

# Transport, Roads and Traffic

## 1 Introduction

More than half a century has passed since the start of full-scale efforts to build up Japan's road network. As construction requirements have evolved, the national road network has come to play a major role in supporting the social and economic activities of the country. However, roads and road infrastructure, especially bridges, are aging rapidly. In December 2012, ceiling panels in the Tokyo-bound Sasago Tunnel along the Chuo Expressway collapsed, killing nine people and creating a prolonged closure of that section of the expressway. Many other defects caused by aging of road infrastructure have been reported nationwide.

Until now, expressway policies emphasized road development, but they are now moving towards emphasizing service. There are calls to pave the way for the evolution of a next-generation expressway network that is sustainable and, for users, more rational and highly convenient.

This article considers the current road situation and presents recent trends concerning expressways and measures to deal with the aging road infrastructure.

## 2 Roads

### 2.1. Background to the recommendations

The social capital stock represented by concentrated road construction during the period of high economic growth is rapidly eroding and, with problems caused by the aging of part of the road infrastructure coming to light, measures against that aging have become an urgent issue. These problems concerning the aging of the road infrastructure, as well as the necessity and importance of addressing them, have been pointed out countless times before in various proposals and reports. As shown in Figure 1, the overwhelming majority of road length in Japan falls under the jurisdiction of prefectures or municipalities. These jurisdictions face challenges in

terms of budget, system, and technical ability that can lead to purely reactive on-site measures.

Against this background, the Road Committee of the Panel on Infrastructure Development compiled the Recommendations for Full-scale Maintenance of Aging Roads report at the 46th basic policy meeting on April 14, 2014. It presents important recommendations on implementing measures to maintain the aging road infrastructure, which are outlined below. The full text of the recommendations is available from the Ministry of Land, Infrastructure, Transport and Tourism (MLIT) website.

### 2.2. Recommendations on the full-scale maintenance of aging roads

#### 2.2.1. Current state of road infrastructure

There are currently some 700,000 road bridges and some 10,000 road tunnels across Japan. Of those 700,000 bridges, 70%, or about 520,000, are located on municipal roads (Fig. 2) the majority of which are managed by local governments. Many of those bridges and tunnels date to the concentrated construction period of high economic growth and are aging rapidly. In ten years, the number

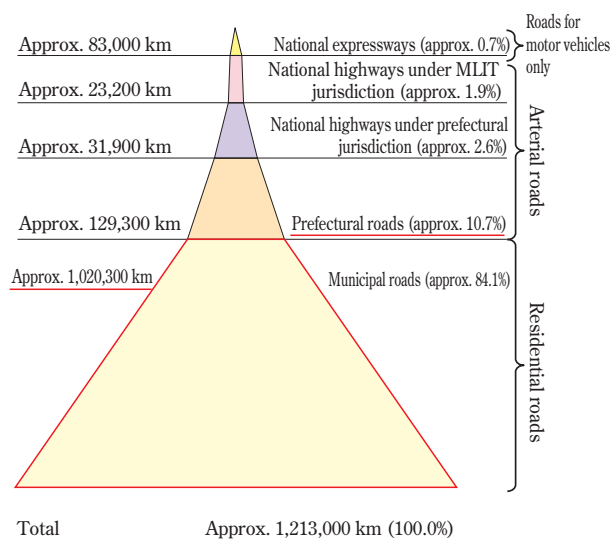


Fig. 1 Japanese road types and proportions by length.

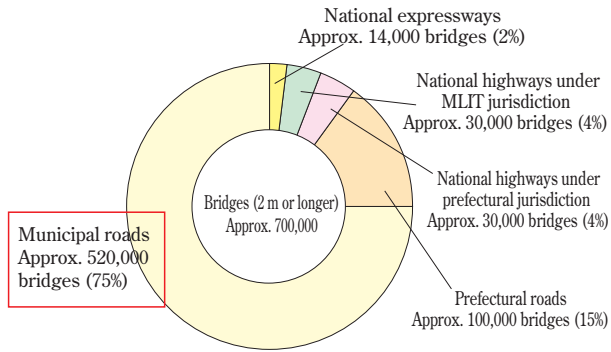


Fig. 2 Number of bridges by road type

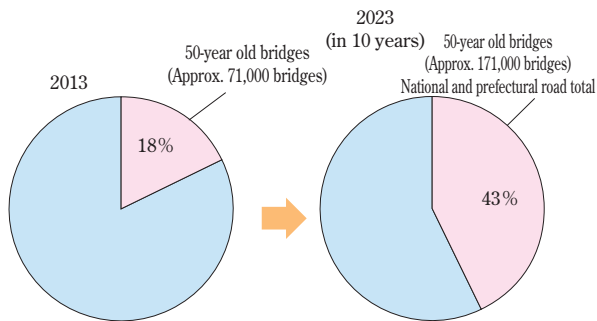


Fig. 3 Proportion of 50-year old bridges (excluding cases where age is unknown)

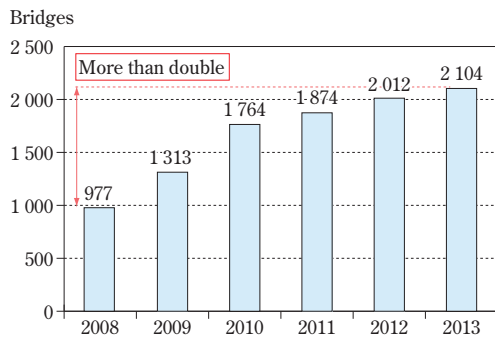


Fig. 4 Traffic restrictions on bridges (2 m or longer) managed by local governments

of bridges that are 50 years old is expected to exceed 40% (Fig. 3).

Deformation due to age has recently been surfacing in some structures that were rushed to completion for the 1964 Tokyo Olympic Games or the 1970 Expo in Osaka, or built in severe environments such as coastal or underwater locations. By contrast, many bridges that have been in use for 80 years remain undamaged thanks to timely and diligent repair and reinforcement.

In the last 5 years, the number of bridges managed by local governments that have been closed or subjected to vehicle weight restrictions has more than doubled (Fig. 4). Moreover, accidents caused by falling concrete blocks in tunnels, or by the collapse of a street lamp due to corro-

sion, occur every year.

Historically, Japan built wooden bridges and “maintenance” simply meant that it was normal to build a new bridge when one was lost to flood or fire. Bridges made of steel and concrete became widespread around 1955, and were called “permanent bridges” at the time. The lack awareness of the need for maintenance and management is illustrated by the contemporary belief that such bridges were maintenance-free and required no more than repainting.

### 2.2.2. Issues around aging road maintenance

The budget allocated to maintenance and rehabilitation of national highways under MLIT jurisdiction, which should normally have increased to deal with aging road infrastructure, decreased by about 20% in the last ten years in conjunction with cuts in the national budget for public works.

In 2012, the national government instituted a Subsidy for Disaster Damage Prevention and Safety Program, which provides financial support for giving priority to bridge inspection and rehabilitation in municipal government road budgets. However, even more support is required as about 90% of municipalities are requesting further subsidies for the maintenance of their aging infrastructure.

Under such financial constraints, about 70% of municipalities experience difficulty in attracting new investments, and about 90% of them are expressing concerns over safety problems arising from the lack of funds necessary for aging road maintenance.

Smaller local government budgets require spreading out the cost of large-scale construction, such as the rebuilding of bridges, over several fiscal years. However the current subsidy program is not designed to provide multi-year financial support for large scale rehabilitation or rebuilding projects.

With regard to the institutional framework, about 50% of towns and 70% of villages do not have civil engineers on staff to deal with bridge maintenance (Fig. 5). Another issue is the poor quality of the bridge inspection guidelines in municipalities, many of which only call for a visual inspection at a distance.

Furthermore the age of about half of the bridges under municipal jurisdiction is unclear, calling attention to the insufficient preparation of road inventories and the high number of road administrators who fail to store and manage the bridge design documents. This demon-

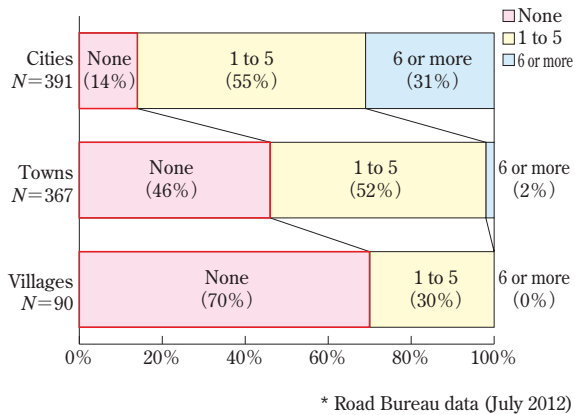


Fig. 5 Number of civil engineers employed by municipalities (for bridge maintenance)

strates that some municipalities do not know the scale or condition of the infrastructure under their care and can be said to reflect poor awareness of the importance of rehabilitating and upgrading it.

Due to their low volume of traffic, expressway overpasses receive a low maintenance priority from road administrators, and some are never inspected. However, they can cause significant damage to third-parties if something unexpected happens.

### 2.2.3. Two fundamental issues

The aging of road infrastructure is not a new issue, and the necessity of taking action has been pointed out in the past. Expressways and national highways under MLIT jurisdictions are at the core of Japan's socioeconomic activities and measures to keep them from deteriorating are well underway. On the other hand, local governments have had to manage a large portion of the road infrastructure while struggling with the three constraints of insufficient funding, insufficient staff, and insufficient technical skill. Consequently, they have only maintained the roads under their care to the limited extent that proved feasible.

Merely establishing a legal framework specifying the frequency and methods of inspection and establishing a system to carry out aging maintenance would not be enough, because municipalities currently lack the manpower and technical know-how to follow-through on such maintenance.

Therefore, two fundamental issues can be identified for local governments: (1) the absence of established minimum rules and standards on maintenance, and (2) the absence of a framework to carry out the maintenance cycle (inspection, assessment, action, and record keeping).

### 2.2.4. MLIT initiatives

In response to the Sasago Tunnel ceiling collapse accident, the MLIT urgently carried out emergency and intensive inspections to ensure a minimum degree of safety in terms of preventing injury to third parties. Further, to set up a full-scale maintenance cycle, the MLIT has used recommendations by committees on the Panel on Infrastructure Development to introduce amendments to the Road Act that provide legal inspection standards and establish a system that allows the national government to carry out maintenance work on behalf of municipalities.

### 2.2.5. Looking ahead

To achieve the comprehensive implementation of aging road maintenance, and, in particular, to promote initiatives at the local government level, the MLIT should use the following two pillars as the basis for the launch of a full-scale maintenance cycle.

#### 2.2.5.1. Define the maintenance cycle (make road administrator duties clear)

This involves stipulating inspection and assessment standards based on the Road Act to clarify the responsibilities of road administrators (rules and standards) and allow citizens to feel safe using the road infrastructure.

#### 2.2.5.2. Building mechanisms to carry out the maintenance cycle

This involves the setting up of mechanisms including the necessary budget, framework, and technology to allow road administrators to implement a sustainable maintenance cycle.

At the same time, efforts must be made to win public support and understanding concerning current initiatives to deal with aging roads as well as the maintenance and rebuilding responsibilities borne by road administrators and the required funding.

The above pillars must be applied to achieving a long-lived society with a sustainable infrastructure where users feel at ease in continuing to use the road network.

### 2.2.6. Specific initiatives

The recommendations conclude by presenting the setting up of a maintenance cycle built on clearly defined road administrator duties as a specific initiative. The maintenance cycle is defined as inspection, assessment, action, and record keeping. The following points are then listed as items that must be worked on to build a mechanism to implement the maintenance cycle: (1) the acquisition of stable funding, (2) a support framework

for local government initiatives, (3) establishing means of drawing upon the technical ability of the private sector, (4) promoting public understanding and cooperation and, (5) other factors.

The recommendations specifically point out the need for stricter instructions and crackdowns on overloaded vehicles through gathering information and performing on-site inspections in cooperation with other authorities. They also call for the establishment of suitable and easy passage for heavy-duty vehicles through the revision of examination standards for, and the quick issuance of, permits for the use of special vehicles on roads.

### **3 Recent Trends Concerning Expressways**

#### **3.1. Background**

The two subcommittees responsible for toll roads and arterial roads under the Road Committee of the Panel on Infrastructure Development were reorganized into the new National Arterial Road Sub-committee. It started discussing the future of the national arterial road system in November 2012.

In June 2013, the National Arterial Road Sub-committee released its interim findings, and the Road Bureau announced its new basic policy on expressway tolls the following December. Then, after going through the public comment procedure, the expressway companies adopted the new fees as of April 2014.

The details and particulars of those discussions are presented below.

#### **3.2. Interim findings of the National Arterial Road Sub-committee**

The interim findings cover a variety of details including prospects for the expressways, maintenance and rebuilding initiatives and the toll structure. The explanations below focus on the toll-related findings.

##### **3.2.1. The development of the expressway infrastructure**

The development of Japan's expressway infrastructure began after World War II. At the time, the extremely poor condition of roads in Japan brought about the remark that "No other industrial nation has so completely neglected its highway system". A public corporation undertook the construction of a toll-based expressway and the Ritto-Amagasaki section of the Meishin Expressway – Japan's first expressway – opened to traffic in July 1963. Fifty years have passed since then.

The current Arterial High-standard Highway Network

Plan, which aims to create a network accessible from anywhere in Japan within an hour, was formulated as part of the Fourth Comprehensive National Development Plan in 1987 and will span 14,000 km.

This plan is the result of revising the original 7,600 km network of the 1966 National Expressway Network Plan to add an extra 3,920 km of expressways and 2,480 km of national highways.

Furthermore, based on the principle of assigning the private sector the tasks to which it is suited, the four expressway public corporations were privatized in October 2005 with the following goals: (1) over a fixed period, repay the 40 trillion yen total interest-bearing debt incurred by the public corporations, (2) perform early repair work on toll road sections requiring maintenance while integrating the private sector's economic judgment and minimizing the burden on citizens and, (3) at the same time, leverage private sector know-how to provide a versatile and flexible toll structure as well as a variety of services taking advantage of road resources and related information, as exemplified by service areas.

Throughout these changes, toll road and ministerial jurisdiction projects have been used to build over 10,000 km of arterial high-standard highways and create a network spanning a wide area that is integrated with other national highways.

##### **3.2.2. Vision for expressways**

The functionality of the expressway network must be upgraded in a way that emphasizes safe and effective use of an existing infrastructure adapted to an increased stock and to aging in light of pending issues and a future vision of the automobile society as well as the assessment of priorities.

In addition, evaluations methods must be enhanced for a stricter selection of projects that accounts for future traffic demand and can also properly reflect the various effects brought about by expressways.

Reinforcing the expressway network calls for the urgent consolidation of the networks around metropolitan areas and regional major cities which serve as the hubs of Japan's economic activities. At the same time, efforts to achieve network capability that allows the conservation of national land must be given the highest priority by renewing awareness that a network consists of connections and enhancing earthquake resistance in vulnerable areas.

##### **3.2.3. Osaka and regional major cities**

Given the current poor state of urban area ring roads and road networks from an international point of view, urgent consolidation to alleviate urban congestion and increase the quality of the network (e.g., reliability) is a top priority issue. In addition, building new ring roads around urban areas will create new value on the periphery of urban centers through, for example, the relocation of distribution facilities to the suburbs. This in turn is expected to result in increasing the potential of urban areas. It is also crucial to establish network multiplexing that will enable Osaka and regional major cities to back each other up in the event of a disaster through enhanced mutual coordination.

Strategic congestion alleviation measures that draw on all conceivable solutions, from the simplest ideas to the most drastic large scale policies, are necessary. Specifically, ideas including drastic measures such as the building of ring roads, concerted bottleneck countermeasures, rethinking the use of road shoulders, or setting up more simple interchanges are required to alleviate traffic congestion.

#### **3.2.4. Enhanced expressway earthquake resistance**

To preserve the vitality of regions by making up for the drawbacks due to the decline in resident population through the expansion of the non-resident population, it is important to assure coordination between regions and secure evacuation and rescue routes. From the standpoints of carrying loads over long distances and ensuring redundancy in the event of a disaster, it is desirable to guarantee a service level with communication speeds of 60 to 80 km/h. Building an arterial road network requires taking not only expressways, but also the use of high-trafficability national highways into account, as well as adopting two-lane divided highways, enhancing the capacity of regions to deal with natural disasters and making efforts to rapidly achieve network capability that allows the conservation of national land.

#### **3.2.5. Strengthening connections between traffic hubs and the distribution network**

Increased distribution efficiency realized through a seamless distribution network is essential to enhancing Japan's international competitiveness. To achieve this, it is critical to support greater efficiency by rapidly granting permits for special vehicles when heavy duty vehicles carrying shipping containers use roads for the passage of vehicles designated as special vehicles under Japanese law. Taking inspiration from Europe and other

regions, it is equally critical to create the necessary road capability to provide better access to airports and ports serving as gateways.

Moreover, accommodating Asian economic growth also makes it important to improve the key shipping lanes interconnecting the hub ports along the Sea of Japan as well as those connecting them to the Pacific Ocean.

#### **3.2.6. Fair and equitable burden of use**

Expressways and other infrastructure become damaged or age more rapidly as usage increases, and maintaining them makes imposing some of the cost burden on citizens and users unavoidable. A fair framework to distribute the burden is vital to proper maintenance, rebuilding, and lasting capability. Without forgetting the burdens associated with changes in the vehicle-based society such as the growing spread of next-generation vehicles based on new sources of energy, or with the acquisition, ownership, and use of a vehicle, it is imperative to attain a fair distribution of burden that accounts for the degree of use, the extent of infrastructure damage, and social impact.

#### **3.2.7. The toll structure**

Japan's toll road system, along with the tax revenue system with earmarks for roads, were introduced in 1952 to accelerate the then extremely slow development of the road network, and have acted as the wheels of the stable funding bus. As a result, road improvement in Japan moved into high gear and laid the foundation for the subsequent high economic growth.

With Japan's economy then shifting down from high growth and going through a period of stability, the expressway network has now reached some 10,000 km, making it necessary to look ahead to a toll road system suited to the next-generation of infrastructure and to shift the paradigm from emphasizing development to emphasizing service.

#### **3.2.8. Issues with the current toll structure**

The current toll structure is burdened with issues that include not only construction circumstances leading to differences in toll rates between sections and expressways not being used effectively, but also the fact that the next discount scheme remains undetermined.

Reflecting on the damage various vehicles cause to expressways has led to pointing out the need to revise the toll rates applied by type of vehicle for mid-sized or larger vehicles, as well as for motorcycles. Similarly, given their use as basic everyday means of transportation



in regions, there have been calls to reduce the rates for light vehicles. On top of that, there are also complaints that users are not receiving sufficient benefit from the tax imposed on fuel consumed on expressways. The issues involved cover a lot of ground.

### **3.2.9. Particulars of the current toll rates**

In 1972, a pool system was introduced to rectify the differences in tolls arising from differences in the period during which the national expressways were built. This established a unified national toll rate, which was set to 8 yen/km (for ordinary cars) at the time. Thereafter, with new sections coming into use and rising construction costs, the toll rate gradually rose, reaching 23 yen/km in 1989. Taking the service life of the facilities into account, the 1995 toll revision extended the toll collection period from 30 to 40 years and set the toll rate at 24.6 yen/km.

There have been no rate revisions since then, but when new sections open, extensions to the period of toll collection have been applied on the grounds of fairness in terms of the burden borne by different generations.

However, a higher rate is applied to sections that have very long tunnels or are located on the outskirts of metropolitan areas (the Tokyo, Kyoto, Osaka and Kobe areas) as they are more costly than ordinary sections.

By contrast, since rates for ordinary toll roads have been set individually based on profitability, their toll rates differ from those of the national expressways. Among those, in consideration of their construction cost and convenience, the expressways linking Honshu and Shikoku, and the Tokyo Bay Aqua-Line are particularly expensive compared to national expressways.

### **3.2.10. Roadmap for new toll rates**

To achieve a fair distribution of burden that enables expressways to fulfill their potential in the overall traffic framework and establishes a system that can be sustained throughout future generations, the new toll rate structure should follow the roadmap below.

#### **3.2.10.1. Achieve acceptable rates and make efforts to reduce them**

A distance-based toll system built on the principle of acceptability, where the burden is fairly distributed among users and tolls are socially and economically regarded as appropriate relative to utility fees, public transport fares and the cost of living should be established.

Also, to support the day-to-day life and economic activities of citizens, through means such as promoting

utilization, efforts must be made to provide substantive discounts while maintaining acceptability and avoiding disruptions to the smooth flow of traffic. In doing so, mandatory burdens imposed on vehicles, such as the various vehicle taxes and the compulsory automobile third party liability insurance should also be taken into consideration.

In addition, to ensure profitability at a low toll rate, some people have voiced the opinion that the costs of site acquisition, which will not drop in the future, should be exempted from the repayment amount.

#### **3.2.10.2. Building a stable and simple framework**

To facilitate the use of expressways, tolls should be based on a simple, highly-sustainable framework.

#### **3.2.10.3. Optimizing traffic flow through flexible toll measures**

Within a simple, highly-sustainable framework, the policy issues involving alleviating congestion on ordinary roads and improving roadside environments should be resolved. Also, to increase social value, flexible toll measures applied by timeframe, day, or frequency with pinpoint accuracy should be operated effectively.

Doing so calls for the establishment of mechanisms to provide information to users, though such means as the use of ETC, on the discounts applied to the specific route they drove even if they are not familiar with all the details of the toll measures.

#### **3.2.11. New toll rates: service-oriented tolls**

Due to the importance of making effective use of the expressway network, which has extended to some 10,000 km, it is vital, as the concept underlying toll setting shifts from a development-oriented to a service-oriented approach, to set up a simple and rational toll system that is in keeping with the extent to which the network has formed.

Specifically, from the standpoint of fairness and the mindset of the beneficiary or the originator, the system should be based on distance. Building from there, in conjunction with efforts to provide toll discounts, the toll rates should be made uniform. However, since there are sections where reduced toll rates would trigger congestion and sections that offer exceptional convenience, the toll rates should be re-organized into three groups: regular sections, metropolitan sections, and particular sections including bridges crossing a strait.

##### **3.2.11.1. Regular sections**

Until now, very long tunnels had a higher toll rate

than other sections due to their high construction cost and convenience, but from the standpoint of effective utilization, they will be reclassified as regular sections and a higher rate will no longer apply. Regular sections that are currently less expensive should have their toll rate brought in line with that of other regular sections, but it is important to proceed cautiously and thoroughly investigate the effects of a rate increase.

#### **3.2.11.2. Metropolitan sections**

Since lowering rates in sections located on the outskirts of metropolitan areas is liable to trigger congestion, those sections will continue to be assigned a higher toll rate than regular sections.

#### **3.2.11.3. Particular sections including bridges crossing a strait**

The large, expensive-to-build bridges and the convenience of crossing a strait in a short time provided by the expressways linking Honshu and Shikoku, the Tokyo Bay Aqua-Line and the Isewangan Expressway would justify setting a higher toll rate than for other sections. However, from the point of view of effective utilization, it was decided to set their toll rates at a level that does not differ greatly from that of other sections. The actual rate should be determined in relation to factors such as the fares of ferries crossing the same strait.

### **3.3. Basic policy of new toll rates for expressways**

In light of the aforementioned interim findings of the National Arterial Road Sub-committee, the Road Bureau of the MLIT established its Basic Policy of the New Toll Rates for Expressways in December 2013. That policy is outlined below.

#### **3.3.1. Basic concept**

Based on the interim findings of National Arterial Road Sub-committee of the Road Committee of the Panel on Infrastructure Development, to foster the further effective utilization of their increasingly networked environment, the new toll rates for expressways should achieve the following.

- (1) Rectify the differences in rates due to the circumstances of construction and be reorganized into the three groups of regular sections, metropolitan sections, and particular sections including bridges crossing a strait.
- (2) Lead, in metropolitan areas, to building a seamless toll system that achieves the most efficient utilization in the world through the gradual application of ITS technology, so as to optimize the operating ratio

of the road network in line with the progress made on ring road development.

#### **3.3.2. Toll discounts**

The current toll discount system is made up of the system introduced at the time of the privatization of the public expressway corporations in 2005 and of the system introduced as part of emergency economic measures to deal with the stagnation in the wake of the 2008 global financial crisis. Of those two, the termination of the funds secured for the emergency economic measures in 2013 makes it necessary to reduce the scope of the discounts.

The introduction of various discounts has led to user complaints that they were confusing and difficult to understand. In addition, for some routes and sections, discounts applying to all time frames on weekdays have resulted in reduced discount effectiveness and users no longer getting a sense that the toll is lower.

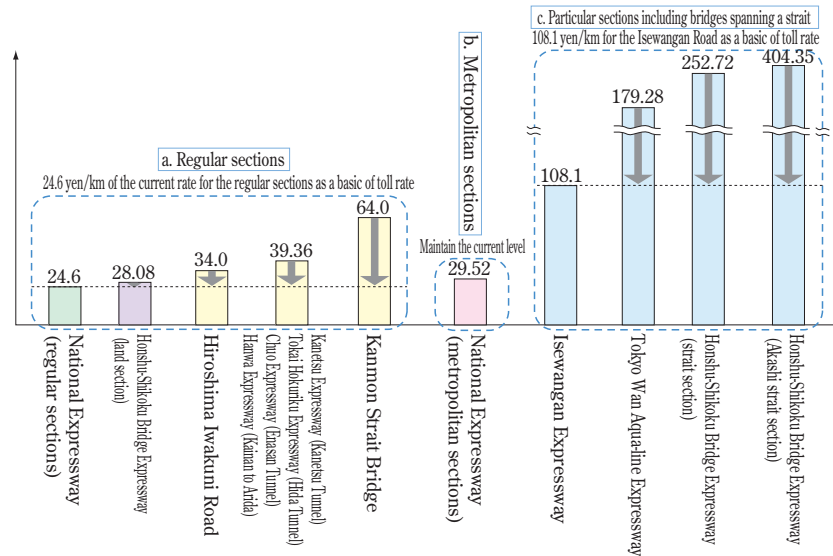
Consequently, in line with the National Arterial Road Sub-committee interim findings, the expressway toll discounts will be globally reorganized based on proposals from the expressway companies following the basic concepts below.

- (1) Revising the discounts to make them highly effective with no waste or duplication.
- (2) Giving due consideration to vehicles making frequent use of the expressways while recognizing the importance of measures directed at supporting everyday life, promoting tourism or facilitating shipping.

Although the new toll discounts will fundamentally be planned within the budget allocated to the system introduced at the time of privatization, in consideration of shipping measures and the promotion of tourism, steps to mitigate drastic changes based on the Economic Measures for Realization of Virtuous Cycles (December 5, 2013 Cabinet Office decision) will be applied over a certain period.

#### **3.3.3. The three types of toll rates**

The expressway toll rates will be re-organized into three groups: regular sections, metropolitan sections, and particular sections including bridges crossing a strait (Fig. 6). Attendant rate reductions will be carried out based on the status of expressway debt repayment, and, taking the cost of toll collection and the fact that ETC use has reached 90% into account, will apply to vehicles equipped with ETC.



(Note) The above rates are limited to ETC-equipped ordinary passenger vehicles.

Fig. 6 Introduction of new toll rates.

### 3.3.3.1. Regular sections

The toll rate for regular sections will be set to 24.6 yen/km for ordinary passenger vehicles (all rates listed below are also for ordinary passenger vehicles), with the same rate applying to the six more expensive sections (the Kanetsu, Enasan, and Hida tunnels, the Hanwa Expressway (between Kainan and Arida), the Hiroshima-Iwakuni Road, and the expressways linking Honshu and Shikoku (excluding bridges).

### 3.3.3.2. Metropolitan sections

The toll rate for metropolitan sections will remain at the current 29.52 yen/km premium rate applied to regular sections.

### 3.3.3.3. Particular sections including bridges crossing a strait

The toll rate for the Isewangan Expressway, the Tokyo Bay Aqua-Line and the bridges along the expressways linking Honshu and Shikoku will be set to 108.1 yen/km.

### 3.3.4. Toll rates in metropolitan areas

In the Tokyo and Osaka-Kobe metropolitan areas, the introduction of a seamless toll system in conjunction with the building of ring roads will be studied. In the meantime, the current tolls will remain in effect until 2015 for expressways in the Tokyo metropolitan area and until 2016 for those in the Osaka-Kobe area.

### 3.3.5. Nippon Expressway Company, Ltd. (NEXCO) toll discounts

Upon clearly stating their objectives, making them

highly effective with no waste or duplication, and giving due consideration to vehicles making frequent use of the expressways while recognizing the importance of measures directed at supporting everyday life, promoting tourism or facilitating shipping, the discounts applied by NEXCO will be revised as follows.

#### 3.3.5.1. Everyday life measures

To alleviate congestion on parallel ordinary roads during commuting hours, revise, and maintain local discounts applied to vehicles making frequent use of the expressway during commuting hours.

To reduce the burden on vehicles making frequent use of expressways, the mileage discount will remain in effect and be set to a maximum of 9.1%.

#### 3.3.5.2. Promotion of tourism

To attract tourists and revitalize the regions, the local holiday discount for ordinary passenger and lighter vehicles will remain in effect and be set to 30%. As a step toward mitigating drastic changes due to economic measures, the current 50% discount will remain in effect until the end of June 2014.

#### 3.3.5.3. Shipping measures

To reduce the burden on vehicles making frequent use of expressways for business purposes, the bulk and frequent use discount will remain in effect and be set to a maximum of 40%. As a step toward mitigating drastic changes due to economic measures, the maximum discount will be expanded to 50% until the end of March 2015.



#### **3.3.5.4. Environmental measures**

To improve the roadside environment of parallel ordinary roads, the late night discount will remain in effect and be set to a maximum of 30%.

#### **3.3.5.5. Tokyo Bay Aqua-Line**

For the foreseeable future, assuming the continued contribution to costs by Chiba Prefecture, the current all-day rate of 800 yen will remain in effect.

#### **3.3.6. Toll rates for the expressways linking Honshu and Shikoku**

Taking the new rates after the current economic measures have terminated and the effects on other public transport into account, and in light of everyday life measures and the promotion of tourism, the current frequent-use weekday commuting time discounts, as well as the weekend and holiday discounts (both limited to ETC-

equipped ordinary passenger or lighter vehicles) will be maintained at the current discounted rate in sections of the expressways linking Honshu and Shikoku with higher rates upon termination of the current discount system.

#### **3.4. Start of the new expressway toll rate system**

Following the institution of the above-mentioned Basic Policy of the New Toll Rates for Expressways, the new expressway toll rate system started from April 2014 upon completion of the various necessary procedures by the expressway companies. At that time, as with other public transport fares, the higher costs arising from the consumption tax increase were also applied.

Specific toll information is available from the websites of the expressway companies.