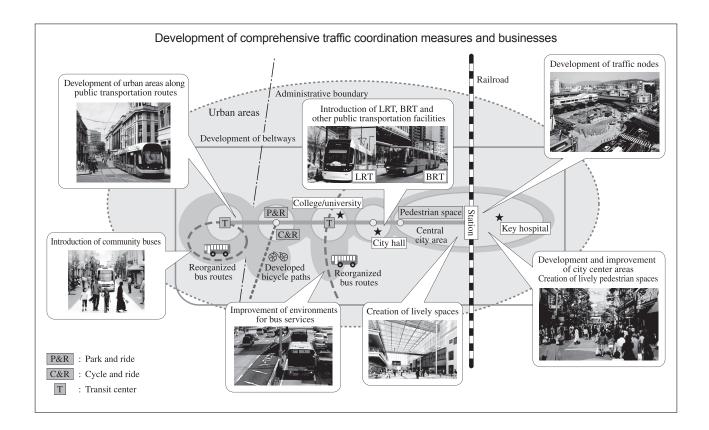
## (2) Promoting policies that support regional revitalization

#### O Initiatives toward enhanced autonomy and discretion of regions and the private sector

MLIT is working toward the expansion and better operation of the Regional Revitalization Infrastructure Reinforcement Grants, Regional Housing Grants, Community Renovation Grants and other grants, and is also encouraging local governments to take advantage of private sector expertise and funds. The ministry also works to create an integrated system that supports measures for regional rehabilitation.

#### O Comprehensive initiatives to realize intensive-type urban structures

The ministry is involved in measures combining the development and revitalization of public transport facilities based on the rural/regional comprehensive traffic strategy and urban development measures aimed at developing stronghold city areas. In addition, pursuant to the Act on Vitalization in City Centers revised in 2006, the ministry takes support measures for designated areas, in a focused manner.



#### O Development of towns and infrastructure development

MLIT pushes forward the development of roads, based on city planning, effective in luring private sector investment. It also carries out the improvement and development of traffic nodes, the improvement of railroad crossings, extensive infrastructure improvement that attracts businesses, and the promotion of other community-based projects and systems. It also promotes cadastral survey, the utilization of deep underground space, and the development of community-based town management by residents, so as to invigorate their local community.

#### OIndependence and revitalization of expanded regional blocks and regional/national building

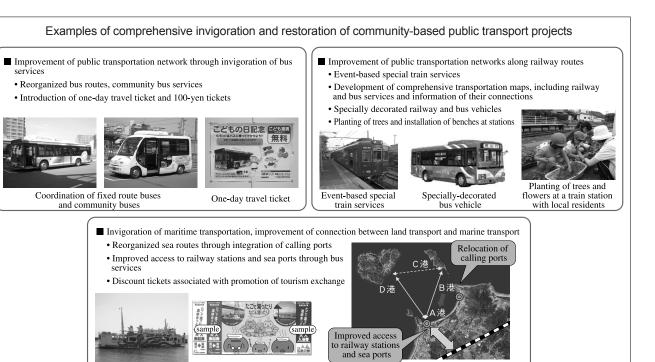
The Regional Independence and Revitalization Comprehensive Assistance Program was introduced in FY2007 with the aim of promoting the independence and revitalization of expanded regional blocks. The ministry is promoting the assistance, in an integrated manner, in terms of know-how and expertise for infrastructure improvement based on plans proposed by local communities themselves in collaboration with the private sector. It also promotes the improvement of bases for the autonomous development of various extensive regional blocks. In addition, the ministry pushes forward the creation of local communities through the new public sector led by various entities, including residents, community-based organizations, NPOs and businesses.

#### O Promoting coordination and exchange among regions

MILT is improving roads in order to promote identification among integrated municipalities and interaction among the regions, exchange between cities and farming, forestry and fishing villages, and also settlement in provincial areas.

#### **O** Securing means of regional transport

In the FY2008 budget, pursuant to the Act concerning Revitalization of Local Public Transport, enforced in October 2007, the "local public transport systems invigoration and rehabilitation comprehensive project" was established. This project aims to comprehensively support councils that address, through originality and ingenuity, various projects concerning regional transport systems, including railways, community buses, shared taxis, and passenger ships. The ministry also renders assistance to the revitalization of local railways, and the maintenance and the securing of local bus routes and transport links to remote islands.



## (3) Promoting urban renaissance projects

Promotion of tourism exchange

The headquarters of the urban rehabilitation department has made decisions concerning 23 urban renaissance projects for the period from June 2001 through March 2009.

Reorganized sea routes

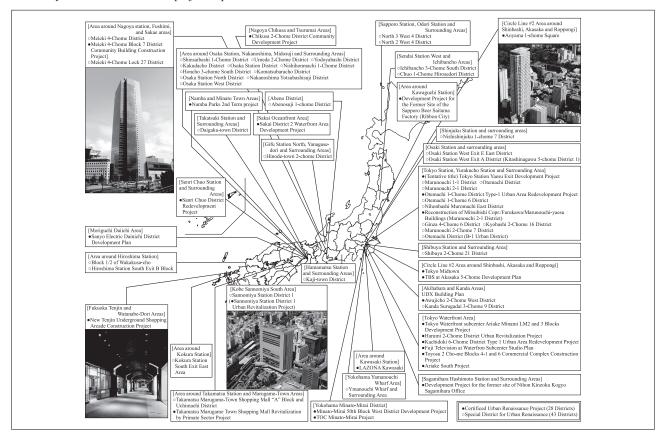
Urban renaissance projects approved so far						
First approval	Fifth approval					
Developing and improving fundamental, wide-area disaster prevention bases at waterfront areas along Tokyo Bay	Forming urban hubs through strategic use of nationally-owned lands					
Restructuring existing metropolitan areas into zero-garbage cities	Sixth approval					
Improving and developing central bureaucracy facilities through PFI	Regenerating Lake Biwa and areas around Yodo River					
Second approval	Seventh approval					
Enhancing international exchange and physical distribution in metropolitan areas	Forming a hub of lifestyle-supporting robot industries in the Osaka area					
Improving and developing beltway systems in metropolitan areas	Eighth approval					
Forming an international center of exchange on life science in the Osaka area	Developing countermeasures to global warming and the heat island phenomenon through urban redevelopment					
Ensuring a "New Zero-Waiting List for Nursery Schools" in urban areas	Ninth approval					
Further developing and enhancing PFI methods	Reconstructing safety and reassurance of local communities through collaboration between crime prevention measures and efforts to create a community					
Third approval	Tenth approval					
Urgently improving crowded city blocks	Promoting urban redevelopment through collaboration and cooperation between universities and community-based efforts					
Using existing stocks in urban areas	Eleventh approval					
Restoring urban environment infrastructures in metropolitan areas	Facilitating urban redevelopment through transfer and relocation of housing of national government workers					
Fourth approval	Twelfth approval					
Forming an international hub of genome science in the Tokyo area	Urgently developing and improving crowded city areas					
Forming a hub of Asian industrial exchange in the Northern Kyushu area	Thirteenth approval					
Creating advanced and unique cities in major urban areas	Facilitating urban redevelopment for enhancing international financial capital functions					

#### **O** Encouraging the private sector to carry out urban development initiatives

As of the end of March 2009, 65 specified areas, including Tokyo, Osaka, and other specified cities and prefectural capital cities, have been designated as Prompt Development Areas for Urban Renaissance under the Special Measures Act for Urban Renaissance to be developed as centers of urban renaissance. In these areas, various urban development initiatives by the private sector are under way.

#### OFlexible budget allocations promoting urban renaissance

Flexible budget allocation measures, available through the National Spatial Projects Adjustment Expense, which was inaugurated in FY2008 by integrating the Urban Renaissance Project Promotion Budgets and other budgets items, provide necessary funding throughout the fiscal year to facilitate effective project implementation.



## (4) Promotion of development measures for specified areas

MILT is proactively promoting the development and promotion of heavy snowfall areas, remote islands, the Amami Islands, the Ogasawara Islands and various peninsulas.

## (5) Promotion of the comprehensive development of Hokkaido

## O Formulation and promotion of 'Leading the Era of the Global Environment, The New Hokkaido Comprehensive Development Plan'

'Leading the Era of the Global Environment, The New Hokkaido Comprehensive Development Plan' which has decided at a Cabinet meeting on July 4, 2008, sets the following strategic goals: "Realization of an Open and Competitive Hokkaido," "Realization of a Sustainable and Beautiful Hokkaido," and "Realization of a Hokkaido with Diverse and Distinct Regions." It promotes various measures and projects by proceeding with the collaboration and cooperation with a variety of entities and by promoting innovative and experimental activities. In order to achieve the goals of the Plan, the ministry will be engaged in the strengthening food supply capabilities, the promotion of the Hokkaido Environmental Initiative, measures to make better use of biomass resources suited to Hokkaido, the invitation of international conference and other events to Hokkaido, and the development of social infrastructure for achieving the strategic goals.

#### OPromoting distinctive local areas and culture

The ministry is engaged in the promotion of areas adjacent to the Northern Territories. In addition, pursuant to "the resolution which considers the Ainu as indigenous people" adopted by both the Upper and Lower Houses on June 6, 2008, a "discussion session on experts concerning policies regarding the Ainu people" was set up on July 1 in the Cabinet Secretariat. In coordination with these moves, the ministry has promoted the Ainu culture and has popularized information and knowledge about the Ainu people's tradition.

## Chapter 4: Creating Comfortable Living Environments

## (1) Providing quality housing

#### O Promotion of the Basic Plan for Housing (National Plan)

Pursuant to the Promotion of the Basic Plan for Housing (National Plan) (approved by the Cabinet in September 2006), MILT is currently promoting measures related to the accelerated stabilization and improvement of residential living standards, with the aim of attaining the following four goals: (1) the creation of quality housing stocks that can be used by future generations, (2) the creation of quality residential environment, (3) the establishing housing market appropriately meeting diversified housing needs of the citizens, and (4) the provision of residential stability for those whose housing needs. In FY2008, the "Conference for Promoting Measures to Stabilize Housing" was held and ministries concerned took part, in order to summarize and review the implementation of relevant measures, in particular, measures taken in collaboration with other sectors, such as measures concerning welfare and public security. In addition, in response to rapidly changing social environments, the ministry revised the Promotion of the Basic Plan for Housing (National Plan), in order to promote the popularization of Long-life quality Houses and the housing renovation in an urgent and focused manner so as to ensure high-quality housing stocks, taking into account that invigoration of housing investment is expected to ensure sustainable economic growth driven by domestic demand.

As a part of measures aimed at extending the lifespan of residences, the Act on the Promotion of Dissemination of Long-life quality Houses was enacted in November 2008.

Purpose and volume of public rental housing

	Purpose	Volume provided
Publicly-Operated Housing	To provide quality, low-rent housing to people with lower incomes in need of housing	About 2.19 million units (FY2007)
Improved housing	To improve the housing environment of inferior residential districts and provide public rental housing for former residents in need of housing	About 160 thousand units (FY2007)
Rental housing provided by the Urban Renaissance Agency	To provide in metropolitan areas, through the development of residential city districts, quality rental housing — mainly family-oriented units, located within shorter distances of work places — that is not supplied by private business operators at an adequate level. (A rental housing system to support private business operators in providing family-oriented rental units was introduced in 2002.)	About 770 thousand units (FY2007)
Rental housing provided by Public Housing Supply Corporations	To supply quality rental housing in accordance with local demand	About 140 thousand units (FY2007)
Good Quality Regional	To help the private land owners the maintenance cost and rent was reduced and further action was taken to provide Good Quality Rental Housing for households with elderly and	

Note1: The number of rental housing units provided by the Urban Renaissance Agency includes that of quality rental housing for the aged.

action was taken to provide Good Quality Rental Housing for households with elderly and

To expand loans to finance the construction of quality rental housing in a living

environment suited to the elderly or child-raising families, or to finance the improvement of

such housing, and to expand loans to finance the purchase of housing that has already been supplied to those whose main goal is to turn it to quality rental housing for the aged

Note2: The number of rental housing units provided by the Public Housing Supply Corporation does not include the number of Good Quality Rental Housing and Good Quality Rental Housing for Aged.

Good Quality Rental Housing for Aged

About 30 thousand units (FY2007)

Note3: In FY2007, the systems of Good Quality Rental Housing and Good Quality Rental Housing for Aged were integrated into a newly established Good Quality Regional Rental Housing system.

Source: Ministry of Land, Infrastructure, Transport and Tourism

child-raising families

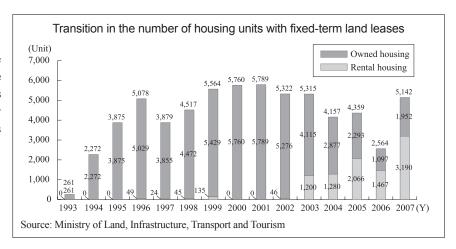
Rental Housing

Rental housing financed by

the Japan Housing Finance

# O Promotion of favorable housing supply and its effective use

MILT is engaged in the effective use of fixed-term land leases and the revitalization of "new towns" as well as policy review to facilitate a stable supply of housing sites with sound environments where necessary.



### (2) Realizing comfortable living environments

#### O Improvement of city parks and formation of comfortable urban environments

The ministry carries out, in an efficient and well-planned manner, the improvement of the National Government Parks and disaster prevention parks as well as the conservation of historic temples, ancient cities, and green space. In addition, it works to popularize the concept of urban greening and green space conservation.

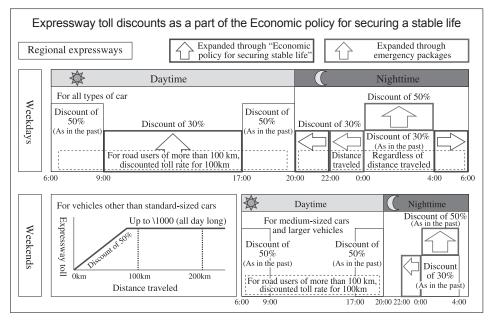
#### O Promotion of road planning prioritizing pedestrians/bicycles

MLIT is promoting easy-to-follow street guides, while taking measures to build up safe, secure and high-quality pedestrian space that prioritizes pedestrians and to develop a safe and comfortable environment for cyclists. In addition, pursuant to the Road Transportation Law revised in FY2007, the ministry has formulated flexible road management systems.

#### (3) Realizing more convenient transport

The ministry will support the promotion of comprehensive and strategic traffic measures in areas where traffic projects and town development are being combined, including the improvement of light rail transit (LRT) systems to be implemented pursuant to the "urban areas and regional areas comprehensive traffic strategy." The MLIT is working to promote the use of Traffic Demand Management (TDM), with the aim of easing congestion, and the revitalization of public transport. It is also engaged in the improvement

of urban railway networks, the development of urban railways, urban monorails and automated guideway transit, and the improvement of bus and taxi accessibility. Furthermore, the ministry facilitates the improvement of "smart interchanges," and introduces and expands various discount systems to reduce expressway tolls, pursuant to Comprehensive Measures for Bringing About Peace of Mind (August 2008) and "the economic policy for securing a stable life (October 2008)."



## Chapter 5: Forging an Open Economic Society with a Competitive Edge

### (1) Improvement in transport networks

#### O Developing arteries

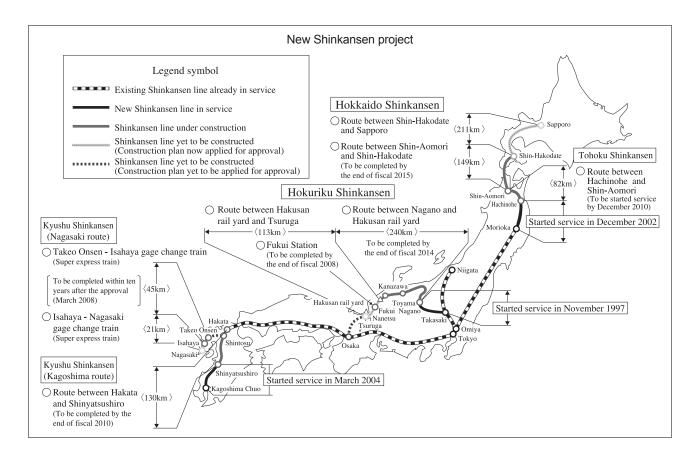
Highway networks, including high-standard highways and high-standard regional roads, constitute a very important infrastructure for Japan, which extends far to the north and south and has connections between regions hindered by mountain ranges and straights separating the major islands. It is vital to build highway networks and to secure their functions for the development of safe and secure national land.

Outlines and actual results of improvement and expansion of high-standard arterial and regional roads								
	Actual results							
High-standard arterial roads								
High-standard regional roads	(Routes and zones designated as of April 2008)  Number of candidate routes: 110 Number of planned routes: 186 Planned routes designated to be extended: Around 6950 km Zones under planned investigation: Around 1,168 km Zones to be improved: 3,183 km Roads to be extended: 1,833 km (Roads to be extended during FY2008) Kanaya Omaezaki Renraku Road (Kanaya Sagara Road)							

#### ODeveloping the trunk railway network

MLIT has been committed to the construction of new Shinkansen lines, which serve as fundamental high-speed transport facilities over Japan's national territory, pursuant to the Nationwide Shinkansen Railway Development Act and based on agreements between the government and the ruling parties. The ministry also proceeds with studies on the Chuo Shinkansen, one of the , planned railway routes, pursuant to the Nationwide Shinkansen Railway Development Act.

MLIT promotes the increasing of the speed of conventional artery railways through the improvement of railroad bends and the partial introduction of double tracks as well as the technological development of superconducting magnetically levitated and variable gauged trains, by making the best use of existing railway facilities.



#### O Developing airline networks

MLIT has been engaged in improving domestic airline networks, by implementing measures for the development of structural aspects of airport facilities and for enhanced competition among airline-service providers through deregulation in nonstructural aspects. The ministry also expands international airline networks by making investment in international airport facilities and by promoting aviation liberalization pursuant to the Asian Gateway Initiative.

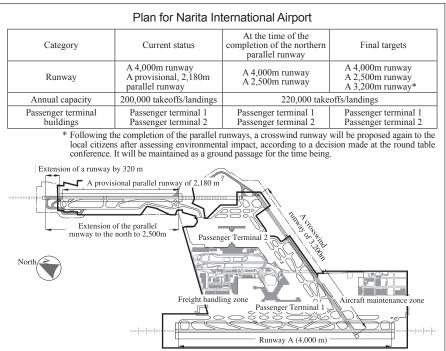
In the metropolitan area, the ministry proceeds with the redevelopment of Tokyo International (Haneda) Airport and the extension of the parallel runway at Narita International Airport to 2,500 m, and it strives to realize the use of both Narita and Tokyo International (Haneda) Airports in an integrated manner to maximize the international aviation function. Regarding the full-scale privatization of Narita

International Airport Corporation, the ministry will make necessary legal amendments in order to introduce regulations that limit large-scale share holdings by stockholders in the country and overseas.

In addition, the ministry is engaged in the deployment of physical distribution facilities at Kansai International Airport, on Niki Island, and the expansion of airfield aprons for passengers at Chubu International Airport.

In order to shift the focus of airport policies from development to operation, the Airport Development and Improvement Act was revised and renamed as the Airport Act in June 2008 to further enhance and streamline airport operations.





## (2) Improving coordination among different transport modes

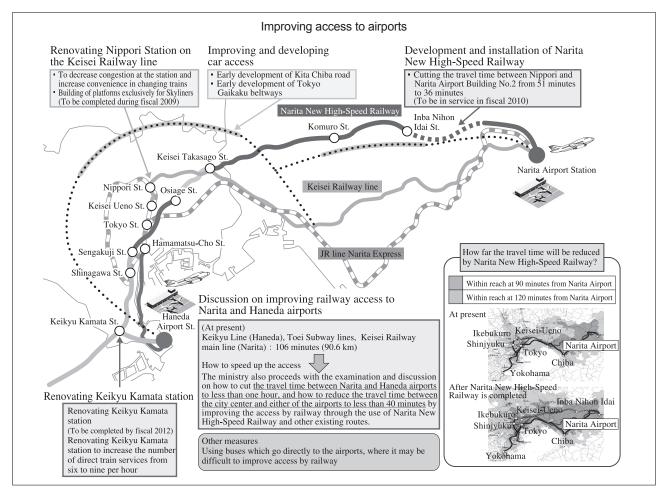
#### O Developing multi-modal transport systems

MLIT is working to improve the speed and facilitation of transit/transshipment by prioritizing the improvement of coordination among key transport facilities and the functional enhancement of such facilities, which includes airports, ports, train stations, high-standard highways, etc. as well as the roads and access railways that connect these key facilities.

#### O Improving access to airports

MLIT aims to improve rail access to Narita International Airport so as to reduce the travel time from central Tokyo to less than 40 minutes by supporting the construction of Narita Rapid Rail Access, and by renovating railway station facilities in order to make transfers more convenient at Nippori Station on the Keisei Railway line. In order to improve road access to Narita International Airport by car, the ministry pushes forward the development and improvement of expressway networks, including the improvement of the east front of Tokyo's Outlying Ring Road System. MLIT is working to further improve railway access to Tokyo International Airport (Haneda Airport), by increasing the capacity of the Keisei Kyuko Dentetsu Airport line, and by comprehensively renovating Keikyu Kamata station to increase the number of train services from the direction of Yokohama.

Furthermore, from the viewpoint of maintaining and enhancing the international competitiveness of the Tokyo metropolitan area, the ministry is examining and discussing measures to further enhance railway access among the two airports and the city center.



## (3) Promoting comprehensive and integrated logistics policies

MLIT is conducting a comprehensive and integrated promotion of logistics policies based on the Comprehensive Logistics Policy Outline (2005-2009). Starting in September 2008, the ministry holds "the Logisticsp strategy committee toward the 2010s," which consists of learned individuals, cargo owners and physical distribution transport operators, for the purpose of optimizing the whole process of logistics through reviewing conventional physical distribution processes. The committee will summarize issues to be addressed and specific solutions. In addition, the 2nd Meeting of the China-Japan-Korea Ministerial Conference on Maritime Transport and Logistics was held in Okayama Prefecture in May 2008, and the "Okayama Declaration concerning cooperation in the physical distribution sector of North East Asia" (joint communiqué) was adopted in order to enhance the collaboration among the three countries in the logistics sector.

#### **O** Measures to strengthen international logistic functions

The ministry enhances the foundation of the international maritime transport network through expanding and deepening the Super-hub Port project, promotes the upgrading of airborne freight functions through enhancing logistics functions at airports in the metropolitan area, and proceeds with international inter-modal transportation.

#### O Measures to develop an efficient logistics system

In connection with administrative procedures required for import and export processes at ports, the "next-generation single window" started operating in October 2008.

For the purpose of streamlining inter-area logistics the ministry boosts the transport capacities of freight railways, develops ports, railway freight terminals and other distribution nodes, and develops and improves extensive road networks. In order to streamline logistics within urban areas, the ministry supports measures aimed at seeking efficiency in urban logistics through collaboration among local parties concerned

MLIT is also supporting the development and training of the human resources needed to promote a new logistics service called 3PL (3rd Party Logistics).

## (4) Revitalizing industries

#### O Trends and policies of railway-related industries

The railway industry is working hard to ensure comfortable and safe train travel, against the backdrop of the severe business environment. IC tickets are being used or are planned to be used throughout the country due to their common or interchangeable use. To promote the complete privatization of JR companies, the central government is continuously supporting Hokkaido Railway Company (JR Hokkaido), Shikoku Railway Company (JR Shikoku), Kyushu Railway Company (JR Kyushu) and Japan Freight Railway Company (JR Freight) by stabilizing and strengthening their management bases.

#### O Trends and policies of motor-vehicle transport industries

In the taxi industry, applications for fare revision were filed in various parts of the country aimed mainly at improving the working conditions of taxi-drivers, and taxi fares have been revised in 53 of the 92 organized fare blocks in Japan (as of December 2008). The Special Measure Law on Appropriate Tax Operation was amended in June 2007 to introduce new measures, including an expansion of the specified areas subject to the driver registration system for areas other than Tokyo and Osaka.

The trucking industry is facing devastating situations, mainly due to the recent crude oil price hikes, in the face of an increasing need to ensure safety and adapt to environmental regulations. MLIT is implementing support in creating an environment allowing the introduction of a tariff system corresponding to fuel price hikes, and it also supports the industry's effort to improve fuel efficiency.

#### **O** Trends and policies of maritime industries

In view of an extreme decrease in the number of Japanese-flag vessels and Japanese crew members resulting from Japan's falling international competitiveness in ocean shipping as well as concern over a potential shortage of crew members due to the aging of crew in the domestic shipping industry, the "Bill to amend part of the Maritime Transportation Act and Seamen's Act" was enforced in July 2008. The Ministry takes measures for implementing the application of a so-called tonnage tariff to oceangoing vessel operators, and for supporting efforts to train and secure seafarers through budget spending, and for improving semen's working environments.

In addition, in coastal shipping, the ministry facilitates the group formation among coastal shipping transport operators, and supports smooth and proper implementation of tentative projects concerning coastal shipping.

Besides the efforts to enhance the international competitive edge of the shipbuilding industry, MLIT is promoting the development and practical application of marine industry technology, including research and development to introduce vessels excellent in safety and environmental design, the development of ocean platform technology that can be applied as the technology basis in the use of ocean space and natural energy in Japan's exclusive economic zone.

#### **O** Trends and policies of aviation industries

Due to fuel price hikes and a sharply decreasing number of passengers following the global recession since the fall of 2008, air carriers have abandoned some routes and reduced the number of services.

MLIT reduces landing fees and takes tax relief measures concerning fixed asset taxes to support the industry, in order to maintain and improve domestic and international air transport networks.

#### Trends and policies of the freight forwarding industries

With an increasing number of newcomers joining the freight forwarding industry, the "WT on facilitating Narita-Haneda logistics" was held in FY2008, as a working group of "the physical distribution strategy committee toward the 2010s," holding discussion among parties concerned on how to facilitate transportation among Narita and Haneda Airports and surrounding areas.

#### O Trends and policies of warehousing industries

Since business environments for the commercial warehouse industry have been much improved, it is now possible to actively proceed with the provision of a variety of services and the streamlining of businesses. Accordingly, the number of newcomers joining the commercial warehouse sector exceeded the number of those exiting the sector, and preference is being given to the comprehensive logistics service business.

#### O Trends and policies of real estate industries

The condition of the real estate market is deteriorating, with the number of contracts concluded declining and a buildup of inventory. In addition, the market for securitization of real estate is now maintaining a downward trend, following the subprime credit crisis in 2007.

The ministry is taking measures for the smooth enforcement of the Act for Execution of Defect Warranty Liability under the HQAA, which will be enforced on October 1, 2009, and for properly responding to the Act on Prevention of Transfer of Criminal Proceeds, which was fully enforced in March 2008.

In order to invigorate the real estate market and realize smooth and invigorated transactions, the ministry takes steps to ensure the transparency of the real estate market, for example, by disclosing the locations, dimensions and prices of real estate traded through the Real Estate Comprehensive Information System. In addition, in order to stimulate demand for real estate as a part of economic measures, the ministry proceeds with the better use of taxation, including the establishment of new special measures concerning taxation on capital gain associated with land and other assets acquired during FY2009 and 2010.

#### O Rejuvenating the construction industry

The construction industry is directly responsible for the improvement of housing and social capital, and is one of the basic industries, accounting for around 10% of both GDP and the total employment. However, the construction industry, too, faces unprecedented difficulty in business conditions, due to an decrease in building investment, sharp hikes in steel, fuel oils and other materials, financial institutions' tighter screening of potential borrowers, and the negative effects from deteriorating business conditions in the real estate sector.

MLIT established the "local construction business management

Local construction business management reinforcing loan scheme To facilitate increasing liquidity concerning construction businesses' receivables associated with public work contracts, including unfinished parts of public work projects. 6. Payment of construction Guarantee Consultation Parties ordering businesses' receivables company public works projects service associated Financial institution 5-1. Debt guarantee with construction contracts Collaboration 2. Approval of transfer 1. Request for transfer of receivables of receivables ▶ 5-2. Loans 3. Transfer of construction businesses 4-1. Funding for subleasing receivables associated with construction contra Cooperative association o Consultation Community-based general private sector business service construction businesses 4-3. Subleasing and financing 4-2. Debt guarantee \* A construction business shall consult with cooperative associations or Construction Business Promotion Fund ※ A construction business shall transfer its receivables to cooperative associations or to general private sector businesses, upon the approval of parties ordering public works projects. \* By combining the debt guarantee by Construction Business Promotion Fund and the debt guarantee by a guarantee company, the amount which exceeds the earned value will be funded.

reinforcing loan scheme," in order to promptly support community-based construction businesses by facilitating funding for them. The scheme is designed to facilitate increased liquidity in construction businesses' receivables associated with public work contracts, including unfinished parts of public work projects. The scheme started operation in November 2008.

In order to enhance the competitive edge, the ministry (1) inaugurated projects to revitalize the construction business and local communities that support and contribute to the invigoration and recovery of the construction sector and the local community through cooperation between various industries, by making better use of human resources, equipment and expertise held by community-based small and medium-sized construction businesses, (2) started emergency consultation services for construction businesses to properly respond to inquiries about their business management, including questions about complex and sophisticated issues, and (3) established a system to dispatch experts, including lawyers, to enterprises.

In addition, to promote the construction industry, the ministry promotes the proper use of ordinary construction joint-venture groups, facilitates the group formation of small and medium-sized, middle-ranking construction businesses, and proceeds with the coalition in projects. It also promotes the invigoration of joint projects carried out by cooperative associations and others and the project reform movement.

## Chapter 6: Building a Safe and Peaceful Society

## (1) Realizing a universal society

#### O Realization of barrier-free features based on the concept of universal design

Following the enforcement of the Act on Promotion of Smooth Transportation, etc. of Elderly Persons, Disabled Persons, etc. (New barrier-free act) in December 2006 the ministry is promoting universal design in Japanese society, by pushing forward the incorporation of more barrier-free features into public transport facilities, living and residential environments and pedestrian space, through improvement in terms of both equipment and facilities as well as know-how and expertise.

#### Incorporation of barrier-free features into public transport facilities

As of March 31, 2008

O Passenger facilities used by more than 5,000 passengers a day								
	Total number of facilities	Facilities meeting the smooth transportation standards in terms of elimination of differences in floor levels	Percentage of total					
Railway stations	2,797	1,881	67.3%					
Bus stops	40	31	77.5%					
Passenger ship terminals	9	8	88.9%					
Airport passenger facilities	21	16	76.2% (100%)*2					

Note1: "The elimination of differences in floor levels" has been evaluated in terms of compliance with Article 4 of the standard concerning the promotion of smooth transportation by public transport pursuant to the New barrier-free Act (including the width of passages, slopes, and the installation of elevators and escalators)

Note2: Airport passenger facilities already met all the standards in terms of slopes, and the installation of elevators and escalators for the handicapped, as of the end of March 2001.

○ Vehicles			
	Total number of vehicles, ships, and aircraft	Number of vehicles, ships and aircraft meeting the smooth transportation standards*	Percentage of total
Railway vehicle	52,476	13,896	26.5%
Bus	60,252		
Low-floor bus		22,578	37.5%
Non-step bus		12,216	20.3%
Welfare taxi vehicle		10,514	-
Passenger ship	932	131	14.1%
Aircraft	504	302	59.9%

Note: "The number of vehicles, ships and aircrafts meeting the smooth transportation standards" has been evaluated in terms of compliance with the standard concerning the promotion of smooth transportation by public transport.

Source: Ministry of Land, Infrastructure, Transport and Tourism

#### O Society with fewer children and creation of environments for raising children

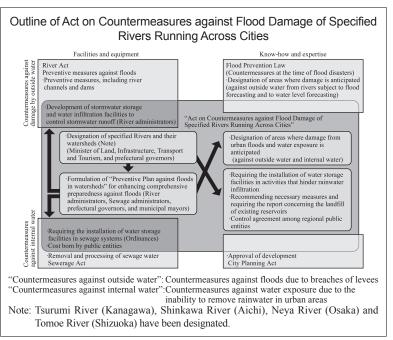
In order to support those who are seeking a balance between work and child-raising experiences, the ministry supports newly-married couples and households raising small children so that they can easily secure proper housing. It also pushes forward the popularization of telework, and promotes transport services for child support. In addition, in order to create environments where children can grow up easily and safely, the ministry proceeds with measures to secure safety and peace of mind for park users, including children.

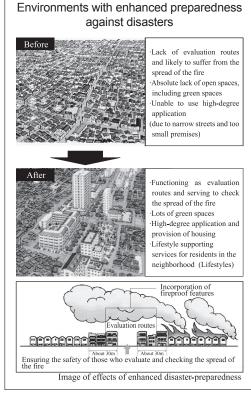
#### O Response to an aging society

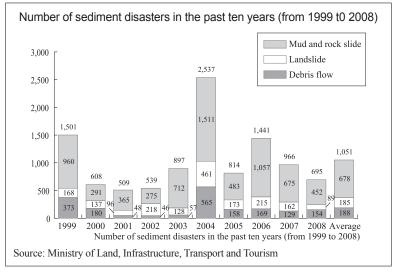
MLIT ensures stability in housing for the elderly, and creates and improves living conditions under which the elderly can safely and comfortably live, in collaboration with welfare policies. The ministry also works for providing transport services suited to an aging society. For example, the revised Road Transportation Act was enforced in October 2006, to establish a registration system allowing NPOs and other entities to provide paid transport services for welfare purposes and for elderly people in under populated areas.

#### (2) Measures against natural disasters

The extremely severe natural conditions in terms of Japan's land features, geological conditions and climates render the protection of life and assets from natural disasters a fundamental challenge. Accordingly, MLIT is committed to integrated structural improvements and non-structural measures, including: food control measures, such as provisions to mitigate damage in case of floods; measures against flood disasters in urban areas involving entire communities as the basis; measures against sediment related disasters; measures against earthquakes by enhancing the quake resistance of housing and buildings; urgent improvement measures for built-up areas to enhance quake resistance; measures against tsunamis, storm surges, and coastal erosion; measures against avalanches; and erosion and sediment control work in volcanic areas.

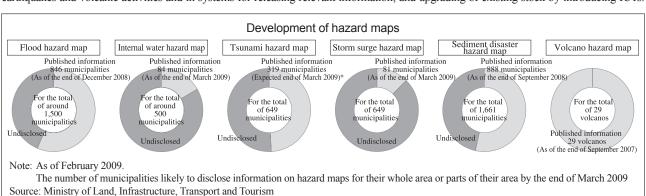






#### OBetter disaster prevention arrangement

Aside from the promotion of non-structural measures, including the information and public relations activities concerning safety and security, promotion is implemented for more sophisticated information on disaster prevention. Such promotion includes the following measures: improved hazard maps; the transmission of earthquake early warnings; improvement in the disaster prevention capacities of rural communities, such as measures to care for the elderly, small children, and others with special needs during emergencies; arrangements to boost emergency responsiveness, such as the preparation of the MLIT business continuity plan (BCP); enhancement in monitoring earthquakes and volcanic activities and in systems for releasing relevant information; and upgrading of existing stock by introducing ICTs.



#### **○** Ensuring disaster-resistant transport system

MLIT promotes the development of a disaster-resistant transport system with ensured multiple access and substitutability in order to secure passengers' safety, traffic functions, the transportation and evacuation of citizens, the sick and wounded and emergency supplies in the event of a large-scale disaster. Disaster prevention is also promoted for roads, railways, ports and air transport.

## (3) Ensuring safety of building structures

The Act to Partly Amend the Building Code, intended to ensure tighter control on building certification and related examination, came into effect in June 2007, and the Act to Partly Amend the Act on Registered Architects and Others, designed to enhance the quality and competence of registered architects, was enforced in November 2008. In addition, the Act for Execution of Defect Warranty Liability under the HQAA," which was enacted in May 2007, was partly enforced in April 2008. (This act will be fully enforced in October 2009.)

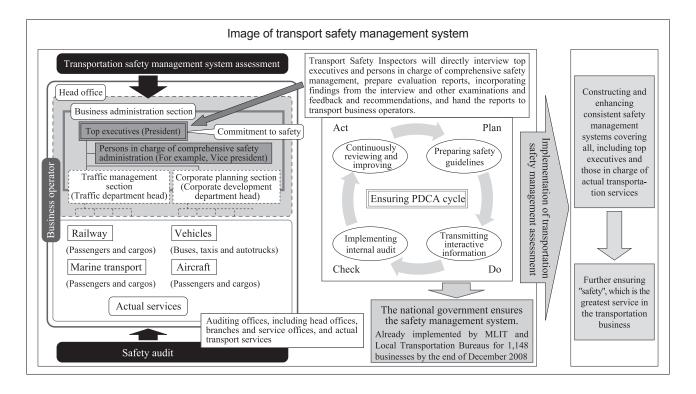
These acts ensure the reliability of construction and supply systems of houses and buildings.

Efforts are also made to ensure proper response to accidents involving elevators and play facilities, through improved and enhanced periodic reporting systems.

## (4) Reinforcing safety measures in the transport sector

Coordinating and improving the safety management system for public transport

The Act to Partly Amend the Railway Business Act and Others to Improve Safety of Transportation (Comprehensive Transportation Safety Act) came into effect in October 2006 and requires transport business operators to prepare and submit a Safety Management Manual to MLIT, appoint Safety General Managers and notify MLIT regarding such appointment. The ministry has started conducting Transportation Safety Management Assessments. The Assessments recently marked the second anniversary of inauguration, and MLIT has prepared the general overview of its assessments' findings and has summarized them so that they can serve as reference data for other transport operators.



#### ORailway safety measures

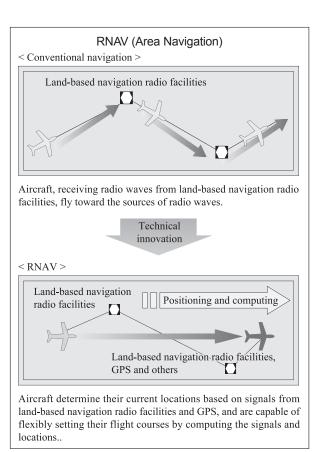
Based on the lessons learned from the JR West Fukuchiyama Line Derailment, MLIT has required business operators to install ATS (automatic train stop) or other speed-control devices at narrow curves, and instructed them to improve methods to identify the causes of incidents (events that could lead to accidents) and utilize such information for future accident prevention. In consideration of the JR East Uetsu Main Line Derailment, deliberation concerning measures against wind blasts is under way, which includes reinforced wind blast observation by railroad operators. Efforts are further taken for preventive measures against accidents at railroad crossings.

#### **Maritime safety measures**

MLIT is working toward improvement in the safety of vessels, through such means as a review of the domestic safety rules and regulations, in line with the amended SOLAS convention (The International Convention for the Safety of Life at Sea, 1914) to be enforced between 2009 and 2010. MLIT is engaged in securing the safety of navigation through various measures, including the establishment of a maritime accidents analysis center in the Marine Technology Safety Research Institute in September 2008, for sophisticated specialist analysis on maritime accidents; the promotion of safety measures for crew and passengers; the enhancement of the rescue system; an investigation into maritime accidents; and the prevention of recurrences.

#### O Aviation safety measures

Starting in October 2006, the ministry imposes an obligation on airlines to report safety related troubles as well as to establish safety management systems. It also reinforces its monitoring of airliners and carries out audits, including those conducted on a no-prior-notice basis. An aviation safety system for safer and smoother aviation traffic is being constructed, through such efforts as introducing full-scale Area Navigation (RNAV) and improving the functions of the Air Traffic Management (ATM) system.

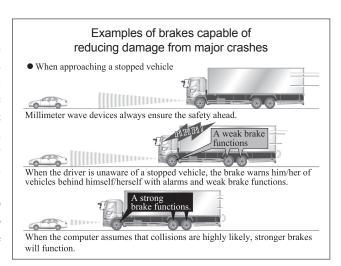


#### O Investigation into causes of accidents involving aircraft, railways and vessels and ensuring the prevention thereof

The Aircraft and Railway Accidents Investigation Commission released its research results on the crash landing at Kochi airport in March 2007 and the JR East Uetsu Main Line Derailment in December 2005. The Marine Accident Inquiry Agency mainly blamed Atago crew members' carelessness in monitoring, for the collision between the MSDF Aegis destroyer Atago and the fishing boat Seitoku Maru in February 2008, and recommended enforcement of communication, reporting and monitoring systems.

#### O Road traffic safety measures

The number of people killed or injured in traffic accidents declined in 2008 for the eighth year in a row. Yet nearly one in every 100 people is either killed or seriously injured in a traffic accident. MLIT is taking focused measures to reduce traffic accidents on arterial roads and residential roads, and carries out systematic maintenance of roads to ensure secure and safe road services. The ministry's comprehensive motor vehicle safety initiative involves expanding and strengthening safety standards, providing safety information through automotive assessments, developing and disseminating Advanced Safety Vehicles (ASV) and improving the motor vehicle recall system. The initiative also enhances protection of accident victims through motor vehicle liability security systems.



## (5) Crisis management and security

## O Promoting measures against crime and terrorism

In cooperation with other nations, MLIT proceeds with measures for ensuring transport security, including anticrime and counterterrorism measures, for all modes of transport and their facilities, as well as secure information and logistics. The ministry is also enhancing countermeasures against pirates.

#### Number of incidents associated with pirates and armed holdups at sea

Year		2002			2003			2004			2005			2006			2007	
Eastern Asia	(	175 12		(	193 11		(	173		(	117 9		(	88 6		(	79 5	
Indian Ocean	(	66		(	96 1		(	41		(	51 0	)	(	53 1		(	40 2	
Africa	(	70 2		(	89 0		(	70		(	73 0		(	62 1		(	120 3	
Latin America	(	67 1		(	72 0		(	46		(	26 0		(	31 0		(	25 0	
Others	(	5		(	2 0		(	0		(	0		(	6		(	18 0	
Total	(	383 16		(	452 12		(	330		(	267 9		(	240 8		(	282 10	
Category	Under way	In harbor	Unknown															
All vessels	102	277	4	207	237	8	145	184	1	110	153	4	77	134	29	104	114	64
Vessels associated with Japan	0	16	0	2	9	1	4	3	0	6	3	0	2	6	0	3	7	0

Note: Figures in upper lines represent the number of incidents involving any country's vessels. (Source: International Maritime Organization)

Figures in the brackets represent the number of incidents involving Japan-affiliated vessels, including Japanese-flag vessels and foreign vessels operated by Japanese businesses. (Source: Ministry of Land, Infrastructure, Transport and Tourism)

#### **Establishing responsiveness to incidents**

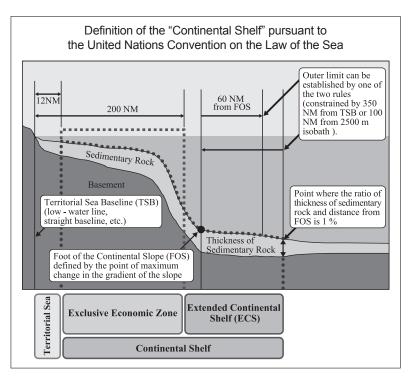
In preparation for incidents and disasters involving vessels, aircrafts or railways, MLIT has established disaster headquarters to implement prompt and adequate measures. In addition, it reinforces collaboration with relevant organizations in response to accidents and disasters at sea. MLIT is striving to establish a system that is capable of prompt and effective response to pollution accidents at sea associated with oil or other harmful liquid substances.

#### **O**Enhancement of maritime safety system

The maritime safety system has been enhanced through the promotion and improvement of operation structure and measures against terrorism, suspicious ships, spy boats and maritime crimes.

#### OPreservation of Japan's marine interests

To ensure Japan's sovereignty in its territorial sea, the ministry properly guards such waters, and conducts resources development and ocean investigation in Japan's vast exclusive economic zones surrounding its territorial sea. In addition, the ministry promotes the improvement of basic information through conducting, in a focused manner, surveys of ocean floor topography, crustal structures, and territorial sea baselines in areas for which it does not have sufficient data. The ministry proceeded with surveys necessary to establish the outer limits of the continental shelf and completed the surveys in June 2008. Then, based on the decision regarding the outer limits of continental shelf made by the Headquarters for Ocean Policy, the submission to the Commission on the Limits of the Continental Shelf was made. The ministry will take appropriate responses to the examination by the Commission. MLIT also works to conserve Okinotorishima Island.



#### ONational security and protection of lives and property of Japanese people

The Plan on Protection of Citizens has been formulated through the joint efforts of MLIT, the Geographical Survey Institute, the Japan Meteorological Agency and the Japan Coast Guard with the aim of addressing possible armed attacks on the country to transport evacuees. In response to the launching of ballistic missiles by North Korea in July 2006 and the statement on nuclear tests issued by the same country in October of the same year, measures have been taken to put all North Korean vessels under embargo and to verify information on the entry of any North Korean vessel into Japanese ports.

#### OCountermeasures against pandemic influenza

MLIT formulated the MLIT Action Plan to Address Pandemic Influenza, and in case of an outbreak overseas, it will take defense measures, including concentrating medical inspection on selected airports and port facilities and limiting international airline services and passenger vessel services. In case of an outbreak in Japan, it will take measures for public transport facilities and measures to geographically contain epidemics. The Japan Coast Guard has also formulated the Japan Coast Guard Action Plan to Address Pandemic Influenza and will take every possible defense measure together with relevant ministries. It will monitor and control illegal immigrants from any country affected by an epidemic.

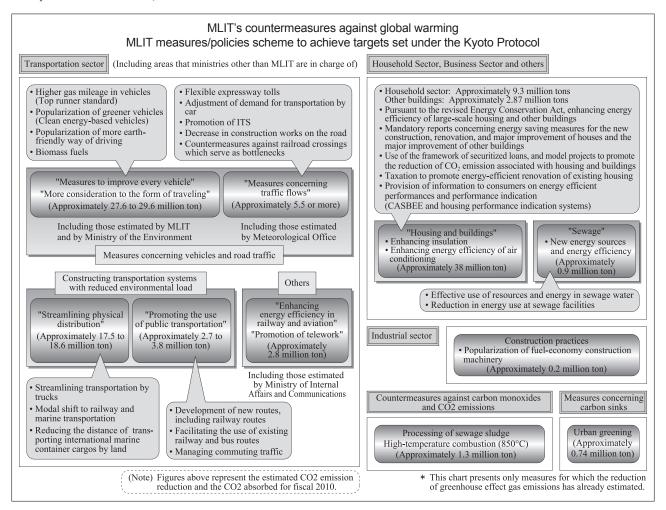
## Chapter 7: Creating and Conserving a Beautiful and Favorable Environment

## (1) Promoting measures against global warming

#### O Implementation of plans to achieve targets set under the Kyoto Protocol

The Kyoto Protocol Target Achievement Plan (approved by the Cabinet in 2005) was fully revised, following a discussion on targets and measures in March 2008, just before the first commitment period. The ministry will take all possible steps to attain the plan's goal without fail by promoting energy efficiency and the use of new energy sources in the transport sector as well as in the housing and building areas of the consumer sector, the construction engineering areas of the industrial sector and in sewage lines, and by increasing carbon sinks through urban greening.

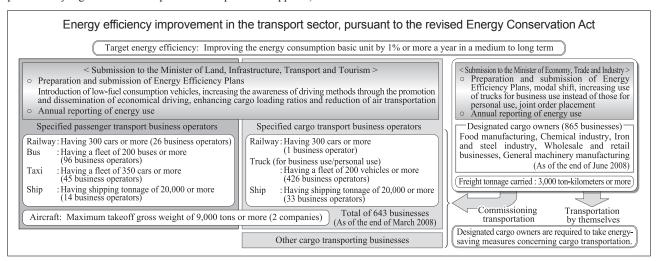
In addition, the ministry is promoting the formation of low-carbon urban and rural structures and low-carbon socioeconomic systems, and the experimental implementation of emissions trading in the domestic integrated market (approved by Global Warming Prevention Headquarters in October 2008).



#### **Measures** in the transport sector

In order to reduce CO2 emissions in the transport sector, MLIT is implementing measures aimed at individual motor vehicles, including improving fuel consumption, developing systems to higher fuel performance, a green tax plan for motor vehicles and developing the next generation of low emission vehicles. At the same time it is making efforts to increase the awareness of driving methods through the promotion and dissemination of economical driving. The ministry is also proceeding with promoting environmental measures in the transport sector by achieving smooth road traffic flows and enhanced coordination between logistics business operators and corporate shippers through the holding of Green Logistics Partnership Conferences and similar initiatives. The ministry is promoting the use of public transport by making it more convenient through the introduction of IC cards and the improvement of transport connections.

Furthermore, pursuant to the Act on the Rational Use of Energy (Energy Conservation Act) designed to further reduce CO2 emissions, the ministry will promote additional measures for achieving higher energy efficiency in the transport sector by using regular reports presented by logistics business operators and specified shippers.)



#### OMeasures concerning houses, buildings, sewerage and urban greening

Law concerning of the Rational Use of Energy (Energy Conservation Act), revised in 2005, has stipulated mandatory reports concerning energy saving measures for the new construction, renovation, and major improvement of housing and the major improvement of other buildings. The revision in May 2008 aims at introducing measures to further improve the energy performance of housing, including enhanced collateral measures in the case of large-sized buildings' failure to meet energy efficiency standards.

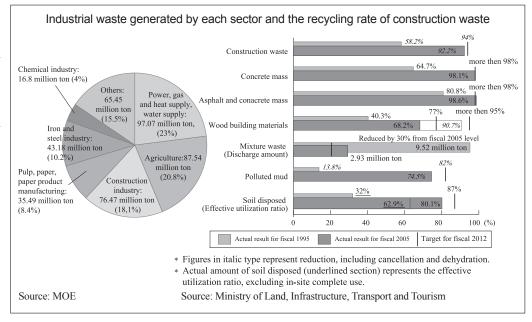
In addition, the ministry also develops and disseminates CASBEE (Comprehensive Assessment System for Built Environment Efficiency), and takes special measures to cut income tax and fixed asset tax for those who have met some requirements concerning energy-efficient renovation of existing housing.

MLIT is also promoting the reduction of government facilities' environmental loads, advancing the popularization of symbiosis housing, taking measures to improve sewage systems and urban districts, and promoting urban greening (planting) and other provisions for carbon sinks,

## (2) Promoting a sound material-cycle society

#### O Promoting the recycling of construction materials

MLIT is committed to promoting, reducing, recycling and restraining the generation of construction waste and sewage sludge (Both of which accounts for about 20 percent of waste discharged from all industries).



#### O Developing logistics systems for recyclable resources

MLIT recently designated 21 Recycle Ports nationwide and is proceeding with the development of an appropriate and efficient international logistics network for recyclable resources.

The ministry develops the sea surface waste disposal facilities in a well planned manner, using and coordinating with ports and harbors, regarding final disposal sites.

#### O Recycling vehicles and FRP boats

Pursuant to the Act on Recycling, etc. of End-of-Life Vehicles, the ministry promotes the proper disposal of used vehicles and the prevention of illegal dumping thereof. The recycling of FRP (Fiber Reinforced Plastic) boats has been put into practice across the country with the support of MLIT, by ensuring appropriate disposal methods of such vessels.

#### O Promoting procurement of materials contributing to the reduction of environmental load

MLIT is promoting green procurement efforts and the wider use of wood materials in public works projects as well as the dissemination of wooden houses.

## (3) Conserving and regenerating a beautiful and abundant natural environment

#### O Development of a beautiful and abundant fluvial environment

MLIT is promoting the development and conservation of a sound riparian environment and the restoration of river water as well as the comprehensive maintenance of earth and sand covering the areas from mountains to beaches. The ministry is also promoting education concerning fluvial environments.

#### Maintenance and conservation of beach and coastal area environments

It is necessary to protect beach areas from high waters, tsunamis and ocean waves, while at the same time, securing areas for the inhabitation and growth of life forms, maintaining scenic beauty and ensuring the proper use of beaches are essential. MLIT is promoting the maintenance and preservation of beaches by sustaining balance among "protection," "environment" and the use of beaches.

#### OGreening of port administration

The MLIT's fundamental policy on port administration is to aim for the development and utilization of ports as well as the preservation, restoration and creation of their environments. The ministry also promotes the review and enhancement of ocean environmental policy measures that will include the maintenance of an ocean environment database (on water quality, bottom materials, and forms of wildlife) whereby administrative agencies, research laboratories and citizens will share and coordinate the oceanic environmental data they collect and manage respectively.

#### O Promotion of the greening of roads and measures for natural environments

The greening of roads will be promoted to reduce environmental load and create beautiful scenic views. MLIT aims at preserving and restoring environments based on the fundamental policy to avoid or minimize impacts on irreplaceable natural environments and to employ alternative measures whenever possible, starting from the planning phase.

## (4) Promoting sound hydrological cycles

#### O Efforts to develop sound hydrological cycles through coordination among government offices concerned

MLIT is working to promote sound hydrological cycles in association with other ministries and agencies concerned.

#### **○** Efforts to improve water environments

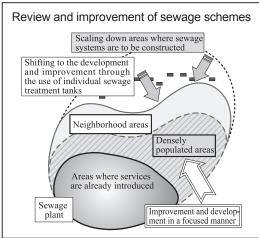
The ministry is also formulating and implementing the Phase II Emergency Action Plan for Improvement of Water Environment (Clear Water Renaissance II) with respect to 34 rivers across the country whose water environment is deteriorating considerably. Efforts are also being made to improve the water environment in the enclosed coastal seas as well as to promote sewerage maintenance and the restoration of canals in response to local needs.

#### Oreation of water resources and good use of water

In order to stably supply water resources, MLIT is ensuring stability in water use, and is promoting the invigoration of areas around water resources, the improvement of water quality in reservoir areas, measures against the infiltration of storm water, measures for groundwater and the use of rain water and treated water.

# ○ Realizing comfortable lifestyles through improvement of sewage lines

The ministry promotes treatment of used water through focused, efficient improvement and development, and secures the sustainability of sewage line projects through ensuring proper stock management, reinforced management infrastructures, the promotion of private consignment and the securing of technical expertise.



## (5) Conservation of marine environment

MLIT is promoting measures to prevent large scale oil pollution by participating in international activities to eliminate sub-standard vessels, which are a leading factor behind major oil pollution, and by enhancing port state control (PSC), where vessels calling at ports in Japan are inspected to verify their conformity to required standards. Other promotion conducted by the ministry includes measures against gas emissions from vessels and studies to establish a certification system for facilities to be installed to control harmful aquatic organisms in ballast water.

# (6) Improving the living environment through measures against air and noise pollution

Addressing environmental degradation associated with road transport

Along with strict auto emission standards imposed on individual motor vehicles and the development and dissemination of low-emission vehicles, MLIT is promoting measures against air and sound pollution by facilitating smooth traffic flows, for example, through traffic demand management (TDM).

#### O Environmental measures for airports and their vicinities

MLIT is taking measures directed at the sources of aircraft noise and improving airports' structures, as well as making efforts to preserve and create more favorable environments in airports and surrounding areas.

#### OMeasures against railroad noise

Regarding the Shinkansen, measures directed at noise sources are being implemented, and further soundproof improvements will be made for the benefit of houses subjected to such noise in case the said measures are not sufficiently effective. Noise from other lines is addressed by giving instructions to railway operators based on the Policy for Noise Measures upon Newly Installed or Drastically Improved Conventional Lines.

#### OAddressing urban heat-island issues

Pursuant to the Outline of Measures against Urban Heart Island Effect (March 2004), established with the aims of reducing artificial exhaust heat, improving surface coatings, upgrading urban forms, and improving the people's lifestyles, MLIT is focusing intensively on measures to secure greenery and open areas in a strategic manner, and will implement long-term measures.

#### O Responding to the sick building syndrome and soil contamination issues

MLIT is addressing the sick building syndrome, soil contamination and dioxin issues, while taking necessary measures against the asbestos issue, which include the removal of air-borne asbestos from existing buildings and the elimination of it during demolitions.

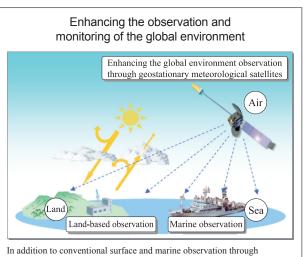
#### **Environment-friendly construction**

Regulation on the use of non-road special motor vehicles has been implemented pursuant to the Act on Regulation, etc. of Emissions from Non-road Special Motor Vehicles. In addition, the ministry works toward designating and disseminating low-noise, low-vibration construction machines to control noise at building sites.

## (7) Observation/monitoring/projection of the global environment

#### Observation and monitoring of global environment

Pursuant to the Priority Measures Concerning the Future Global Environment formulated and released in June 2008, MLIT is monitoring the concentrations of  $\mathrm{CO}_2$  in the atmosphere and the ocean by research vessels. The ministry also plans to implement the next geostationary meteorological satellites, Himawari-8 and 9, which lead the world with enhanced functions to observe the global environment. MLIT participates in the Argo Project to deploy profiling floats, which observe water temperature and salinity from the surface to middepth (2000m) autonomously in global oceans. The ministry is also observing and monitoring the ozone layer and ultraviolet rays and promoting regular environmental observation in Antarctica.



In addition to conventional surface and marine observation through observation ships, MLIT will improve the observation and monitoring of the global environment on the land, in the air and in the sea.

#### OProjection of global climate change

With respect to global warming, the Japan Meteorological Agency and Meteorological Research Institute have developed models to project global climate change as well as climate change of the areas around Japan, and the research results have been quoted in the Fourth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC). Tokyo Climate Center (TCC) provides technical assistance, and information related to the observation of extreme weather, long-range weather forecasting and global warming predictions to meteorological organizations in other countries.

#### O Promotion of Global Map and global geodetic observation

MLIT is playing a leading role in the Global Mapping Project. MLIT is also conducting global geodetic observation, such as on crustal movement and associated research, including international observation activities with the aid of VLBI (measurement technology using radio stars) and SLR (capable of measuring earth–satellite distance with the aid of a laser).

## Chapter 8: International Partnerships and Contributions for the Nation's Sustainable Development and Enhanced International Competitiveness

# (1) Developing international partnerships and coordination mechanisms under the initiative of Japan

To address a variety of global and regional issues that require wide-ranging international cooperation, MLIT takes initiatives in establishing and developing international partnerships and coordination mechanisms.

With regard to climate change issues in the transport sector, MLIT organized the Ministerial Conference on Global Environment and Energy in Transport, and shared with many developed and developing countries a long-term global vision of realizing low-carbon and low-pollution transport systems, toward which the ministry takes the leadership on enhancing international cooperation in such a field as assistance for formulating action plans in developing countries.

Water issue is another global challenge. Through UNESCO and the Network of Asian River Basin Organizations (NARBO), MLIT contributes to the dissemination and promotion of integrated water resources management, and supports the Team Water Japan, an industry-government-academia partnership to address crises associated with water in Japan and abroad.

MLIT also strengthens partnerships in the Asia and the Pacific region in such fields as transport, logistics, construction, water and marine environment management through various frameworks of cooperation. Those frameworks include: the Minister's Forum on Infrastructure Development in the Asia-Pacific Region, the ASEAN-Japan Transport Ministers Meeting; the China-Japan-Korea Ministerial Conference on Transport and Logistics; and the Japan-Vietnam Conference on Construction and Partnerships in Environmental Management for the Seas of East Asia.

## (2) Issues concerning international standards

MLIT works to establish and promote international standards in a variety of areas. Efforts include: the harmonization of vehicle regulations and mutual recognition of certification; the standardization of railway specifications; the promotion of formulating international standards concerning vessels and seafarers; the harmonization of civil engineering and construction standards and the certification system; and the standardization of ITS and geographical information. The ministry also addresses issues of geographical name standardization, particularly the issue over the name of the Sea of Japan, in cooperation with other government offices.

# (3) International cooperation that utilizes Japan's experiences, technology and expertise

To meet strong needs of the relevant sectors in developing countries, MLIT promotes a range of international cooperation measures, from capacity building, aid policy formulation and technological development for environmental and safety issues, to the transfer of technology and know-how to developing countries in close coordination with JICA and other international organizations. In the field of socioeconomic infrastructure development, MLIT supports large-scale projects such as the Asian Highway and the Mekong Region Development. The ministry also provides technical assistance in such fields as infrastructure, environment, safety and security through giving seminars and offering training. For the countries devastated by natural disasters such as Sichuan Earthquake in May 2008, MLIT provides maximum technical support through government survey missions and others experts to promote international cooperation for disaster prevention and disaster-resistant community development.

## (4) Multilateral and bilateral talks

MLIT participates in multilateral talks and forums, including the World Trade Organization (WTO), the Asia-Pacific Economic Cooperation (APEC) and the International Civil Aviation Organization (ICAO), in order to advance negotiations and make proposals. In addition, the ministry works to enhance multilateral efforts and actively facilitates partnership among countries involved in such sectors as logistics, tourism, roads, ports, maritime safety, and geographic surveying and mapping. MLIT also engages in relevant bilateral negotiations, including those on economic partnership agreements (EPAs) and free trade agreements (FTAs), through which the ministry exchanges opinions about related policies and promotes technical cooperation with various stakeholders.

# Chapter 9: Use of Information and Communication Technology (ICT) and Promotion of Technical Research and Development

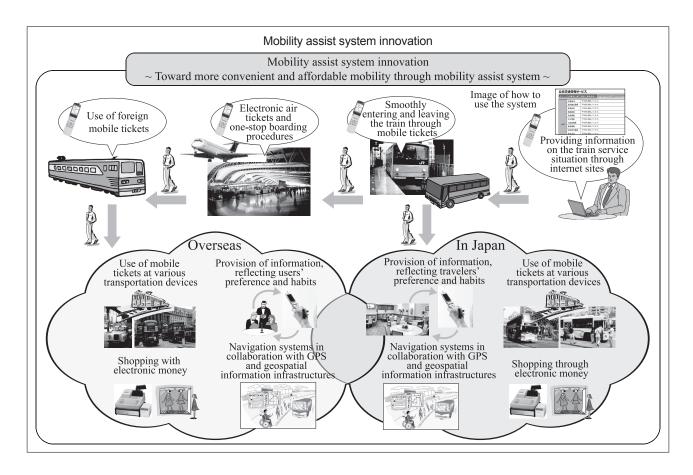
## (1) Promoting innovation in MLIT administration through the use of ICT

#### O Development of location-related information systems with the aid of ubiquitous technologies

MLIT is promoting the Free Mobility Project using Japan's advanced ubiquitous network technology. Demonstration experiments were conducted at five locations in Japan in FY2008 with the aim of commencing regular services in the near future, and the ministry summarized findings and issues to be addressed concerning the project. Starting in FY2009, the ministry will support model projects conducted by local public agencies and other entities, and will disseminate the systems to local communities.

#### OApplication of ICT in the transport sector

The ministry proceeds with the application of ICT in the public transport field that includes the mutual use of IC train tickets among countries in the Asia region, and will realize the mobility assist system, including the introduction of mobile IC-based tickets and next-generation IC-based ticket systems by installing transport ticket functions in cell phones. The ministry promotes the Intelligent Transport System (ITS), disseminates Electronic Toll Collection System (ETC), improves the provision of road traffic information, and promotes technology development and demonstration experiments.



#### O Realization of a society the utilizes advanced geospatial information

Pursuant to the Basic Act on the Advancement of Utilizing Geospatial Information with the aim of realizing an economic society utilizing advanced geospatial information, the Basic Plan on the Advancement of Utilizing Geospatial Information was approved at a Cabinet meeting in April 2008. The ministry is promoting the development of Denshi Kokudo, a digital map of Japan to be developed by computer, while establishing a framework related to geospatial information, including fundamental geospatial data.

#### O Realization of electronic government

The application of ICT is being promoted in order to realize one-stop-service in motor vehicle ownership procedures (including car safety inspection, vehicle registration, certification of parking spaces and payment of motor vehicle tax) as well as to tender and contract formalities for public works.

# O Development of fiber-optic network for maintenance of public facilities and its accommodation pipeline open to public use

The ministry is promoting the improvement and development of the network, for the purpose of streamlining the management of public facilities and providing and sharing large volumes of data in a stable manner.

Fiber-optic networks for managing state-controlled rivers and roads have been made available to the public and private business operators, to the extent that facility management is not disturbed.

## (2) Promotion of Technical Research and Development

While improving the framework for the partnership among industry, government and academia at all levels of ministry, including bureaus at the headquarters, affiliated research institutions and regional development bureaus, MLIT is promoting cross-sectoral and integrated research and the development of technologies, and is actively reflecting findings from research and development in the construction and transport industries as well as in related public works projects. MLIT is promoting technology R&D to realize the society that the ministry as a whole should try to establish according to its MLIT Technology Basic Plan (period: 2008- 2012).

It also promotes the use and dissemination of new technologies in public works projects.

## (3) Improving construction management techniques

MLIT is making efforts to improve its cost estimation techniques in public works projects, including an attempt to shift from the traditional Capital Cost Estimate method to the Unit Price-Type Estimation method. The ministry is promoting the application of ISO management systems to public works projects.

## (4) Research and development on construction machinery and equipment

MLIT is working to develop and improve construction machinery in order to realize more efficient, effective and safer construction projects, to rationalize the maintenance of machinery and equipment and to improve their reliability. The ministry also introduces already-developed techniques in construction works.

For example, during reconstruction activities following the Iwate-Miyagi Nairiku Earthquake in June 2008, unmanned tele-operated backhoes (mining machines) were used in at-risk areas, as a specific precaution measure.