Part 1: Land Transport Safety

Chapter 1: Road Traffic Safety

1. Achieving a Society with No Traffic Accidents

○ Under the principle of respecting human life, we aim to ultimately achieve a society with no traffic accidents.

○ In addition to enhanced efforts for the further decrease of fatalities, it is also necessary to be vigorously committed to the reduction of traffic accidents.

2. Objectives Set in Road Traffic Safety

① Toward the objective to attain the world's safest road traffic, to reduce the annual number of fatalities who die within 24 hours after a traffic accident to 5,500 or less. (Also, equally reduce the number of fatalities who die within 30 days after a traffic accident)

② To reduce the annual number of casualties to one million persons or less.

3. Measures for Road Traffic Safety

<Four viewpoints>

1) Coping with declining birthrate and aging society
2) Securing safety for pedestrians
3) Encouraging citizens to improve their awareness
4) Utilizing IT

<Eight pillars>

i) Improving the road traffic environment
ii) Comprehensively implementing traffic safety awareness initiatives
iii) Securing safe driving
iv) Ensuring vehicle safety
v) Maintaining road traffic order
vi) Enhancing rescue and emergency services systems
vii) Promoting victim support, including the appropriate compensation system
viii) Enhancing R&D and study activities

Section 1: Achieving a Society with No Traffic Accidents

It is important to achieve a safe, secure society and form a harmonious traffic society where all citizens including elderly and disabled people behave based on a mutual understanding and show consideration in their attitudes toward each other.

According to a survey on Japanese people's awareness on traffic safety conducted in FY2004 (Questionnaire Survey on Traffic Safety Awareness, etc.), many people consider it necessary to completely eliminate or significantly reduce the number of road traffic accidents (see Figure 1).

Figure 1: Which of the following best represents your perception of traffic accidents?

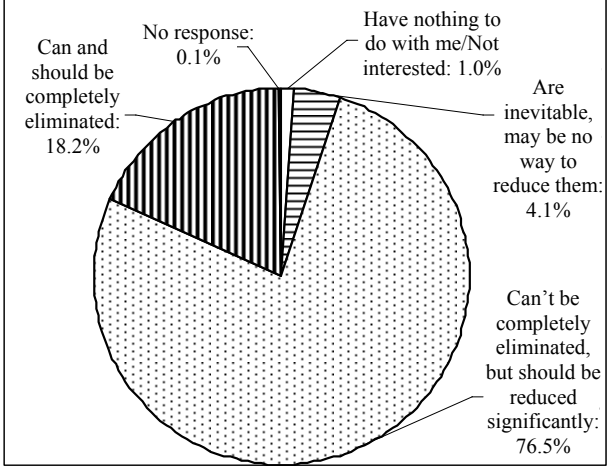
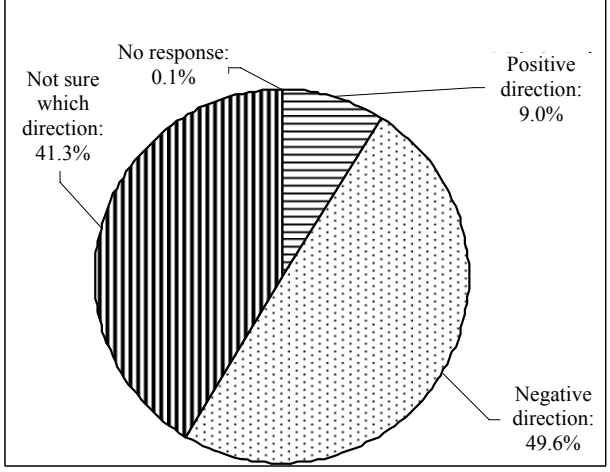


Figure 2: In what direction is the trend in traffic accidents headed?



Note: 1. The survey was conducted by the Cabinet Office.
2. Respondents consist of 16 years or older citizens nationwide eligible to apply for a 2-wheel driver's license (the number of samples: 2,105 responses)

In accordance with the principle of respecting human life, we should aim to ultimately achieve a society with no traffic accidents. In view of the above-mentioned awareness status of Japanese people, it seems that traffic accidents can be reduced by vigorously promoting traffic safety measures.

The survey results show that many people feel the trend in traffic accidents is headed in a negative direction (see Figure 2), and this is probably due to the fact that the number of traffic accidents is increasing despite a decreasing death toll.

Therefore, in addition to the efforts to further reduce the number of road traffic fatalities, it is also necessary to take active measures to reduce the number of traffic accidents.

When doing so, it is important to bear in mind that on-road risk is about 4.2 times higher than off-road risk (see Reference 1) and that annual economic losses due to road traffic accidents have reached at least 4,285 billion yen (equivalent to about 1% of the GDP) (see Reference 2). As well, it is vital to further improve and enhance traffic safety measures and to encourage commitment by all citizens to traffic safety efforts.

In particular, it should be noted that the ratio of pedestrians to total road traffic fatalities is larger in Japan than in the United States and European countries. Therefore, it is especially important to secure the

safety of pedestrians under the principle of people first in road traffic policy by developing pedestrian walkways and other measures.

Since traffic safety is closely related to the conditions characteristic to local communities, it is also crucial to encourage regional efforts, while taking into account the specific traffic conditions in each community. In this process, local governments can and should play a significant role in developing traffic safety systems and measures suitable to each community.

On top of that, all parties in the community, e.g. the government, schools, homes, workplaces, organizations, and companies, should reinforce cooperation among them while bearing their own roles. It will be particularly effective if citizens actively participate and collaborate in various traffic safety activities in diverse ways at each phase from planning to implementation, and review.

In particular, the participation and collaboration of people who have been injured or have lost their families in traffic accidents is of great importance, because they themselves have experienced and understood what great misery a traffic accident can cause.

In the process of promoting community efforts, it is also an effective way to regard traffic safety as a key factor to achieve community safety, in addition to crime prevention and disaster prevention.

Reference 1: Risk of resulting in death on roads

According to the National Vital Statistics Report issued by the Ministry of Health, Labour and Welfare, the number of fatalities resulting from "accidents" during 2003 (including falls, accidental drowning, accidental suffocation, fire, traffic accidents, etc.) was 38,714.

Of those fatalities, the number of persons who died in on-the-road traffic accidents was calculated to be 10,645 (excluding those who died more than one year after the accident or died from an aftereffect).

In the meanwhile, the Cabinet Office has found through the survey that people spend an average of two hours on the road in a day. Based on these data, the number of fatalities per unit time on-road and off-road (at home, at the office, etc.) can be calculated as follows.

Total accident fatalities: 38,714 persons

Road traffic accident fatalities: 10,645 persons

$$\frac{\text{<On-road risk>}}{\text{<Off-road risk>}} = \frac{\dfrac{10{,}645 \text{ fatalities}}{2 \text{ hours}}}{\dfrac{38{,}714 \text{ fatalities} - 10{,}645 \text{ fatalities}}{24 \text{ hours} - 2 \text{ hours}}} = 4.2 \text{ times}$$

When the sleeping time of 7 hours and 42 minutes (as estimated by the Ministry of Internal Affairs and Communications in 2001 for the population at the age of 15 and older) is subtracted from hours spent on off-road activities, the risk ratio can be calculated as follows.

$$\frac{\text{<On-road risk>}}{\text{<Off-road risk excluding the sleeping time>}} = \frac{\dfrac{10{,}645 \text{ fatalities}}{2 \text{ hours}}}{\dfrac{38{,}714 \text{ fatalities} - 10{,}645 \text{ fatalities}}{24 \text{ hours} - 2 \text{ hours} - 7 \text{ hours and } 42 \text{ minutes}}} = 2.7 \text{ times}$$

Reference 2: Economic losses due to road traffic accidents

According to the survey on economic losses due to traffic accidents conducted by the Cabinet Office (June 2002), the annual economic losses due to road traffic accidents are estimated to be 4,285 billion yen.

The calculation of this amount takes into account that economic losses caused by traffic accidents include physical losses such as medical expenses, compensation, lost income, etc. and material losses such as repair expenses, etc. of vehicles or buildings, as well as emergency transportation costs, expenses born by the police for dealing with accidents, judicial expenses, insurance management expenses, losses caused by traffic jams, etc.

<Economic losses caused by traffic accidents>

	Amount of losses (unit: 100 million yen)
Physical losses	17,269
Material losses	18,041
Losses of employers	772
Losses of public organizations	6,769
Total	42,850

(Note) The figures above do not add up because they have been rounded off to the position of 100 million.

Note that "psychological damage to acquaintances and/or friends," "loss of the pleasure of living," etc. are not included in the survey results. Therefore, the amount of losses would actually be larger when those mental and psychological losses are taken into account.

Section 2: Objectives Set for Road Traffic Safety

I. Current Status and Outlook for Road Traffic Accidents

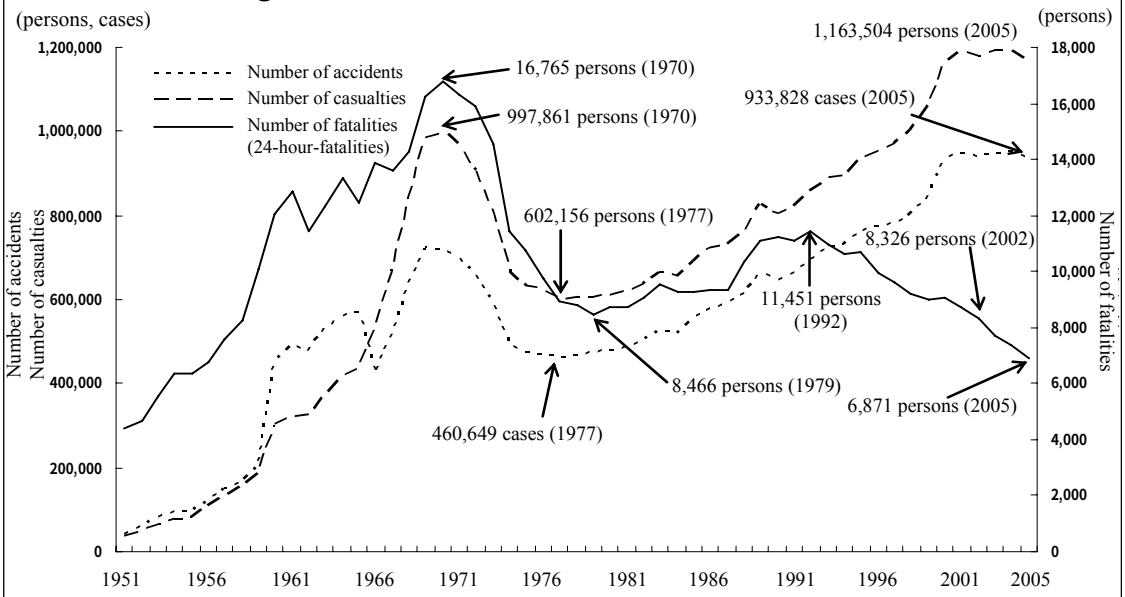
1. Current status of road traffic accidents

The annual number of traffic accident fatalities in Japan where people died within 24 hours of an accident (hereinafter referred to as "24-hour fatalities") hit a peak of 16,765 in 1970, and then started to steadily decrease in the next year, dropping by almost half to 8,466 in 1979. Later, the number took an upward turn and recorded 11,451 in 1992, and then again turned downward in the next year, declining by more than half of the number in 1970 to 8,326 in 2002. The number of fatalities in 2005 was as small as 6,871. The number of persons who died within 30 days of a traffic accident (hereinafter referred to as "30-day fatalities") as well as the number of fatalities on Health and Welfare Statistics (the number of persons who died within one year of a traffic accident) have also shown a similar downward trend in recent years.

However, both the number of casualties and the number of traffic accidents have been increasing on a nearly consistent basis since 1978. In 2005, these numbers slightly decreased to 1,163,504 persons and 933,828 cases, respectively, but still remained at a high level. The number of casualties per 10,000 automobiles also remains nearly flat in recent years.

Judging from this, it can be concluded that the objective set in the Seventh Fundamental Traffic Safety Program to "reduce the number of annual 24-hour fatalities to the 1979 level of 8,466 or lower, the record low since the enforcement of the Traffic Safety Policies Act, by the year 2005" was successfully attained, while another objective, "to minimize the ratio of annual casualties to the total number of vehicles owned," failed to show satisfactory results.

Changes in Road Traffic Accidents, Casualties, and Fatalities



Notes 1. Source: National Police Agency
2. Figures after 1966 do not include accidents that only caused property damage.
3. Figures for Okinawa Prefecture were not included until 1971.

Number of casualties per 10,000 vehicles

	2000	2001	2002	2003	2004
Number of casualties	153.5	155.2	152.2	153.3	152.4

[Reference] Objectives and results of previous Fundamental Traffic Safety Programs

First Fundamental Traffic Safety Program (FY1971 to FY1975) Objective: To reduce the estimated number of pedestrian fatalities (about 8,000) by half Result: 3,732 fatalities in 1975
Second Fundamental Traffic Safety Program (FY1976 to FY1980) Objective: To reduce fatalities (16,765) by half Result: 8,760 fatalities in 1980
Third Fundamental Traffic Safety Program (FY1981 to FY1985) Objective: To reduce the number of fatalities to 8,000 or lower Result: 9,261 fatalities in 1985
Fourth Fundamental Traffic Safety Program (FY1986 to FY1990) Objective: To reduce the number of fatalities to 8,000 or lower Result: 11,227 fatalities in 1990
Fifth Fundamental Traffic Safety Program (FY1991 to FY1995) Objective: To reduce the number of fatalities to 10,000 or lower Result: 10,679 fatalities in 1995
Sixth Fundamental Traffic Safety Program (FY1996 to FY2000) Objective: To reduce the number of fatalities to 10,000 or lower by 1997 and to 9,000 or lower by 2000 Result: 9,640 fatalities in 1997 and 9,066 fatalities in 2000
Seventh Fundamental Traffic Safety Program (FY2001 to FY2005) Objective: To reduce the number of fatalities to 8,466 or lower Result: 6,871 fatalities in 2005

The following are characteristics of fatal road accidents in recent years:

(i) A continuing large number of elderly fatalities at the age of 65 or older is observed, accounting for about 40% of the total fatalities. Of those elderly victims, more than 60% were involved in a fatal accident while walking or riding a bicycle. Also, the number of fatal accidents involving elderly drivers has been increasing.

(ii) The number of young fatalities ranging from 16 to 24 years of age has been significantly decreasing. Especially, the decrease of the death of automobile occupants is remarkable.

(iii) When compared with the United States and European countries, the ratio of pedestrian fatalities to all fatalities is higher in Japan.

(vi) The number of fatal accidents resulting from speeding or drunk driving has been decreasing.

The recent decreasing trend of fatal traffic accidents apparently demonstrates the results of successful implementation of various measures aimed at improving the road traffic environment, promoting comprehensive traffic safety awareness initiatives, securing safe driving, improving vehicle safety, preserving order on the road, enhancing rescue systems, etc. More specifically, the following factors can be measured quantitatively.

(i) Severe penalties and other countermeasures against vicious and/or dangerous violations such as increasing the severity of punishment for drunk driving

(ii) Declined fatality rate (of automobile occupants) as a result of increased use rate of seatbelts

(iii) Lowered "hazard recognition speed" (vehicle speed immediately before accident)

(iv) Decreased proportion of pedestrian casualties who violated a traffic rule

(v) Decrease of head-on collisions which have a high fatality rate

(vi) Increase in vehicles with high crashworthiness

2. Outlook for future road traffic conditions

As for the outlook for future road traffic conditions in Japan, it is expected that the number of driver's license holders, the number of vehicle ownership and the total vehicle kilometers will all be increased. In addition to those increases in volume of road traffic, the growing number of elderly people, especially the increase in those holding a driver's license, who are more vulnerable to fatal traffic accidents are considered to have a significant influence on road traffic circumstances.

3. Outlook for road traffic accidents

It is expected that road traffic conditions will change in a complicated fashion in line with socioeconomic circumstances, and therefore it is difficult to accurately predict future traffic accident trends. However, a Cabinet Office study entitled "the Research for a Long-term Prediction of Road Traffic Accidents" (March 2005) shows the following median estimates of traffic accidents for 2010.

Number of accidents	About 0.95 million (based on the analysis on the number of accidents as a function of kilometers traveled/last 4 years) #1 About 1.03 million (based on the analysis on the number of accidents as a function of kilometers traveled/last 17 years) #1 About 1.11 million (based on the analysis on the age structure of the population) #2
Number of casualties	About 1.19 million (based on the analysis on the number of casualties as a function of kilometers traveled/last 4 years) #1 About 1.28 million (based on the analysis on the number of casualties as a function of kilometers traveled /last 17 years) #1 About 1.38 million (based on the analysis on the age structure of the population) #2
Number of fatalities	About 5,700 (based on the analysis on the age structure of the population) #2 About 6,400 (based on the analysis on the number of fatalities as a function of kilometers traveled) #1

It should be noted that the above estimates are based on the assumption that conventional traffic safety measures will be maintained with no program changes or additions. This means that the estimates do not include any expected effects of measures that may be newly introduced in the future or have been recently introduced and have yet to display their full effect.

#1: "Analysis as a function of kilometers traveled" is an analytical methodology that focuses on a correlation between the total traveled distance of vehicles and the occurrence of road traffic accidents. First, the correlation has been determined. Then, the past data on traveled distance was used to estimate the future total traveled distance, and the estimated volume of traffic accidents has been calculated based on the estimated

future total traveled distance and the correlation. The number of accidents and that of casualties respectively have two estimates, with one estimated based on the trend of the last four years and the other based on the trend of the last seventeen years.

#2: "Analysis on the age structure of the population" (cohort analysis) is based on the methodology that uses the structural similarity between the trend of age structure of the population and that of road traffic accidents. Weightings emphasize the population of specific age groups such as the group of people 16-20 years old and the group of people 65 years or older to calculate the estimates.

II. Objectives Set in the Fundamental Traffic Safety Program

[Numerical objectives] **To reduce the number of fatalities resulting from traffic accidents: 5,500 or lower**

To reduce the number of casualties resulting from traffic accidents: one million or lower

In order to attain the ultimate objective, i.e. a society with no traffic accidents, the government will strive to attain the medium-term objective set in 2003 of "achieving the world's safest road traffic by reducing the annual number of road traffic fatalities to 5,000 or less, in ten years." Therefore, the government will aim to reduce the annual number of 24-hour fatalities to 5,500 or less by 2010, the last year of the term of this program.

This means that, not only 24-hour fatalities, but the number of any fatalities caused by road traffic accidents (including 30-day fatalities) should also be reduced by a similar proportion.

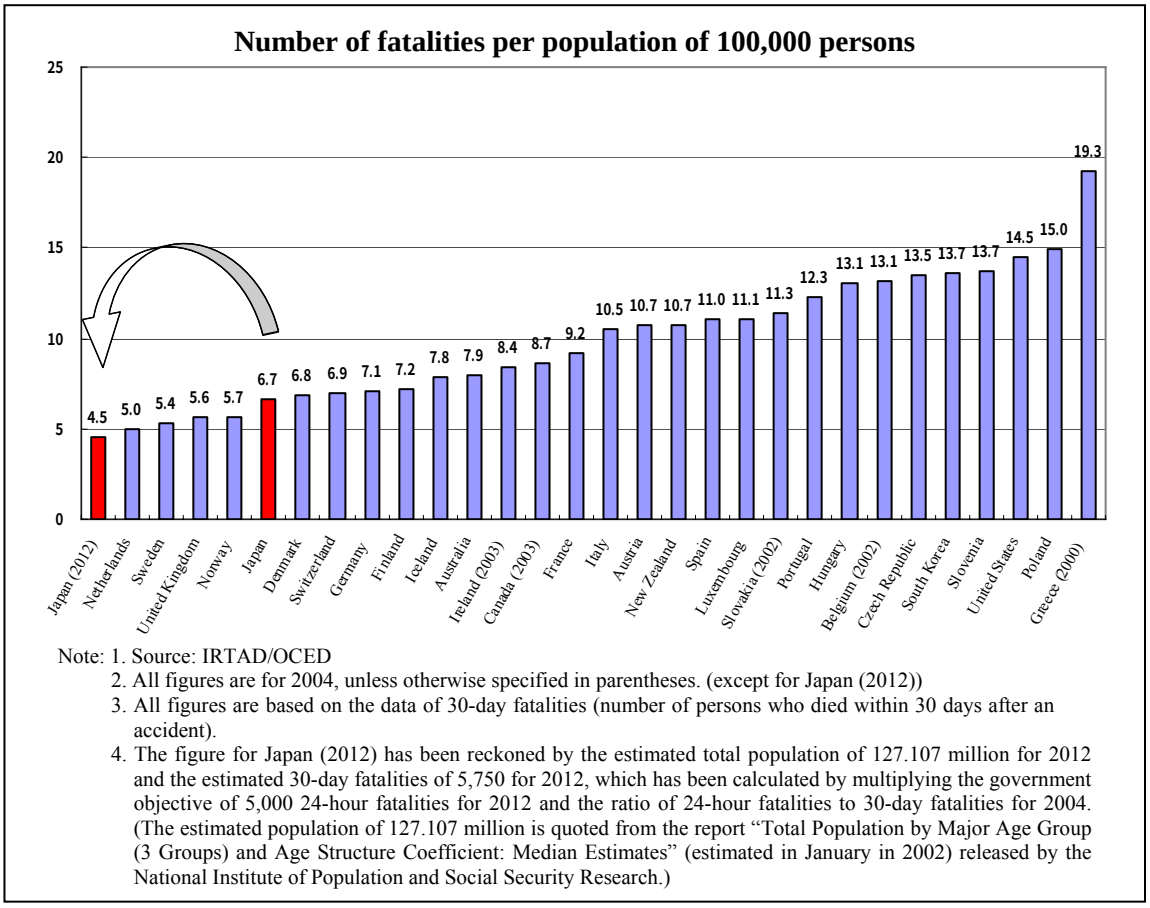
In the process of implementing traffic safety measures to achieve the priority objective in this program, i.e. reducing the number of fatalities, the government will also strive to reduce the number of accidents and the number of casualties, aiming to reduce the annual number of any casualties to one million or less by 2010.

To this end, the government's relevant ministries/agencies and local governments will promote the measures mentioned below in Section 3 comprehensively and vigorously with the understanding and cooperation of citizens.

International comparison of the number of 30-day fatalities per 100,000 population, made among 29 countries whose data have been released on the International Road Traffic and Accident Database (IRTAD), shows that Japan is ranked relatively high (meaning "low" fatalities), registering 6.7 persons (in 2004).

This figure would be reduced to 4.5 or lower, if the objective "to reduce the number of traffic accident fatalities to 5,000 or lower, in ten years" is attained. This would allow Japan to declare successful realization of "the world's safest road traffic" if it is supposed that other countries' traffic accident conditions remain basically unchanged from as they are today. Although other countries are also expected to decrease

their death toll, as they are promoting traffic safety measures as vigorously as Japan, it can be still expected that Japan will be one of the best countries in the world in terms of safe traffic.



Note: 1. Source: IRTAD/OCED
2. All figures are for 2004, unless otherwise specified in parentheses. (except for Japan (2012))
3. All figures are based on the data of 30-day fatalities (number of persons who died within 30 days after an accident).
4. The figure for Japan (2012) has been reckoned by the estimated total population of 127.107 million for 2012 and the estimated 30-day fatalities of 5,750 for 2012, which has been calculated by multiplying the government objective of 5,000 24-hour fatalities for 2012 and the ratio of 24-hour fatalities to 30-day fatalities for 2004. (The estimated population of 127.107 million is quoted from the report "Total Population by Major Age Group (3 Groups) and Age Structure Coefficient: Median Estimates" (estimated in January in 2002) released by the National Institute of Population and Social Security Research.)

Section 3: Measures for Road Traffic Safety

I. Viewpoints in Considering Future Measures for Road Traffic Safety

In view of the recent decreasing trend of road traffic accident fatalities, it can be judged that the measures implemented so far in accordance with previous Fundamental Traffic Safety Programs have been successful to a certain degree. Therefore, based on existing traffic safety measures, the government will work toward making them more effective and introducing new measures expected to be effective by taking into account changes in socioeconomic and traffic-related conditions, and collecting and analyzing information on traffic accidents that actually occurred.

In the implementation of traffic safety measures, it is necessary to set specific objectives for each measure as far as possible, evaluate their actual effect after implementation, and make improvements as appropriate.

From this viewpoint, the following eight pillars have been selected for the implementation of traffic safety measures; i) improving the road traffic environment, ii) comprehensively implementing traffic safety awareness initiatives, iii) securing safe driving, iv) ensuring vehicle safety, v) maintaining road traffic order, vi) enhancing rescue and emergency services systems, vii) promoting victim support, including the appropriate compensation system, and viii) enhancing R&D and study activities.

In light of the current and future socioeconomic conditions and traffic situations, the government should implement these measures, particularly focusing on the following viewpoints.

1. Coping with declining birthrate and aging society

Considering that in Japan, elderly people account for a larger share in road traffic fatalities compared with other countries, and that the Japanese population is expected to continue to rapidly age in the future, it is necessary to create a traffic society where elderly people will be able to go out or travel safely and without anxiety.

To this end, the government should implement detailed and comprehensive traffic safety measures based on the diverse characteristics of elderly people. In addition, measures should be developed focusing on the difference in the modes of transportation used by elderly people, i.e. when they travel by foot or by bicycle and when they travel by car. The understanding of the features of each case should be incorporated in the measures. In particular, regarding the last case, since the number of senior drivers is expected to significantly increase in the future, it is an urgent task to strengthen measures to prevent elderly people from causing accidents.

Also, in order to assist elderly people in participating in traffic society comfortably, regardless of changes in their physical strength and functions due to aging, it is important to form a barrier-free road traffic environment under the policy to design urban areas and a living environment friendly to diverse people of all age groups.

For ensuring traffic safety for the elderly, safety activities should be introduced in cooperation with medical and welfare facilities, etc. that are frequently used by elderly people, and should also be closely

associated with their local community life, since traffic accidents involving the elderly often occur in neighborhood areas of their residences.

In addition to progress in the aging of society, the declining birthrate should also be taken into consideration. In order to realize a society where people can give birth and raise children without anxiety, further measures are required from the perspective of protecting children not only from crimes but also from traffic accidents.

Therefore, for securing safety for children, it is also necessary to actively develop or expand walkways for school routes, etc.

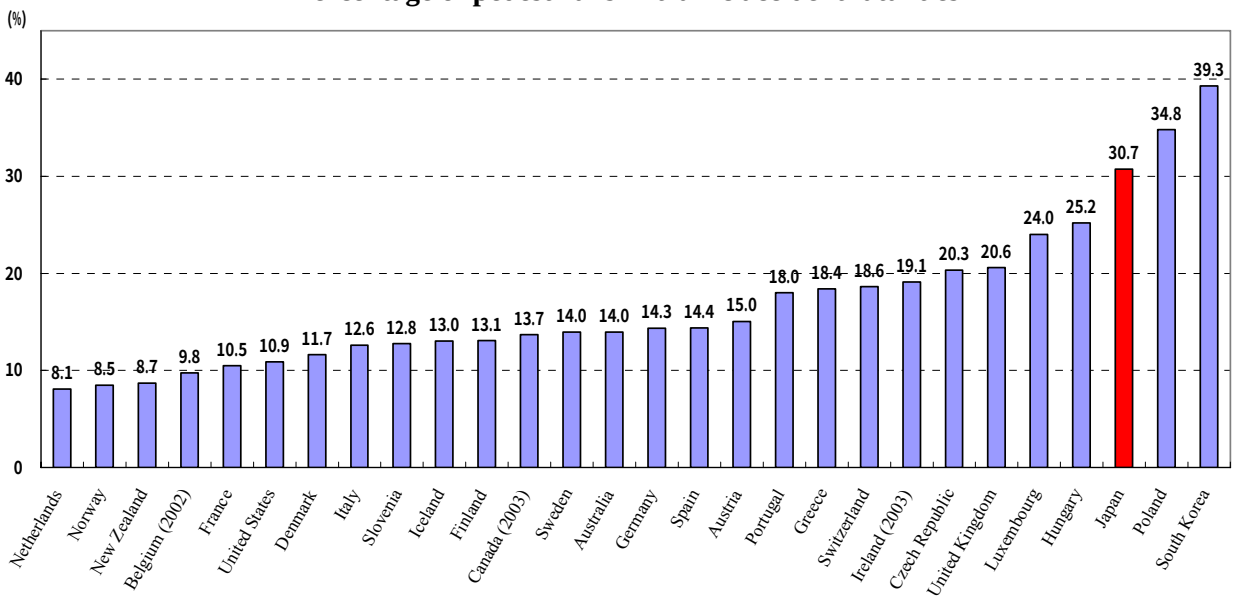
2. Securing safety for pedestrians

In Japan, more than 30% of traffic accident fatalities are pedestrians. This percentage is relatively higher than that in the United States and European countries. Specifically, pedestrians account for about 50% of elderly fatalities and about 40% of juvenile fatalities aged 15 or under.

In order to achieve a safe and secure society, it is absolutely necessary to secure safety for pedestrians who are vulnerable in relation to cars. Safety on the roads used daily by elderly people and children needs to be increased, in particular.

Given such circumstances, it is required to promote measures to secure safety for pedestrians in accordance with the principle of people first by further developing pedestrian walkways for school routes, community roads, and thoroughfares in urban areas, and so forth.

Percentage of pedestrians in traffic accident fatalities



Note: 1. Source: IRTAD/OECD
2. All figures are for 2004, unless otherwise specified in parentheses.
3. All figures are based on the data of 30-day fatalities (number of persons who died within 30 days after an accident).

3. Encouraging citizens to improve their awareness

All citizens in this traffic society, including those engaged in traffic administration and transportation services, should become fully aware of the risk of traffic accidents, and remind themselves that they should endeavor not to cause and not to get involved in traffic accidents, with the ultimate objective of achieving a society with no traffic accidents.

To this end, further efforts should be made to enhance education and awareness-raising activities regarding traffic safety. However, these activities will bring about only a limited effect if they are focused merely on providing information or calling for attention to traffic safety in a unilateral way. It is vital for more citizens to foster positive attitudes to build a safe and secure traffic society by themselves.

For this purpose, it is necessary to develop a mechanism that enables citizens to actively participate in creation of a safe and secure traffic society in local communities or organizations by identifying traffic problems in the community, proposing concrete traffic related objectives and policy, and actually carrying out various traffic safety activities. To help this, local governments should also strive to develop such a mechanism based on the specific circumstances in the respective areas.

In the course of setting those objectives, to establish regional indices (for example, indices of specific age groups in the community such as the elderly or children) is effective in order to raise the traffic safety awareness of local citizens.

Furthermore, for preparing prefectural or municipal traffic safety programs, it is necessary not only to observe the national Fundamental Traffic Safety Program but also to fully take into consideration regional characteristics such as local traffic and social conditions, as well as to devise ways to reflect the opinions of local citizens.

Increase in opportunities to directly listen to victims of traffic accidents and families of the deceased from traffic accidents would also be effective for raising the level of people's understanding of the significance of traffic safety.

4. Utilizing IT

With the rapid progress in information society, the use of information is important for building a safe and secure traffic society. Particularly, information technology (IT) is expected to significantly contribute to traffic safety, by supplementing shortcomings in people's cognitive ability and judgment, counteracting people's careless mistakes, and minimizing damage arising from such mistakes.

Among others, the government should drive forward the initiative to develop Intelligent Transport Systems (ITS) that would integrate people, roads and vehicles into a unified system with the use of IT. ITS will enable, for instance: i) increasing traffic safety by providing information to compensate for a driver's delay in finding objects on the road; ii) improving the safety functions of vehicles such as crash prevention; iii) upgrading traffic control; iv) speeding up rescue and emergency services activities.

It is also necessary to further vitalize traffic safety education at schools, homes and local communities through the utilization of the internet and other information technologies for training of leaders and such.

Today, ITS is moving on to a stage where practical application and dissemination should be promoted in parallel with system development. For promoting traffic safety, it is especially important to enable as many people as possible to benefit from information technologies.

On the other hand, we need to be aware that IT is not a panacea but merely a means to improve traffic safety. There is no question that we should not overestimate the power of IT and should understand the ultimate significance of the attitude of each person, as mentioned above in subsection 3.

II. Measures to Be Taken

1. Improving the road traffic environment

As part of the efforts to improve the road traffic environment, relevant ministries and agencies such as the National Police Agency and the Ministry of Land, Infrastructure and Transport, have been jointly promoting road measures bilaterally for thoroughfares and community roads. So far, the measures targeting "black spots" of thoroughfares have been found to be successful in reducing accidents to a certain degree.

When analyzing the recent trend of fatal traffic accidents by type of situation, pedestrians are still more vulnerable to traffic accidents than vehicle occupants, as the decreasing rate for the former is lower than that for the latter. In this light, it is necessary to further ensure the safety of pedestrians, who are more susceptible to traffic danger than vehicles.

In response to the changing social situations such as the decreasing birth rate and increasing aged population, the government focuses on protecting children and creating a traffic society where elderly people can go out safely without anxiety, and plans to vigorously implement measures, in addition to the previously introduced ones, to provide people-oriented road traffic environment with safe and secure space to walk, by making enhanced efforts to develop walkways on school routes, community roads and thoroughfares in urban areas.

Other government plans for the improvement of the road traffic environment include systematic improvement of road networks with appropriate role sharing among different types of roads including high-standard thoroughfares and minor district roads, which would be effective to restrain through traffic inflow into community roads, and restriction of vehicle speed and the formation of a safe road environment allowing for the physical division of road users as automobiles, bicycles, pedestrians, etc. by implementing carefully-designed accident prevention measures such as installation of walkways and other traffic safety facilities and the effective promotion of traffic regulations, especially on those roads in urgent need of traffic safety improvement.

For improving traffic safety facilities from the viewpoint of effective and efficient reduction of traffic accidents, priority will be given to places suffering a frequent occurrence of accidents or other traffic safety problems. Characteristics and causes of past accidents at these places will be analyzed, and analysis results will be reflected in the designing and implementation of countermeasures. After the implementation of countermeasures, results will be evaluated and utilized as feedback to another designing and implementation of the next countermeasures to ensure steady accident reduction.

Also, works to improve road traffic safety are closely related to daily living and socioeconomic activities of local road users including pedestrians, and therefore the government will have the opinions of local citizens and professional drivers reflected in improvement plans, and also increase opportunities for local citizens to voluntarily participate in the planning of traffic safety measures for local roads. In addition, the progress, effects, etc. of improvement works will be released to the public.

Furthermore, in order to contribute to traffic safety by making road traffic smoother, the government will comprehensively promote the Transportation Demand Management (TDM) scheme that

intends to devise ways to use roads and improve transport efficiency and promote time-wise or space-wise leveling of traffic volume, as well as the development and wide utilization of Intelligent Transport Systems (ITS) that aim to drastically improve the safety of road traffic through the utilization of information technologies to integrate people, roads and vehicles into one system.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Providing people-oriented, safe and secure pedestrian space ((1))
○ Promoting the development of walkways for school routes, etc. ((1) a)
○ Developing "Safe Pedestrian Areas" and implementing traffic safety measures through the use of the "Manual for the Prevention of Traffic Accidents on Community Roads" ((1) b)
○ Developing barrier-free walkways and other measures for improving walk space ((1) c)
○ Improving road networks and promoting the use of high-standard highways ((2))
○ Achieving a safe and comfortable road traffic environment through the wide use of IT ((3) c)
○ Implementing comprehensive and intensive measures such as the development of "Road-for-Residents Zones" (zones where pedestrians and bicycles have priority) ((5) b)
○ Intensively implementing traffic safety measures through the Priority Identification Process ((6) a)
○ Promoting accident prevention measures for black spots ((6) b)
○ Pursuing safety measures based on scientific analysis by applying the "Traffic Accident Countermeasures and Assessment Manual" and the "Casebook of Traffic Accident Countermeasures" ((6) c)
○ Utilizing intelligent transport systems ((8))
○ Promoting measures against illegal parking under the new act ((11) b)
○ Developing tangible and intangible measures for the parking issue ((11) e)
○ Developing a disaster-resistant road traffic environment ((12))

(1) Providing people-oriented, safe and secure pedestrian space

Traditional traffic safety measures that have been implemented and have produced satisfactory results to a certain degree so far were designed mainly from the viewpoint of automobiles. Road improvement and traffic safety measures from the viewpoint of pedestrians are not yet sufficient, and the inflow of through traffic into community roads, etc. is still a serious problem. In the meanwhile, the number of pedestrian fatalities occupies about 30% of the total fatalities, and about 70% of those pedestrians lost their lives on thoroughfares.

In this situation, it is necessary to promote people-oriented traffic safety measures through obtaining the cooperation of local communities. For example, proactive development of walkways on school routes, community roads and thoroughfares in urban areas, etc. would be needed.

a. Promoting the development of walkways for school routes, etc.

In order to secure the safety of school or preschool children walking to elementary schools, kindergartens, day nurseries, community centers for children, etc., the government will vigorously promote development of walkways for school routes, etc.

In addition, they will enhance safety improvements for routes to schools or kindergartens, through installation and development of push-button traffic signals, streetlights for pedestrians, grade-separated crossing facilities, pedestrian crossings, etc.

b. Promoting traffic safety measures for community roads

As for "Safe Pedestrian Areas," which are located in residential or commercial districts with high rates of accidents with fatalities or injuries and surrounded by thoroughfares, prefectural public safety commissions and road management agencies will jointly implement area-wide and comprehensive accident prevention measures such as improvement of walkways.

Prefectural public safety commissions will promote traffic safety measures in a manner to carefully integrate traffic regulations, traffic control, safety guidance and control of violations. Specifically, mainly targeting community roads within the Safe Pedestrian Areas, they will implement safety measures such as the introduction of LEDs[1] to signal lights, use of brighter road signs and marks, and installation or widening of side strips. They will also implement measures for smooth traffic flow, mainly targeting circumferential thoroughfares, measures such as the introduction of intelligent traffic signals or real-time traffic information services with the use of near-infrared beacons, road information boards, etc. In addition, mainly targeting those roads constituting designated routes under the Act for Promoting Easily Accessible Public Transportation Infrastructure for the Aged and the Disabled (Act No.68 of 2000; hereinafter referred to as "Transportation Accessibility Improvement Act"), the government will promote the installation of barrier-free traffic signals such as audio traffic signals, elderly-friendly traffic signals, pedestrian-detecting traffic signals, etc., and introduction of traffic signals with the function of separating pedestrians and vehicles, which are designed to avoid collisions between pedestrians and vehicles by staggering the time for the go sign for pedestrians and vehicles.

Measures to be implemented by road management agencies include "route measures," which aim to provide pedestrians with networks of safe spaces to walk through, by the improvement of walkways and installation of barrier-free walkways, "zone measures," which aim to form priority zones for pedestrians and bicycles through the utilization of vehicle speed-controlling road structures such as humps, cranks, etc., and "circumferential road measures," which aim to ensure smooth traffic on circumferential thoroughfares and restrain the entry of vehicles in transit into Safe Pedestrian Areas by improving intersections, etc.

Through the promotion of the above measures, the government aims to accomplish the numerical objectives set in the Priority Plan for Social Infrastructure Development established in FY

[1] LED: Light Emitting Diode

2003 (the objective to reduce the number of traffic accidents resulting in casualties within Safe Pedestrian Areas by about 20% and the number of pedestrians/bicycles-involved traffic accidents within the Areas by about 30% by FY 2007).

[Numerical objectives[2]] To reduce the number of traffic accidents resulting in casualties within Safe Pedestrian Areas by about 20%
To reduce the number of pedestrians/bicycles-involved traffic accidents within Safe Pedestrian Areas by about 30%

Also, improvement of walkways on community roads outside Safe Pedestrian Areas will be promoted vigorously. In addition, with the utilization of the "Manual for the Prevention of Traffic Accidents on Community Roads," etc., prefectural public safety commissions and road management agencies will jointly implement accident prevention measures. Those measures include the creation of safe and secure road spaces friendly to both pedestrians and vehicles by controlling vehicle speed, giving a clear indication of road structures and the existence of crossings to car drivers, giving both pedestrians and vehicles a clear indication of their own zones, and other efforts to create safe, secure road spaces friendly to both pedestrians and vehicles.

c. Developing barrier-free walkways and other measures for improving walk space

(a) In order to ensure the safe, comfortable use of road for pedestrians and bicycle users, the government will continue to selectively implement improvements of walkways and bicycle lanes together with road rebuilding projects at high-risk places for traffic accidents involving pedestrians. In the course of implementing such improvements, they will promote installation of wide walkways that can ensure comfortable walking for pedestrians. When it is difficult to build a walkway on an existing road, they will promote installation of a street for pedestrians only or for pedestrians and bicycle, instead of walkways, in parallel with the existing road.

Also, for the purpose of restraining the entry of vehicles in transit, and thereby ensuring the safety of pedestrians and improving the living environment, the government will improve community roads (which are equipped with a safe, comfortable walk zone with a structure to separate pedestrians from vehicles and restrain vehicle speed through the installation of cranks, humps, etc.) and roads that can be safely shared by pedestrians and vehicles (which cannot afford a walkway but instead have a structure to restrain vehicle speed with a combined installation of humps, narrowed zones, etc. to ensure safe road use of pedestrians). Also, visibility and understandability of road signs and marks will be improved through introducing brighter, larger, variable or self-luminous road signs/marks, using information boards, combining road signs/marks, seeking better locations for road signs/marks, etc. (hereinafter collectively referred to as "introduction of brighter road signs/marks, etc.").

[2] These numerical objectives are set by the Priority Plan for Social Infrastructure Development (FY2003-FY2007).

(b) In order to secure self-supported daily and social lives for elderly or disabled people, the government will vigorously develop wide walkways with flat surfaces, especially in those areas close to railway stations, public facilities, welfare facilities, hospitals, etc., based on the principle of universal design.

In addition, they will provide barrier-free traffic signals, waiting time-indicating traffic signals, grade-separated crossing facilities equipped with an elevator or wheelchair lift, resting facilities for pedestrians, parking spaces for bicycles, and parking lots with reserved spaces for vehicles of handicapped people. Elimination of wire poles will also be promoted integrally with road rebuilding projects. In order to ensure the safe and smooth use of roads by elderly or disabled people, as well as to address the increasing population of elderly drivers, the government will promote the introduction of LEDs to signal lights and brighter road signs/marks, etc.

Also, in station squares, etc. where various kinds of traffic meet, safe, comfortable, and attractive walk spaces friendly to pedestrians will be secured, through installation of elevators, ramps instead of stairs, grade-separated crossing facilities with direct access to buildings, station squares, etc.

Especially in those areas surrounding a railway station, etc., which are designated as priority improvement zones under the Transportation Accessibility Improvement Act, the government will promote installation of wide walkways friendly to all pedestrians, as well as the introduction of barrier-free traffic signals equipped with intelligent functions to protect pedestrians when they are crossing roads, ensuring that such barrier-free efforts will cover all target areas in a way so as to create barrier-free networks, in cooperation with the transport industry.

The government will also promote the development of Pedestrian Information and Communication Systems (PICS), which aim to support safe walking for elderly and disabled people, and specifically, provide them with necessary traffic information and prolong the time of green lights on pedestrian signals by utilizing two-way signal transmission between communications equipment installed at intersections, etc. and portable terminals carried by these pedestrians.

Furthermore, for the sake of effective use of barrier-free walk spaces, studded paving blocks to aid visually handicapped people, road signs or guidance for pedestrians, maps of barrier-free streets, etc. will be actively introduced to ensure that elderly people and other pedestrians can easily find the locations of public facilities and barrier-free routes to the facilities.

(c) Under the new legislation against illegal parking, which mainly intends to increase the responsibilities of registered users of unattended vehicles and secure an enforcement workforce through outsourcing the monitoring task to private sectors, control over highly pernicious, dangerous, troublesome parking offenses will be strengthened, especially against illegal parking near pedestrian crossings or bus stops.

The government will more rigorously crack down on illegal parking of motorcycles, etc. on walkways or on guidance blocks on pavement for aiding visually handicapped people, which

hinders smooth walking for elderly or disabled people, in cooperation with municipal governments that have been working on the removal of unattended illegally-parked bicycles, etc.

(d) In order to maintain safe and comfortable walk zones during winter, snow clearing works or the installation of snow melting facilities will be promoted in central urban areas and the surrounding areas of public facilities.

(2) Improving road networks and promoting the use of high-standard highways

In order to secure fundamental traffic safety, systematic improvement of roads will be promoted in a way so as to ensure appropriate role sharing among different types of roads including high-standard thoroughfares and local residential streets, and also ensure better connections with other public transports. Also, the government will promote effective utilization of high-standard thoroughfares, which are safer than general roads.

a. Improving road networks with appropriate role sharing

(a) The government will vigorously develop networks consisting of various roads ranging from high-standard thoroughfares to local residential streets in a systematic way, as well as walkways and bicycle lanes, with the aim to facilitate separation of traffic into automobiles, bicycles, pedestrians, etc. and refine traffic flows.

(b) The government will promote improvement of high-standard thoroughfares and regional high-standard highways, which are safer, with lower death and injury accident rates when compared to general roads, so that more vehicles can be sent to those high-standard roads to improve the safety level of the entire road network.

(c) The government will promote the development of bypasses, loop roads, etc. to restrain the entry of through traffic and disperse traffic effectively, with the ultimate objective to prevent excessive traffic congestion and the frequent occurrence of traffic accidents in urban areas.

(d) In residential zones surrounded by a thoroughfare, or commercial zones that have a large volume of pedestrians, the government will attempt the redesigning of traffic flow to send as much through traffic as possible to thoroughfares, for the purpose of improving the living environment there. To this end, they will comprehensively implement the systematic improvement of auxiliary thoroughfares, local access roads and streets for the exclusive use of pedestrians, as well as the improvement of traffic safety facilities such as community roads or roads shared by pedestrians and vehicles on local access roads.

(e) With the aim to establish efficient transport systems that meet the needs of citizens, and form a desirable traffic environment with smooth traffic flow and minimal road congestion, the government will promote a “multi-modal” scheme that seeks the coordination of multiple transport systems, covering roads, railways, ocean and air transports. They will also construct access roads to airports and harbors, and railway stations or other places where various public transports meet.

b. Improving the road traffic environment through road rebuilding

In order to minimize the occurrence of traffic accidents, and to ensure safe, smooth and comfortable traffic, road rebuilding projects will be promoted vigorously under the below-mentioned strategies.

(a) In order to enhance the safety of pedestrians and bicycle users, and to improve the living environment, the government will vigorously promote road rebuilding projects that would contribute to road traffic safety. Those projects include the expansion of existing roads for the purpose of installing walkways, etc., redistribution of road spaces, together with construction of small-scale bypasses, and the installation of bicycle lanes to separate bicycles from pedestrians or vehicles.

(b) In order to prevent traffic accidents and reduce traffic congestion at and around intersections, the government will promote downsizing of intersections and the grade separation of crossings.

(c) When building a new general road or rebuilding an existing road, the government will ensure the introduction of necessary traffic safety facilities, including road signs, median strips, stopping lanes for vehicles, road lamps, guardrails, etc. Also, grade-separated crossing facilities equipped with a ramp, elevator or wheelchair lift will be installed when needed to ensure the safety of pedestrians.

(d) Matching the functions of each road with the actual status of road use, including the conditions of roadside zones, would contribute to ensuring traffic safety. With this in mind, the government will promote the installation of service roads that would offer better access from roadside zones, establishment of green zones, implementation of countermeasures against illegal on-street parking, etc., taking into consideration the actual status of traffic flow.

(e) With the aim to secure safe and comfortable spaces for pedestrians and bicycle users in commercial districts, etc., the government will promote the installation of wide walkways, bicycle lanes and community roads, improvement of those roads shared by pedestrians and vehicles, and restriction or prohibition of the entry of vehicles to shopping malls, according to the actual traffic volume and traffic conditions of pedestrians and bicyclists.

(f) In downtown districts and areas surrounding a railway station, etc., where traffic congestion is heavy, the government will comprehensively promote improvement of neighbor thoroughfares, installation of pedestrian decks (overpasses or underpasses for pedestrians that are separated from roadways for the protection of pedestrians) and construction of open spaces adjacent to public transport, for the purpose of expanding walk spaces and physically dividing pedestrians and vehicles in a systematic way.

(g) In those areas with an historical environment such as traditional streets or historic sites, local traffic should be separated appropriately from through traffic and the traffic of tourists. For this reason, the government will systematically promote improvement of guide paths providing access to historical districts, community roads within the areas, and historic trails, etc.

c. Promoting the utilization of high-standard thoroughfares

The government will promote the redistribution of more traffic to high-standard thoroughfares that are safer than general roads, in order to reduce traffic accidents resulting in casualties.

To this end, the government will improve networks of high-standard thoroughfares, expand services with the utilization of the Electric Toll Collection System (ETC), which enables automatic payment of expressway tolls without stopping at a toll gate, and increase interchanges on expressways, for the purpose of creating an environment where high-standard thoroughfares are more easily accessible.

(3) Promoting traffic safety facilities improvement projects

Targeting those roads in urgent need of safety improvements, prefectural public safety commissions and road management agencies will jointly promote the projects to improve walkways and other traffic safety facilities in accordance with the Priority Plan for Social Infrastructure Development (approved in the Cabinet meeting on October 10, 2003) that covers the period between FY2003 and FY2007, for the purpose of improving the traffic environment, and thereby preventing traffic accidents and making traffic smoother. Those projects will be implemented systematically and selectively, along with fact-finding investigations and analysis on traffic accidents, based on the below-mentioned strategies.

Even in and after FY2008, the comprehensive and systematic improvement of walkways and other traffic safety facilities development will continue to be promoted, taking into consideration the latest trends of traffic accidents.

a. Securing safe walking for pedestrians, etc.

The government will designate zones exhibiting a high rate of traffic accidents resulting in casualties as “Safe Pedestrian Areas,” and introduce area-wide comprehensive measures for accident prevention, including the improvement of walkways in particular, with the aim to reduce traffic accidents resulting in casualties within the Areas. Also, on those roads constituting designated routes under the Transportation Accessibility Improvement Act, they will promote barrier-free walk space by introducing barrier-free traffic signals and reforming steps and steep slopes.

b. Securing safe and smooth traffic on thoroughfares, etc.

The government will first designate those intersections and other road sections having high rates of traffic accidents resulting in casualties or the frequent occurrence of such accidents as “black spots,” and then intensively develop traffic safety facilities including walkways with the aim to prevent traffic accidents at the black spots after the developments. Also, targeting those thoroughfares in metropolitan areas with a significant amount of illegal parking, they will enhance efforts against illegal parking by integrating tangible and intangible measures such as paving streets with eye-catching color markings to specify no-stopping zones, and improving illegal parking control systems.

c. Achieving a safe and comfortable road traffic environment through promoting the use of IT

The government will work to prevent traffic accidents resulting in casualties and shorten the passing time at target spots by the introduction of intelligent traffic signals, etc. In addition, they will

promote the Universal Traffic Measurement Systems (UTMS) with installation of near-infrared beacons as well as introduction of infrared beacons. Furthermore, they will also promote enrichment of road traffic information services through expansion and improvement of the environment to collect and provide information.

Through the promotion of the above measures, the government aims to accomplish the numerical objectives set in the Priority Plan for Social Infrastructure Development established in FY2003 (the objective to reduce the number of traffic accidents resulting in casualties by about 44,000 by FY2007) .

[Numerical objective[3]] To reduce the number of traffic accidents resulting in casualties through the introduction of intelligent traffic signals, etc. by about 44,000

(4) Promoting effective traffic regulations

The government will attempt further rationalization of traffic regulations through prevention of risks on roads and other efforts to secure safe and smooth traffic, and the review of existing traffic regulations within the entire road network to ensure their compatibility with the actual conditions of respective roads, including their social functions, road structure, status of traffic safety facilities, conditions of traffic flow and volume, etc. Also, they will promote development of a database on the information of traffic regulations conducted by prefectural public safety commissions to ensure effective traffic control.

a. Implementing traffic regulation tailored to local conditions

For those roads which are used mainly for through traffic, the government will enhance traffic regulation designed to ensure orderly traffic flow through prohibiting stopping and parking, U-turns, restricting directions to go or allotting traffic lanes for a specific direction to go. For those roads which are used mainly for local community traffic, traffic regulation designed to maintain a desirable living environment will be enhanced through efforts to restrain the entry of through traffic by introducing one-way streets together with restrictions on directions to go. For those roads which are used mainly by pedestrians and bicycles, traffic regulation designed to ensure the safety of pedestrians and bicycle users will be enhanced through the introduction of streets for pedestrians only, prohibition of the entry of vehicles, installation or expansion of side strips, etc.

Especially in residential districts, the government will implement traffic regulation designed to ensure the safety of pedestrians, etc. to form “Safe Pedestrian Areas”.

b. Implementing traffic regulation to secure safe functional urban traffic

In order to secure safe functional urban traffic, the government will promote systematic traffic regulation in urban areas and attempt appropriate distribution of traffic flow and volume. Also, they will promote traffic regulation to secure the safety of mass public transport systems, such as buses and trams, in a way so as to prioritize them.

[3] These numerical objectives are set by the Priority Plan for Social Infrastructure Development (FY2003-FY2007).

c. Implementing traffic regulation on thoroughfares

In order to secure traffic safety and ensure smooth traffic on thoroughfares, the government will review and make any necessary correction on existing restrictions, including speed limits, the rule to prohibit crossing the lane line for passing on the right, etc., by taking into account the road structure, status of traffic safety facilities and traffic conditions.

d. Implementing traffic regulation on expressways

For newly opened expressways, the government will introduce appropriate traffic regulation to secure traffic safety and ensure smooth traffic, taking into consideration the road structure, status of traffic safety facilities, etc. Also, they will promote review of traffic regulations being applied to existing expressways to ensure their compatibility with actual traffic conditions, through comprehensive examination of any change of traffic flow, any status of improvement of road structures, the status of traffic safety facilities, trend of traffic accidents, etc. Especially for the sections with many traffic accidents, necessary safety measures will be introduced, including lane restrictions for large-sized trucks, the rule to prohibit crossing the lane line for passing on the right, and speed limits, etc.

In the event of a traffic accident, extraordinary weather conditions, or any other traffic disorder, special traffic regulations will be implemented swiftly and adequately to address the situation, to prevent secondary disorder.

(5) Working with local residents, etc. to improve the road traffic environment

Since road traffic safety is closely related to the living and socioeconomic activities of road users, it is necessary to understand the opinions of local citizens and road users, and to have them fully reflected in the designing of improvement measures.

Also, because of regional differences in road environments, road use conditions and traffic conditions, improvement of the road traffic environment should be based on local needs and conditions.

a. Promoting participation of local citizens in improvement of the road traffic environment

Since it is important to have the views of actual road users applied to the improvement of the road traffic environment, the government will vigorously promote “traffic safety comprehensive reviews” in which local citizens and road users spontaneously participate and check traffic safety facilities. Opinions of road users will be invited through “Hyoshiki BOX” which collects drivers’ opinions on road signs, etc. via postcards, internet, etc., and “Road Consultation Windows” in order to have them reflected in the improvement of the road traffic environment.

Bearing in mind that traffic safety is supported by safety awareness of the local citizens, joint efforts of the governments and local citizens to carry out traffic safety projects will be promoted for forming safe better communities through the establishment of a mechanism to allow citizens to actively take part in the designing of traffic safety projects from the planning stage to the implementation stage.

In addition, the government will release information on the progress and effects of the projects to the public, as much as possible, to obtain the understanding and cooperation of local citizens for the improvement of the road traffic environment.

b. Implementing comprehensive and intensive measures

In zones surrounded by thoroughfares, etc. which constitute residential districts, central urban areas or commercial areas including shopping centers, the government will promote the formation of "Road-for-Residents Zones" will be promoted to create safe, secure and lively towns and streets adopting the principle of people first. In these zones, responsible organizations will enhance consensus-building and creative solution for the regional needs and requirements with spontaneous participation of local citizens in the zone, and implement comprehensive measures such as improvement of walkways, restriction of the inflow of general vehicles, elimination of wire poles, and increase in green zones. To promote this, the government will provide highly-motivated municipalities or civic groups with not only tangible but also intangible assistance, for example, support to help them reach consensus. For central urban areas, the government will assist in efforts such as pilot programs of a "transit mall," which aims to create a lively town by restricting the use of general vehicles and increasing convenience of pedestrians, bicyclists and public transports such as buses and trams.

Also, with the aim to promote measures to address the needs of local citizens such as the creation of preference roads for pedestrians, the introduction of barrier-free walk spaces, elimination of wire poles, and improvement of bicycle-friendly environments, the government will establish a model district which can successfully implement comprehensive and intensive measures to create people-friendly towns and streets, the measures that set a pattern for other communities nationwide.

(6) Promoting effective and selective promotion of accident prevention measures

Targeting those roads in urgent need of traffic safety improvement, the government will install traffic safety facilities, etc. selectively in accordance with the Priority Plan for Social Infrastructure Development, to establish a safe, smooth and comfortable traffic environment. To this end, they will selectively implement countermeasures against traffic accidents and promote the designing of accident countermeasures including the improvement of walkways based on scientific analysis.

a. Selective implementation of accident countermeasures

Since traffic accidents on thoroughfares tend to occur more frequently in certain specific zones than in others, the Priority Identification Process will be adopted in order to reduce traffic accidents effectively and efficiently (this Process aims to ensure effective and efficient implementation of counter-accident measures, and clearly indicates the spots that should be given priority for implementing measures by listing those spots in order of the seriousness of their problems using objective data which show the need for countermeasures). Using this Process, the government will identify priority zones having high rates of accidents resulting in casualties or high rates of specific accidents, such as pedestrian-involved accidents, and selectively implement accident countermeasures such as the improvement of walkways, etc.

b. Promoting countermeasures against black spots

Targeting those designated "black spots," which are intersections and other roads sections having high rates of traffic accidents resulting in casualties or frequent occurrence of such accidents, prefectural public safety commissions and road management agencies will jointly promote intensive accident countermeasures including the improvement of walkways, etc.

Accident countermeasures promoted for those black spots include the installation and upgrades of traffic signals, use of "traffic signals with the function of separating pedestrians and vehicles," introduction of brighter traffic signs/marks, etc., improvement of walkways, etc., improvement of intersections, improvement of sight distance, improvement of auxiliary traffic lanes, installation of median strips, installation of bus top zones and improvement of guardrails and road lines and markings on bus routes, installation of street lamps and delineators, etc.

Through the promotion of the above measures, the government aims to accomplish the numerical objectives set in the Priority Plan for Social Infrastructure Development established in FY2003 (the objective to reduce the number of traffic accidents resulting in casualties at black spots after countermeasure implementation by about 30% by FY2007).

[Numerical objective[4]] To reduce the number of traffic accidents resulting in casualties at black spots after countermeasure implementation by about 30%

c. Promoting measures against accidents based on scientific analysis

In order to promote measures against accidents based on scientific analysis at black spots, etc., the government will utilize the "Traffic Accident Countermeasures and Assessment Manual" and "Casebook of Traffic Accident Countermeasures" for the designing, implementation and assessment of individual measures. Also, they will collect and store data on introduced measures against accidents and improve the Manual and the Casebook by utilizing those data as feedback.

d. Utilizing liaison conferences

Aiming at the appropriate and steady materialization of a safe road traffic environment, the relevant agencies will discuss planning, assessment and progress management of measures against accidents, with the support of intellectuals, leveraging the "Liaison Conference for Promoting Safe Road Traffic Environment" established by the National Police Agency and the Ministry of Land, Infrastructure and Transport, and the "Advisors' Meeting" organized under the Conference.

e. Improving traffic safety facilities

(a) Targeting high-risk spots considered as susceptible to traffic accidents, the government will introduce traffic signals by taking into consideration the road structure and actual traffic conditions. They will also promote sophistication of existing traffic signals to ensure their ability to rationally respond to traffic fluctuations. Such sophistication includes introduction of centralized traffic control systems, coordinated systems, a speed detection function, use of multiple marks, a right-

[4] These numerical objectives are set by the Priority Plan for Social Infrastructure Development (FY2003-FY2007).

turn detection function, etc. Especially for those thoroughfares where traffic volume tends to be significantly reduced during certain periods of time such as night time, they will promote the introduction of an off-time mode to activate vehicle/pedestrian detection or a push-button function to traffic signals. They will also introduce a bus detection system where necessary.

(b) In order to secure traffic safety in a way so as to address characteristics of the road structure and traffic conditions, the government will promote the introduction of traffic safety facilities such as brighter road signs/marks, etc., introduce any measures to facilitate the easy detection of an accident location as well as swift and accurate accident investigations or site cleaning, and also promote installation of "kilometer posts" that allow drivers to easily confirm their current position as well as the distance to a destination. Furthermore, they will promote installation of "oncoming vehicle detection systems" that make drivers aware of any oncoming vehicle at a curve with an obstructed view, as well as "excessive-speed deterrence systems" that help prevent accidents caused by speeding on road sections of thoroughfares. For addressing serious nighttime accidents that still occur frequently, nighttime accident countermeasures such as the introduction of road lamps or delineators will be promoted.

f. Implementing safety measures accommodating local needs

Since the task to improve traffic safety has its roots in community life, improvement of the road traffic environment will be implemented based on understanding of the needs of local citizens, the status of their road use, and actual conditions of traffic flow, etc.

In order to secure safe road traffic during winter in designated cold snowy regions, the government will promote measures against snow and frozen road surfaces, such as snow-clearing works or antifreeze spraying conducted timely and properly, and installation of snow melting facilities at intersections, snow flowing gutters and snow chain workspaces.

Also, for road traffic safety, the government will promote improvement of road information service devices, by which collected information on the weather and road surface conditions will be provided for road users.

g. Selective introduction of traffic regulations in areas with many traffic accidents

Targeting those areas or routes where traffic accidents occur frequently, the government will selectively introduce effective traffic regulations, including speed limits, and the rule to prohibit crossing a lane line for passing on the right, etc.

h. Preventing recurrence of serious accidents

On the occurrence of any serious traffic accident that would make a significant impact on society, the government will swiftly investigate the road traffic environment around the site and other possible contributing factors of the accident, and promptly implement any necessary countermeasures responding to the identified factors in order to prevent similar accidents from occurring in the future.

(7) Promoting measures against accidents on expressways

The government will promote systematic improvement of traffic safety facilities on expressways from the viewpoint of comprehensive implementation of traffic safety measures in urgent need. Also, they will vigorously promote road rebuilding projects to expand road width, etc. for those road sections affected by congested traffic, appropriate road maintenance services, and provision of road traffic information to maintain or improve the safety level.

a. Implementing intensively comprehensive measures for reducing accidents

In order to secure safe and smooth traffic in those "black spots" in urgent need of safety improvement, the government will conduct detailed analysis on factors that could trigger accidents , including those peculiar to rainy days or night time, and,. based on findings from the analysis, selectively make improvements on traffic safety facilities, including the installation of guardrails to reinforce median strips, road lamps, self-luminous delineators, high-function pavement, high-visibility road lines, etc. Also, in those two-lane sections having no structural partition to physically divide a lane from the opposite lane (temporary sections), it is necessary to reinforce measures for preventing critical accidents caused by those vehicles jutting out to the opposite lane, and to this end, the government will introduce visual guidance for drivers, such as high-visibility traffic cones or lane markings, projected pavement markings, sophisticated portable partitions or median strips, etc. In addition, in order to prevent vehicles from moving into the wrong lane, they will promote comprehensive accident prevention measures by improving road signs, markings, etc.

Furthermore, together with these measures, they will provide emergency workspaces on expressways to facilitate rescue and emergency services after an accident, and support rescue and emergency services activities by helicopters.

b. Creating a safe and comfortable traffic environment

In order to prevent driver fatigue or irritation and secure a better driving environment that assists in safe and comfortable driving, the government will promote congestion prevention measures, such as the expansion of traffic lanes, improvement of interchanges, and swift removal of broken-down vehicles due to accidents or mechanical failure., as well as to improve the convenience of expressway buses, and introduce measures to correct excessive crowdedness of rest facilities. In addition, in order to respond to diversified needs of road users, they will promote improvement of traffic information services with the utilization of widely-used information/communications technologies, such as facsimiles and the internet, etc., so that expressway users can instantly obtain necessary traffic information.

c. Establishing advanced IT-utilized systems

The government will promote the introduction and improvement of the Vehicle Information and Communication System (VICS) to satisfy the diverse needs of expressway users and enable them to obtain necessary traffic information, etc., as well as improvement of Intelligent Transport Systems (ITS) such as the Electronic Toll Collection System (ETC) to mitigate traffic congestion and improve convenience for expressway users.

(8) Utilizing Intelligent Transport Systems

The government will continue to promote improvement of Intelligent Transport Systems (ITS), which aim to enhance traffic safety, transport efficiency and the comfortable use of roads by building an integral system that links people, roads and vehicles, with the utilization of state-of-the-art information technologies, and also contributes to environmental conservation through materialization of smooth traffic including reduction of traffic congestion, etc. Based on the "Basic Guidelines on the Promotion of ITS," businesses, public organizations and academic institutions will work together to further promote research and development activities, field tests, improvement of infrastructures, and projects for popularization or standardization of ITS. Also, international cooperation will be vigorously promoted through information exchanges at the ITS World Congress, etc. and international standardization of ITS.

a. Improving Vehicle Information and Communication System

In order to secure safe, smooth road traffic, the government will promote the introduction and improvement of the Vehicle Information and Communication System (VICS), which provides road traffic information such as real-time information on the state of traffic congestion, estimated travel time to a destination, information on traffic regulations, etc. They will also make efforts to increase a variety of available information and diffuse vehicle-mountable VICS units.

In addition, with the aim to improve precision and accuracy of information to be collected and provided, they will promote installation of infrastructures, such as near-infrared beacons, 5.8GHz DSRC (Dedicated Short Range Communication), etc. At the same time under industry-government-academia collaboration, the government will work to make it possible to collect information from VICS-equipped vehicles (probe information) to complement information collected from infrastructure.

b. Promoting the Universal Traffic Management System

The government will promote improvement of the "Universal Traffic Management System (UTMS)" and implementation of measures such as improvement of near-infrared beacons, which are a key technology to support the UTMS, in accordance with the UTMS plan. The plan aims to introduce this new traffic control system for the purpose of securing traffic safety and comfortable road use by deploying advanced traffic control centers and utilizing near-infrared beacons that enable the centers to make two-way communication with individual vehicles, and thus have active, comprehensive control of traffic flow and volume. Specifically, this would make it possible to provide high-level traffic information, ensure vehicle operation management as well as the right of way for public transport, reduce traffic pollution, assist drivers for their safe driving and secure the safety of pedestrians.

c. Promoting driver support systems to prevent traffic accidents

With the aim to enhance traffic safety through advanced ITS, industry-government-academia collaboration will be promoted for research and development of driver support systems which utilize road-to-vehicle communication technologies to prevent those traffic accidents which are usually unavoidable by the sole effort of a driver.

Also, improvement of Driving Safety Support Systems (DSSS) will be promoted. DSSS utilize a traffic control system or other infrastructure to send visual or auditory information regarding traffic conditions in neighbor areas to a driver through a car navigation system with the aim to warn the driver of any existing risk elements and thus create a driving environment where the driver can be well prepared for the possible risk, and ultimately reduce traffic accidents.

Furthermore, Advanced cruise-assist Highway Systems (AHS) will be promoted. AHS aim to assist drivers in driving safely and comfortably with the utilization of IT that creates an interlinkage between roads and vehicles, by which drivers can obtain appropriate traffic information, can be aware of any danger, and ultimately avoid accidents.

d. Promoting Smart Way

The government will promote introduction of various ITS services, taking into consideration their potential interlinking with various other communication media such as cellular phones, video communication systems, etc. ITS services include smooth passing at tollgates utilizing a Dedicated Short Range Communication (DSRC) system that is already in use with ETC, area guidance to satisfy various needs, and timely information service for assisting drivers, etc.

e. Promoting the utilization of advanced information technologies in the road transport industry

For the purpose of materializing environment-friendly, safe and smooth traffic of vehicles, the government will encourage the utilization of ITS in the road transport industry, with the aim to promote the use of public transports and improve efficiency of commodity distribution. Specifically, they will promote improvement of Public Transportation Priority Systems (PTPS) and Mobile Operation Control Systems (MOCS).

(9) Creating a smooth, comfortable and safe road traffic environment

To create a safe road traffic environment, it is necessary to secure the smooth and comfortable use of roads. To this end, the government will increase and upgrade traffic control systems, and introduce intelligent traffic signals to ensure smooth traffic. Other measures to ensure smooth road traffic include the installation of rest facilities for drivers, introduction of easy-to-understand road signs, and correction of any undesirable road use or occupancy.

a. Creating a smooth, comfortable and safe road traffic environment

(a) The government will improve and upgrade traffic control systems through expanding control areas, etc. for the purpose of promoting collection, analysis and distribution of traffic information and operation of traffic signals, road signs/marks and other road traffic regulations in wide-area and comprehensive way.

(b) The government will accurately understand actual traffic flow patterns on each thoroughfare, and utilize such understanding for the efficient operation of traffic signals. Specifically, intelligent functions of traffic signals will be introduced based on predicted traffic flow patterns, such as coordinated systems, an off-time mode to activate the push-button function or vehicle/pedestrian detection, use of multiple marks, a right-turn detection function, etc. Also, they will promote

sophisticated traffic control systems that enable operation of traffic signals to delicately respond to the fluctuation of traffic flow.

(c) In response to the increasing necessity to prevent those traffic accidents caused by long-distance drivers as well as the recent trend of increasing elderly drivers, the government will promote installation of a passing lane as much as possible on those general roads connecting urban districts. They will also vigorously increase rest facilities for drivers such as “road stations”.

(d) The government will introduce systems to create a user-friendly road traffic environment and secure safe, smooth traffic flow. They include traffic monitoring cameras, various vehicle sensors, traffic information systems that allow drivers to obtain accurate information promptly (including information on extraordinary weather conditions and optimum route guidance from one city to another, etc.), traffic information boards, and roadside communication facilities. They also include large-sized high-visibility durable fixed road signs and roadside variable message boards that would introduce effective, time-selective traffic regulations on specific types of vehicles, easy-to-understand systematic road signs and variable centerlines that would satisfy the needs of road users. Especially at intersections and their surrounding areas on thoroughfares, the government will promote the installation of guide signs with a route number, etc., and introduce signs in foreign languages using graphical symbols in response to the progress of internationalization.

Also, they will vigorously promote improvement and expansion of the Vehicle Information and Communication System (VICS).

b. Correcting any undesirable road use or occupancy

(a) Correcting any undesirable road use or occupancy

When giving approval to any use or occupancy of a road by an object or construction work, road management agencies will make sure of its appropriateness from the aspect of conservation of the road structure and security of safe, smooth road traffic. Also, they will provide instructions on road users’ responsibility to satisfy approval requisites and conduct appropriate maintenance or management of the object or construction work on the road.

In addition, office work for road use approval will be computerized in order to accurately understand the status of road use and minimize the influence of the road use on road traffic.

(b) Removing illegal road occupancy

As for any illegal road occupancy that obstructs smooth road traffic, road management agencies will examine the actual conditions of such illegal occupancy, and give strict instructions or orders for its removal. Especially in urban districts, removal of such illegal occupancy will be promoted intensively.

Since spontaneous commitments of local citizens living in roadside residences or road users are important to eradicate all illegal road occupancy, the government will actively conduct educational activities for those citizens to prevent illegal road occupancy. For instance, they will establish “road care month” to widely encourage the protection of roads.

With the aim to ensure effective coordination of road construction works, the government will gradually expand utilization of a "computer mapping system" that uses digital maps for data processing.

(c) Regulating road digging

As for road digging construction work, the timing and method will be carefully selected in order to prevent any disordered digging or traffic accidents/congestion caused by the construction work.

Also, the government will promote utilization of joint-use underground ducts as a drastic measure to avoid road digging work.

c. Comprehensively improving the environment for the use of bicycles

(a) It is necessary to improve the overall environment for the use of bicycles by clarifying the positioning and role of bicycles as an urban transport facility suitable for urban structures. Measures for bicycles include the improvement of networks of bicycle lanes to facilitate the safe, smooth use of bicycles as one of means of transportation, the same as pedestrians and vehicles. Other measures include improvement of bicycle lanes that help separate bicyclists from pedestrians or vehicles, bicycle/pedestrian paths that are wide walkways allowing for the use of bicycles, and installation of color pavement or curbs that partition a road to secure bicycle space. The government will design those facilities taking into consideration the actual traffic volume of bicycles, pedestrians and vehicles. Also, they will designate bicycles lanes to be used exclusively for bicycles and walkways to be shared by pedestrians and bicycles to control traffic.

(b) In order to ensure the comprehensive and systematic promotion of measures for bicycle parking, the government will promote specific measures under the Act for Promotion of Safe Bicycle Use and Comprehensive Promotion of Measures Against Parking of Bicycles, etc. (Act No.87 of 1980).

To this end, the setting up of a regional Bicycle Parking Policy Council, and the establishment of comprehensive plans will be promoted. Also, for the purpose of promoting the construction of roadside or off-road parking facilities for bicycles, especially in those areas already having high parking demand or a high potential for significantly growing demand, the government will promote bicycle parking improvement programs, etc. as part of the traffic safety facilities improvement projects or the city and street planning projects. In addition, they will promote establishment of a local government ordinance to oblige developers of those buildings which are expected to generate high parking demand for bicycles to build a bicycle parking facility. Furthermore, they will work to nurture bicycle parking improvement projects of the Bicycle Parking Facilities Development and Management Foundation and the Bicycling Popularization Association of Japan. Also, the national government will support parking facilities developed by private sectors, together with local governments, to further promote measures for bicycle parking.

Also, systematic traffic regulations to secure safe bicycling will be promoted along with parking improvement.

(c) In order to address problems caused by unattended bicycles near railway stations, etc., local public organizations, road management agencies, prefectural police and railway companies will maintain

appropriate cooperative relationship by promoting active management of Bicycle Parking Policy Councils and establishing comprehensive plans. Also, they will promote efficient and comprehensive improvement of bicycle parking, and removal of illegally parked bicycles in station squares or on roads through the establishment of municipal ordinances, etc., in accordance with local conditions.

Especially on those roads constituting designated routes within priority improvement zones selected by municipal governments under the Transportation Accessibility Improvement Act, they will selectively promote strengthening of control over illegally parked bicycles, publicity or educational activities for the prevention of illegal parking, as well as construction of bicycle parking facilities, with the aim to ensure smooth travel for elderly or disabled people.

(d) The government will promote construction of large-sized bicycle lanes, which would provide citizens with the opportunity to appreciate history and nature, to secure traffic safety and accommodate the increasing leisure demand of people.

(10) Promoting Transportation Demand Management (TDM)

In order to mitigate the current severe situation of road traffic congestion and make road traffic smoother, the government will promote Transportation Demand Management (TDM). TDM aims to improve transport efficiency and achieve time-wise and space-wise leveling of traffic volume, consisting of measures to expand traffic capacity through the development of bypasses and loop roads and improvement of intersections, etc., measures to upgrade traffic control, and measures to introduce special efforts for the efficient use of roads, such as promotion of the "park and ride" (a system to encourage private car users, by providing parking space around railway stations or bus terminals in suburbs, to park the car there and then ride a train, bus or other public transportation to the destination, for the purpose of mitigating traffic congestion caused by the large volume of private cars heading toward urban areas), improvement of information services, promotion of car sharing, introduction of staggered working hours/school hours or a flextime system, etc. Also, they will introduce publicity or educational activities to facilitate the wide use of TDM measures.

a. Promoting the use of public transports

Targeting those roads severely affected by traffic congestion, the government will promote measures to promote bus use, including the introduction of bus-only lanes or bus-priority lanes, high-grade bus stops, bus-detecting traffic signals, Public Transportation Priority Systems (PTPS), "park and ride" practice and community buses, etc. At the same time, they will promote the "Omnibus Town Project", by which relevant ministries and agencies of the government will jointly work on the comprehensive implementation of the above measures.

Also, the government will assist in the development of public transportation such as trams, monorails, etc. to shift part of road traffic to public transportation such as railways and buses, with the aim to materialize smooth road traffic.

In addition, “seamless” public transport systems will be sought by encouraging railway companies or bus companies to optimize the frequency and hours of operation for better transfer, so as to improve user convenience. Also, in order to secure access to railway stations or bus stops, the government will promote the development of parking facilities for “park and ride” drivers, bicycle lanes and station squares with the aim to strengthen connections among transport systems.

b. Improving efficiency in the use of vehicles

With the aim to promote the efficient use of vehicles by increasing the average number of passengers sharing a car or the average freight loading ratio for trucks, the government will promote practices of car sharing or shared delivery and work to increase MOCS to improve efficiency in distribution systems.

c. Leveling traffic demand

With the aim to disperse traffic volume during peak hours, the government will promote the introduction of staggered working hours/school hours or a flextime system and improve traffic information services.

(11) Promoting comprehensive parking measures

In order to enhance road traffic safety and smoothness, and contribute to maintenance and improvement of urban functions, the government will promote comprehensive measures for car parking based on local traffic conditions and regional needs.

a. Promoting orderly parking

(a) With the aim to establish better-organized parking practices to meet the road environment, traffic conditions, parking demand, etc., the government will conduct review of current parking regulations bilaterally from a time-conscious viewpoint focusing on hourly, weekly and seasonal changes of traffic flow and volume, etc., and from a location-conscious viewpoint focusing on characteristics of the traffic environment and road structure in each section of the roads. Based on such review, they will implement meticulously-designed parking regulations to satisfy the needs of the respective times and locations, paying sufficient attention to the utility of parking.

(b) At those intersections where illegal parking or stopping creates significant disturbance to traffic flow or congestion, the government will promote the introduction of illegal parking prevention systems. For example, they will give vocal warnings to those drivers attempting to park or stop a car near intersections to prevent illegal parking/stopping and ensure safe, smooth traffic.

b. Implementing measures against illegal parking under the new legislation

(a) By subcontracting patrolling works to find illegal parking to private sectors, the government will secure a labor force engaged in the control of illegal parking and strengthen the control. In order to do so, it is more important than ever before to focus the target of the control on pernicious, dangerous or highly-troublesome illegal parking. Therefore, the government will establish the guidelines for target locations and times of the control over illegally parked vehicles, based on

opinions and requests of local citizens, and release the guidelines to the public. Control will be promoted in accordance with the guidelines.

(b) As for those illegally-parked vehicles whose drivers cannot be identified and thus cannot be directly ticketed, order for penalty payment to the registered users of the vehicles and order for vehicle use restrictions to the registered users who have received the order for penalty payment repeatedly will be actively utilized, to strongly pursue registered users' responsibility. At the same time, as for those violations resulting in a traffic accident or habitual offenses, the responsibility of drivers concerned will be strictly sought.

c. Improving parking facilities

In order to eliminate illegal parking on roads and secure safe, smooth road traffic, the government will promote, in addition to promoting parking regulations and controlling illegal parking, the following measures to develop and effectively use parking facilities.

(a) The government will conduct surveys necessary for the planning of parking improvement programs, and promote designation of parking improvement zones, especially in those areas affected by heavy traffic congestion. Also, they will promote establishment of parking improvement plans to implement systematic, comprehensive parking measures in those designated zones.

(b) The government will promote establishment of local government ordinances to oblige developers of large-sized buildings to have them equipped with a parking facility, and assist private sectors' development of parking facilities through the utilization of various subsidies, loan programs, tax incentives, etc.

Especially in those areas in need of intensive improvement of parking facilities due to the necessity to maintain or improve their urban function or the role to connect public transports, they will vigorously promote development of public parking facilities, utilizing traffic safety facility improvement projects, loan projects (interest-free loans), etc.

(c) In order to enhance effective utilization of existing parking facilities, the government will improve or upgrade information services on available parking lots and vehicle guiding systems for parking. Also, with the aim to restrain excessive inflow of vehicles from suburban areas to urban areas and to prevent traffic congestion, they will promote improvement of the "park and ride" environment by increasing parking lots, etc.

d. Raising people's awareness and motivation toward elimination of illegal parking

The government will conduct publicity and educational activities regarding elimination of illegal parking and securing parking spaces for vehicles, seek close cooperation with relevant public and private organizations, and work to improve people's attitudes and motivation toward the elimination of illegal parking through active utilization of volunteers promoting regional traffic safety activities.

e. Developing tangible and intangible measures to cope with the parking issue

Targeting those urban roads where illegal parking is substantial and harms safe, smooth road traffic, the government will promote comprehensive parking policy by integrating tangible and

intangible measures, including provision of parking facilities, roadside parking spaces, stopping lanes for organizing luggage, introduction of information services on available parking lots, vehicle guidance systems for parking and illegal parking prevention systems as traffic safety facilities, clear indication of no parking and stopping zones by using color pavement, and implementation of meticulously-designed parking regulations, control of illegal parking, active publicity and educational activities, etc.

(12) Developing disaster-resistant road traffic environment

a. Improving the disaster-resistance of roads

The government will make efforts to create a disaster-resistant road environment to maintain safe, secure living even at the time of disasters, such as floods, heavy snow, earthquakes, tsunamis, etc. Based on what was learned from past large-scale disasters, such as floods or the Mid Niigata prefecture Earthquake in 2004, they will secure emergency routes for transportation that are essential for rescue activities at damaged areas and the delivery of rescue materials. To this end, they will upgrade earthquake-resistant structures of bridge girders in accordance with the "three-year program for upgrading earthquake-resistant structures of bridge girders at emergency transportation routes" and the "three-year program for upgrading earthquake-resistant structures of bridge girders over bullet train lines and expressways."

As for countermeasures against tsunamis, the government will improve the information system to dispatch warnings to road users, and promote improvement of evacuation routes to minimize human damages. Also, they will promote improvement of those high-standard thoroughfares away from potential flood areas so that emergency routes for transportation can be secured even in the occurrence of tsunamis.

In order to secure highly-reliable, safe road networks that are not susceptible to extraordinary weather conditions such as heavy rains, etc., the government will introduce counter-disaster measures such as reinforcement of artificially-cut surfaces of hills or bluffs facing a road, and promote improvement of "life line" roads that would prevent isolation of a damaged area.

Also, utilization of "road stations" as a shelter at the time of disasters such as earthquakes or tsunamis will be promoted.

b. Improving the disaster-resistance of traffic safety facilities

In order to secure safe road traffic in the event of disasters such as earthquakes, floods, heavy snow, etc., the government will promote improvement of traffic safety facilities, such as traffic control centers, traffic monitoring cameras, vehicle sensors, traffic information boards, etc. They will also promote the development and introduction of road monitoring systems so that any necessary traffic control such as road closure can be implemented swiftly and effectively at the time of disaster. They will promote the improvement of traffic control tools and equipment, and also promote the introduction of backup power with the function of automatically recovering signals in order to prevent

any chaotic situation caused by an unexpected shutdown of traffic signals due to a blackout at the time of disaster.

Furthermore, the National Police Agency will ensure accurate operation of wide-area traffic control systems, which would allow the Agency to receive real-time, detailed traffic information on-line from regional traffic control centers managed by prefectural police, and utilize such information for wide-area traffic control in the event of disaster.

c. Implementing traffic control in the event of disaster

In order to minimize confusion in the event of disaster by securing emergency traffic routes as necessary, the government will implement swift and accurate traffic control including restriction of the entry of vehicles into disaster-affected areas.

Also, with the aim to ensure accurate, swift traffic control such as road closures, etc. in accordance with the Disaster Measures Basic Act (Act No. 223 of 1961), they will restrain the entry of vehicles into disaster-affected areas through control of traffic signals. They will also promote improvement of traffic information boards and other information services so that all necessary information, including instructions for detours and information on the status of the disaster and traffic control, etc. can be given to the public widely and visually.

d. Improving information services in the event of disaster

The government will promote improvement of seismometers, traffic monitoring cameras, vehicle sensors, road traffic information dispatch equipment, communication facilities and road management information systems, etc. in order to ensure swift, accurate collection, analysis and dispatch of information on road damages or traffic conditions, and facilitate restoration, secure emergency routes for traffic or transportation, and provide better information services for road users in the event of disaster. Also, they will improve IT-utilized services to provide information on roads and traffic conditions at the time of disaster, using the internet, etc.

(13) Creating the road traffic environment that would contribute to traffic safety

a. Prohibiting or restricting passage based on the Road Act

In order to conserve road structures and protect road users from danger, the road administrators will implement passage prohibition or restriction in a swift and accurate way in accordance with the Road Act (Act No. 180 of 1952) when any potential traffic danger is recognized due to the existence of road damages, road collapse or extraordinary weather conditions, or when a passage prohibition or restriction is considered necessary because of road construction work. Also, they will introduce any necessary institutional development or act enforcement to prevent a violation against the prohibited or restricted use of underwater tunnels by those vehicles carrying dangerous objects, or prohibited or restricted use of certain roads by those vehicles exceeding statutory upper limits of size or weight.

b. Securing playgrounds for children

In order to develop playgrounds and reduce those traffic accidents involving children playing on the streets, and to create a desirable living environment in urban areas, the government will promote

construction of basic parks for community use and city wide use along with other parks in accordance with the Priority Plan for Social Infrastructure Development.

Furthermore, targeting downtown areas, residential districts with densely-populated small houses, areas affected by heavy traffic, or their neighborhood areas, which suffer from a shortage of playgrounds for children, they will promote construction of community centers for children or kids' parks designed mainly for preschool children and lower grades of elementary school children. They will also make schoolyards or gymnasiums of public elementary, junior or junior high schools, as well as gardens of social welfare facilities available for local children when possible.

c. Promoting the removal of wire poles

The government will promote wide-area projects to remove wire poles from towns for the purpose of securing safe comfortable walk spaces, improving urban scenery, ensuring disaster prevention in urban areas, and improving the reliability of information and communication networks. The projects will be promoted in accordance with the "Electric Pole Elimination Plan," and will cover not only urban thoroughfares but also main streets in historical districts having cultural heritage.

2. Comprehensively implementing traffic safety awareness initiatives

Traffic safety education is important to make citizens aware of their responsibilities as members of "traffic society," to improve the level of their understanding of traffic safety and their etiquette and behavior on roads, and to train people to be good citizens who can respect other people and contribute to the safety of neighbors and communities, under the principle of respect for human life. In order to raise the level of people's traffic safety awareness and improve their traffic etiquette, it is necessary to provide life-long learning opportunities and learning programs for each age group, and inspire people to realize that traffic safety is something to be achieved by their own efforts. It is also necessary to enhance knowledge about and care for the weak including elderly and disabled people, to understand the pain of others, and develop an attitude toward accident prevention under the principle of people first.

In this light, the Traffic Safety Education Policy (National Public Safety Commission Notice No.15 of 1998) should be effectively used, to provide traffic safety education systematically and step by step for all generations from children to adults in a way to respond to their mental and physical development and needs at their respective life stages. Also, in response to the growing population of elderly people, the government will improve education designed for the elderly to improve their traffic safety awareness. At the same time, they will strengthen awareness-raising and guidance for the purpose of encouraging other generations to learn about characteristics of the elderly, and motivating them to protect and give consideration to the elderly. In addition, the government will strengthen traffic safety training for school children and junior high and high school students, who use bicycles frequently, by teaching them how to use bicycles safely, as preparatory education for future car drivers.

At schools, well-designed, systematic guidance on traffic safety will be given to students in accordance with the Courses of Study mainly during moral classes, special activities, hours for comprehensive studies and other relevant classes.

In promoting traffic safety education and publicity activities, the government will actively promote citizens' hands-on participation, direct experience and practical training. Also, they will promote improvement of educational materials. For instance, the internet will be actively utilized to promote interlinking among various educational programs. The government will ensure that necessary information is made available to the public in the form of easy-to-understand contents, to make it possible for people to understand and practice safe behavior on roads.

In the course of implementing traffic safety education and publicity activities, the national and local governments, police, schools, relevant private organizations, local communities and households will jointly promote community-wide activities through mutual assistance using their respective strengths. Especially, those officials of local public organizations and school teachers who are in charge of traffic safety education will be encouraged to improve their leadership, and leaders in private sectors and community leaders will also be developed, so that regional voluntary activities to address local needs can be promoted.

Also, in order to effectively promote community-wide traffic education and publicity activities, exchanges among three generations, the elderly, parents and children, will be promoted so that all

generations share opinions on traffic safety and develop mutual understanding, where the elderly will play the central role.

In addition, the government will develop reliable evaluation or assessment methods with regard to expectable effects or results of education and publicity activities, evaluate or verify these activities, and work to effectively implement further activities. Furthermore, using those verification and evaluation results, they will make efforts to improve relevant parties' understanding of the significance and importance of the activities.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Promoting traffic safety activities focused on citizens' participation, hands-on experience and practical implementation ((1) f, (2), (3) a, e, and (5))
○ Promoting safety education for elderly people ((1) f)
○ Promoting safe bicycle riding ((3) b)
○ Promoting the use of seat belts by backseat passengers ((3) c)
○ Promoting the use of reflective materials ((3) e)
○ Promoting traffic safety initiatives by private organizations ((4))
○ Promoting citizens' participation and collaboration ((5))

(1) Promoting systematic and step-by-step traffic safety education

a. Promoting traffic safety education for preschool children

Traffic safety education for preschool children aims to teach basic traffic rules and develop an attitude to observe the rules and practice traffic etiquette as required according to their physical and mental development as well as regional needs, and also to teach the basic skills and knowledge necessary for the safe use of roads in their daily living.

At kindergartens and nurseries, traffic safety education should be given systematically and constantly by using every possible opportunity during their daily education and care activities, in cooperation with children's families, relevant organizations, and groups, etc. In order to make educational programs effective and easy to understand, visual aids such as picture-story shows, etc. will be utilized, and home education by parents or guardians will be promoted. Also, the government will promote improvement of educational materials or teaching aids as well as training skills of teachers.

At children's halls and playgrounds, traffic safety education will be promoted as part of play programs designed especially for small children. Parents, etc. will be encouraged to organize groups to support such educational activities.

Relevant organizations will assist kindergartens, nurseries, etc. in promoting traffic safety education, by providing them with various teaching materials, teaching aids and information that satisfy regional needs and are designed to meet the respective stages of children's mental and physical

development. Also, the government will promote educational programs for children' guardians, such as lectures or seminars, so that they can be a model of a good road user to give appropriate traffic safety guidance to their children at home or on the road. In addition, they will promote the activities of volunteer traffic attendants (trained volunteers engaged in assistance for people's safe road use), such as giving children tips on the safe use of roads around their kindergartens, nurseries, etc. and also holding traffic safety seminars for their guardians.

b. Promoting traffic safety education for school children

Traffic safety education for school children aims to teach the skills and necessary knowledge as a pedestrian or bicycle user in a way so as to meet their physical and mental development and regional needs, and also train children to improve their attitudes and ability to be well-prepared for any possible danger on roads and to avoid danger by judging the road and traffic conditions.

Elementary schools will carry out traffic safety education in cooperation with children's families, relevant organizations, groups, etc., in a way so as to introduce it throughout all school education programs, mainly during physical exercise classes, moral classes, homeroom activities, school council activities, special activities of school events, and hours for comprehensive studies, etc. Focus areas of education include rules to observe as a pedestrian, tips on the safe use of bicycles, the safe use of public transports, methods to predict and avoid danger on roads, and the significance and necessity of traffic rules, etc.

For the systematic, effective implementation of traffic safety education at elementary schools, reference materials necessary for guidance will be prepared and distributed. Also, as part of the efforts to seek appropriate traffic safety education and desirable methods, surveys and research will be conducted, and seminars for teachers will be carried out.

Relevant organizations will assist elementary schools in promoting traffic safety education, and also implement supplementary educational programs for children. Also, lectures or seminars designed for children's guardians will be provided, so that they can be a model of well-behaving citizens in their daily living and give appropriate on-site guidance to their children on the road as a pedestrian or bicycle user, including basic traffic rules and traffic etiquette.

In addition, the government will promote the activities of volunteer traffic attendants such as giving children safety tips on their school routes and holding traffic safety seminars for their guardians.

c. Promoting traffic safety education for junior high school students

Traffic safety education for junior high school students aims to train them to master overall safety skills and traffic knowledge necessary in their daily living, especially when using a bicycle, and also educate them to care for others on the roads by paying attention not only to one's own safety but also to the safety of other people.

Junior high schools will carry out traffic safety education in cooperation with students' families, relevant organizations, groups, etc., in a way so as to introduce it throughout all school education programs, mainly during classes of health education and physical exercise, moral classes, homeroom activities, student council activities, special activities of school events and hours for comprehensive

studies, etc. Focus areas of education include rules to observe as a pedestrian, tips on the safe use of bicycles, characteristics of automobiles, etc, the methods to predict and avoid danger on the roads, meanings of road signs and marks, first aid methods, etc.

For the systematic, effective implementation of traffic safety education at junior high schools, reference materials necessary for guidance will be prepared and distributed. Also, as part of the efforts to seek appropriate traffic safety education and desirable methods, surveys and research will be conducted, and seminars and lectures for teachers, including those on CPR (cardiopulmonary resuscitation), will be carried out.

Relevant organizations will assist junior high schools in implementing traffic safety education smoothly, by sending instructors or providing necessary information. Also, lectures or seminars designed for students' guardians as well as supplementary educational programs for students will be promoted and carried out in their communities.

d. Promoting traffic safety education for high school students

Traffic safety education for high school students aims to train them to master overall safety skills and traffic knowledge necessary in their daily living, especially when using a motorcycle or bicycle, and also to educate them to practice responsible behavior, as a member of traffic society and a good citizen, by observing traffic rules with an attitude of respect for their own life as well as of other people.

High schools will carry out traffic safety education in cooperation with students' families, relevant organizations, groups, etc., in a way so as to introduce it throughout all school education programs, mainly during classes of health education and physical exercise, homeroom activities, school council activities, special activities of school events, and hours for comprehensive studies, etc. Focus areas of education include tips of the safe use of bicycles, characteristics of motorcycles and automobiles, the methods to predict and avoid danger on the roads, drivers' responsibilities, first aid methods, etc. In addition, as it is expected that many students will obtain driver's licenses in the near future, preparatory education for future drivers will be provided. Especially, guidance for motorcycle and vehicle safety will be designed according to the actual needs of students and their communities, in cooperation with relevant organizations, the PTA, etc., with the aim to improve students' awareness of safe driving and their practical skills through training programs and practical lessons.

For the systematic, effective implementation of traffic safety education at high schools, reference materials necessary for guidance will be prepared and distributed. Also, as part of the efforts to seek appropriate traffic safety education and desirable methods, surveys and research will be conducted, and seminars and lectures for teachers, including those on CPR, as well as regional projects for promoting traffic safety education, will be carried out.

Relevant organizations will assist high schools in implementing traffic safety education smoothly, by sending instructors or providing necessary information. Also, supplementary educational programs for local high schools students or young people of corresponding age will be carried out. In addition, exchange programs between high schools and junior high schools or elementary schools will

be promoted for the purpose of raising their sense of responsibility as a high school student and encouraging active participation of high school students in traffic safety activities.

e. Promoting traffic safety education for adults

Traffic safety education for adults from the viewpoint of the security of safe driving will be directed mainly to future drivers at driving schools and driver's license holders. Besides this, traffic safety education for university/college students and adults will be enhanced.

Further improvement of the quality of education at driving schools will be promoted, since driver's education mostly takes place at driving schools.

Education for driver's license holders aims at the improvement of their awareness of drivers' social responsibilities, driving skills necessary for safe driving, the capability to predict any danger and avoid it, understanding of the psychological damage of traffic accident victims and miseries of traffic accidents, traffic safety awareness and traffic etiquette. Adult traffic education will consist mainly of various lectures and classes organized by the prefectural public safety commissions, a customized driver's education program provided by driving schools or private institutions for traffic safety education, and traffic safety education for professional drivers provided by safe driving administrators and operation administrators as part of in-house educational programs to ensure safe driving or safe operation of transport.

Registered vehicle users will make efforts for invigoration of voluntary safe driving management, by sending their safe driving administrators and operation administrators to statutory traffic safety lectures or seminars for managers, etc. Also, training facilities such as the Central Driving Safety Training Center of the Japan Safe Driving Center will be utilized to train professional instructors for drivers to acquire high-level driving skills and instruction methods. In addition, the government will promote improvement of those institutions or facilities for traffic safety education.

Also, they will promote traffic safety activities at community halls or social education facilities, including traffic safety seminars or lectures for adults. In addition, those activities operated by relevant organizations or volunteer traffic attendants will be promoted.

Traffic safety education for university/college students will be enriched in cooperation with relevant organizations, groups, etc. in accordance with their actual use of cars and motorcycles.

f. Promoting traffic safety education for elderly people

Traffic safety education for elderly people aims to help them understand the influence of their aging and deteriorated physical function on their capability as a pedestrian or driver, and also acquire practical skills or knowledge about traffic rules necessary for the safe use of roads according to road and traffic conditions.

In order to promote traffic safety education for elderly people, the national and local governments will improve the education scheme designed for the elderly, through development of traffic safety instructors for the elderly and the development of teaching materials or tools. Also, they will vigorously promote the participation, experience and practice-based traffic safety education program for senior leaders (senior instructors in charge of traffic safety education for the elderly).

Also, traffic safety seminars for the elderly will be held in cooperation with relevant organizations, volunteer traffic attendants, medical institutions, welfare facilities, etc., and various events including social education activities and welfare programs will also be utilized to increase opportunities for traffic safety education for the elderly. In addition, targeting those elderly people who have never had a chance to participate in traffic safety education programs, community-based activities will be promoted so that those elderly people can learn safety tips from an instructor who visits them at home or from people around them in their daily life. When promoting these activities, it is necessary to invite the spontaneous participation of elderly people, and also provide them with practical guidance based on past data of elderly-involved traffic accidents. In addition, effective utilization of traffic safety equipment, such as reflective materials will be promoted.

Education for elderly drivers will also be promoted, by carrying out and making improvements on lectures for elderly drivers or classes to be taken at the time of renewal of a driver's license. In addition, private driving lessons will be provided in cooperation with relevant organizations, driving schools, etc., in order to increase opportunities for elderly people to take such lessons and encourage their spontaneous participation.

For those elderly users of electric wheelchairs, the government will work together with industrial organizations including electric wheelchair manufacturers to make sure that instructions and guidance necessary for safe use are given at the time of purchase, and also promote traffic safety education for the safe use of electric wheelchairs.

Furthermore, for the purpose of vitalizing community-based activities to ensure the safe driving of elderly drivers, they will carry out training programs for local senior leaders.

In addition, traffic safety activities operated by mothers for local communities as well as exchanges of different generations will be promoted to create more opportunities for children or the young generation to discuss traffic safety issues with elderly people or their parents and acquire appropriate guidance from them at home or at community events, etc.

g. Promoting traffic safety education for disabled people.

In order for disabled people to acquire the skills and knowledge necessary for their traffic safety, local welfare activities, etc. will be used to provide well-designed traffic safety education for disabled people according to the degree of their disability, using sign language interpreters, subtitled videos, etc. Also, the government will work to provide education opportunities at accessible places, and promote the development of effective teaching materials.

For the sake of those people who are unable to walk by themselves without assistance, lectures for their attendants including caregivers and volunteer traffic attendants will be held.

h. Promoting traffic safety education for foreign people

The government will promote traffic safety education for foreign people with the aim to improve their understanding of traffic rules in this country. In view of the recent growing internationalization, teaching materials for foreign people will be improved to ensure effective

education. Also, the government will ask for the cooperation of employers of foreign people to promote their participation in traffic safety seminars, etc.

i. Improving education for traffic offenders

Education for traffic offenders including juveniles shall be further improved by focusing on respect for human life and law-abiding sprits with due consideration to victim's viewpoints, addressing individual problems and taking individuals' future plans into consideration.

In particular, further improvement shall be made by increasing inmates' opportunities to directly listen to the voices of victims or victims' organizations as guest speakers to the correctional institutions, developing effective teaching materials and standardized education programs in order to understand victims' emotions based on the results of the study group on "education from the victims' viewpoint."

Personality assessment for juveniles shall also be improved by promoting experts' research on more accurate assessment of the characteristics of juveniles and adequate assessment measures, and by using driving aptitude tests including those developed by the Ministry of Justice.

j. Improving probation for traffic offenders

The government will promote improvement of the competence of probation officers and volunteer probation officers to take care of individual or group traffic offenders, and implement effective treatment of people on probation depending on their individual problems.

(2) Promoting effective traffic safety education

In implementing traffic safety education programs, the government will introduce practical training allowing for hands-on experience as much as possible, so that participants can not only acquire skills and knowledge necessary for the safe use of roads but also understand the significance of said skills/knowledge.

Educational organizations for traffic safety will share information, and cooperate with each other by lending teaching materials and equipment for education, sending teachers and providing information each other upon request, to promote traffic safety education.

Also, the government will work to train and retain traffic safety instructors depending on the age distribution and road-use pattern of lecture students, improve teaching materials, and develop and introduce effective education methods.

In addition, they will review the effects of education and make any necessary change to or improvement of the education methods or teaching materials, to provide effective traffic safety education consistently.

(3) Promoting education activities to raise people's traffic safety awareness

a. Promoting traffic safety campaigns

Traffic safety campaigns will be promoted systematically and constantly through mutual cooperation among the government agencies and national associations organizing campaigns, organizations constituting regional Traffic Policy Councils, etc. of local governments, for the purpose

of raising each one's traffic safety awareness to prompt them to observe traffic rules and traffic etiquette in their daily life, and also encouraging a national movement to improve the road traffic environment by citizens themselves.

Focus areas of traffic safety campaigns will be chosen from those issues common to overall cities nationwide, such as the prevention of traffic accidents involving elderly people and children, education for the correct use of seatbelts and child seats, prevention of nighttime accidents (especially at twilight), promotion of the safe use of motorcycles and bicycles, elimination of illegal parking, etc. In addition to those primary focus areas, other regional targets will be introduced as necessary in order to make campaigns effective for solving local problems.

Before actually carrying out a campaign, prior publicity towards local citizens will be made to obtain their understanding of the aims, terms, focus areas, action plan, etc. of the campaign, so that campaigns based on the hands-on participation of citizens can be enhanced. Also, campaign organizers will try to design and carry out campaigns based on the trend of traffic accidents in the target regions and the needs of local citizens and traffic accident victims, so that citizen-oriented campaigns can be developed.

Besides, organizers will promote participation of civic groups or volunteer traffic attendants to campaigns who can undertake community-based and finely-tuned activities and also promote traffic safety activities that lead citizens to understand that traffic accidents could happen to them, even today, through traffic safety classes based on hands-on participation, direct experience and practical training.

In addition, they will give sufficient consideration to make future campaigns more effective through verification and evaluation of the effects of traffic safety campaign after implementation.

b. Promoting safe bicycle riding

The government will work to establish an understanding that bicycles are categorized as "vehicles," not pedestrians, and that bicyclists need to observe traffic rules and etiquette on roads as a "vehicle user."

In order to prevent traffic accidents or bad behavior of on-the-road bicyclists, the government will step up efforts to spread knowledge about safe bicycle riding and necessary attention toward pedestrians and other vehicles. Especially, they will make efforts to familiarize bicycle users with the rules on the use of bicycles on walkways.

In view of the frequent occurrence of bicycle-involved traffic accidents at twilight or during the night, the government will strictly require bicycle users to turn on bicycle lights at night, and promote installation of reflective materials on the sides of bicycles.

In addition, they will promote publicity activities about the potential danger of a bicycle carrying a child or infant and actual accidents in the past, and also vigorously promote the use of a bicycle helmet for a child or infant.

c. Promoting the use of seatbelts by backseat passengers

The government will work to deepen people's understanding of the effectiveness and proper way of wearing seatbelts, and promote seatbelt use not only in the driver's seat or passenger seat but

also in rear seats. (As of October 2005, the use rate of seatbelts on general roads is 92.4% for the driver's seat, 80.3% for the passenger seat and 8.1% for rear seats, according to the survey conducted jointly by the National Police Agency and Japan Automobile Federation.)

To this end, educational activities will be vigorously promoted using all possible opportunities and diverse media through mutual cooperation among the national and local governments, relevant organizations and groups.

In particular, the government will promote the use of seatbelts by backseat passengers on expressways, taking into account those accidents wherein passengers have been hurled out of a car.

d. Promoting the proper use of child seats

To widely promote proper use of child seats, the government will effectively provide guardians of infants and small children with information and guidance about the effectiveness and proper usage of child seats, by using a symbol character for promotion activities of child-seat use, in cooperation with kindergartens, nurseries, hospitals, etc. In particular, education toward guardians of upper-age-group children will be strengthened (As of April 2005, the use rate of child seats is 49.1% for those children under 6 years old and 30.4% for 5-year-old children, according to the survey conducted jointly by the National Police Agency and Japan Automobile Federation.)

Also, various assistance programs of local governments or private organizations will be utilized to create an environment that facilitates the use of child seats.

In addition, the government will encourage manufacturers of child seats and automobiles to enhance their efforts to make public a table indicating the compatibility between child seats and vehicle seats, release comparative data on the reliability of each product, and prepare easy-to-understand instruction manuals. Guidance and advice for customers at retail shops as to the proper use of child seats will also be promoted.

e. Promoting the use of reflective materials

In order to promote the use of reflective materials, which are expected to be effective for preventing traffic accidents involving pedestrians or bicyclists at night, the government will vigorously promote education and publicity activities through various media. Also, for the purpose of raising people's understanding of the visibility-enhancement effect and proper use of reflective materials, they will carry out various educational events based on citizens' hands-on participation, direct experience and practical instruction and hold exhibits of reflective materials in cooperation with relevant organizations and groups.

Those activities to promote the use of reflective materials will target not a certain age group but all age groups. The government will encourage incorporating reflective materials in personal belongings such as clothes, shoes, bags, etc., and release information on reliable products with appropriate reflective performance to the public as much as possible.

f. Implementing effective publicity

The government will conduct publicity activities for traffic safety promotion selectively and intensively, by using various media such as TV, radio, newspaper, the internet, etc., by sending

specific, highly-appealing messages, including information on actual accidents, information closely connected with daily living and voices of traffic accident victims. Effective implementation of the activities will be sought under the following strategies.

(a) With the objectives to prevent traffic accidents involving elderly people, improve people's proper use of seatbelts and child seats, prevent reckless driving of young drivers, eliminate drunk driving and illegal parking, etc., the government will carry out wide-area campaigns based on the combined efforts of households, schools, workplaces and communities, as well as intensive campaigns through joint efforts of the public and private sectors using multiple media.

(b) Since the role of households is quite significant in promoting traffic safety, the government will work to enhance more elaborative publicity that penetrates into households by fully utilizing family-targeted media and promoting information releases via local public organizations or community groups, to effectively help protect children and elderly people from traffic accidents and eliminate reckless driving and drunk driving, etc.

(c) For the purpose of assisting private organizations in promoting publicity activities, the national and local governments will make available as much relevant material and information on traffic safety as possible, and ask for the cooperation of news media to create nationwide momentum toward traffic safety promotion.

g. Promoting other education and publicity activities

(a) For enhanced safety of elderly people, the government will promote the wide use of a mark designed to invite people's attention to the protection of the elderly from traffic accidents. Also, they will promote publicity activities using scientific data on how the deteriorated physical functions of the elderly would affect their behavior on roads. Furthermore, the government will put efforts into making other generations understand characteristics of the elderly and raising the awareness that other drivers need to pay enhanced attention to those vehicles with the "senior driver" mark.

(b) In view of the frequent occurrence of critical accidents at twilight and during the night, the government will provide information on the major causes of those nighttime accidents, such as speeding drunk driving, etc. to the public, to help them understand how those violations cause serious accidents and how dangerous those illegal acts are, for the purpose of preventing those violations.

Also, they will encourage drivers to turn on their headlights earlier in response to weather change, a change of season and regional conditions, using traffic information boards, etc.

(c) For the purpose of allowing citizens to understand the actual situations of how traffic accidents occur and improve their attitude toward accident prevention, the government will promote information services through the internet to provide data on accidents and "black spots".

(d) The government will collect comprehensive safety information, such as vehicle assessment data provided by JNCAP (Japan New Car Assessment Program), data on the effectiveness of safety devices, information on the proper use of automobiles, information on vehicle inspection and

maintenance, general information on traffic accidents, etc., and send such information from time to time to vehicle users, road transport companies, car manufacturers, etc. timely and properly, for the purpose of raising their traffic safety awareness.

(e) The government will hold traffic safety symposiums for the purpose of introducing new views and knowledge to traffic safety activities, through discussions with intellectuals, and raising people's traffic safety awareness.

(4) Promoting traffic safety initiatives by private organizations

The government will promote voluntary efforts and activities of those private organizations working for traffic safety improvement by assisting them in carrying out various projects and events including training programs of traffic safety instructors and also providing them with information and data necessary for their activities. Furthermore, they will encourage community groups, car manufacturers, car dealers, associations of car users, etc. , through various opportunities such as the Nationwide Traffic Safety Campaign, to effectively and actively implement traffic safety activities corresponding to each one's field of activity in the context of regional needs and conditions. To this end, liaison meetings will be held on a regular basis between the government and private organizations as well as among private organizations to develop nationwide activities for traffic safety.

As for those traffic instructors or volunteer traffic attendants who do not belong to any organization, assistance in improving their qualities and capabilities will be provided to promote their independent activities and establishment of a framework for communication and mutual cooperation.

Especially for promotion of those traffic safety education programs or publicity activities initiated by private organizations or volunteer traffic attendants, efforts will be made to establish training schemes and curricula to develop traffic safety instructors.

(5) Promoting citizens' participation and collaboration

Since traffic safety is supported by the safety awareness of local citizens, voluntary efforts of citizens to improve their traffic safety awareness are important.

Therefore, in the process of thoroughly spreading awareness for traffic safety, the government will promote accessible activities that satisfy the needs of each community on the basis of close cooperation between citizens and the government, private organizations, businesses, etc., and actively pursue the participation and collaboration of citizens.

From said viewpoints, the government will promote community based traffic safety measures with the aim to form safe secure communities. Those measures include supporting the creation of "community maps of high-risk spots" by citizens and road users, designing a framework in which citizens can actively participate in traffic safety activities, such as traffic safety comprehensive reviews, and setting specific objectives to address local needs in their activities.

3. Securing safe driving

In order to secure safe driving, it is necessary to improve capabilities and aptitude of drivers. To this end, the government will promote driver's education not only for driver's license holders but also for future drivers. In particular, education for elderly drivers will be enhanced, in view of expected rapid growth of elderly population. Also, the current driver's license system will be reviewed for any necessary improvement by taking into consideration the recent traffic conditions.

In addition, in view of expected future changes of the road transport industry, the government will emphasize the important role and responsibilities of the companies in traffic safety, work to promote the companies' voluntary efforts for appropriate safe driving management and to improve safety measures for the road transport industry, and make efforts to prevent traffic accidents at work.

Furthermore, the government will improve comprehensive information services on road traffic by utilizing information technologies, in order to satisfy people's needs and demands for upgraded diverse road traffic information systems, and provide accurate, timely information on meteorological conditions that would affect road traffic significantly.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Enhancing measures focused on elderly drivers ((1) d)
○ Promoting safe driving management ((3))
○ Improving the supervision of motor carrier businesses ((4) a)
○ Promoting the Trucking Business Safety Assessment Program ((4) b)
○ Promoting the use of video-recording drive recorders ((4) c)

(1) Improving driver's education

With the aim to train people to be good drivers with the necessary knowledge, skills and capabilities for safe driving, traffic safety education will be promoted to foster safety awareness among people even before they obtain a driver's license. For driving school students and driver's license holders, the government will promote education to improve their skills useful for safe driving in real situation.

Driver's education should not be limited to the lessons for the acquisition of knowledge and skills, but will be improved to provide the opportunity for drivers to develop safety awareness and appropriate attitude toward safe driving. To this end, the government will introduce education designed according to psychological and personal characteristics of individuals, seminars for better understanding of the tragedy of traffic accidents with the use of victims' memoirs, and education to make drivers aware of one's own physical and health conditions.

a. Improving education for those who are going to acquire a driver's license

(a) Improving education and training at driving schools

Education standards at driving schools will be improved, taking into consideration the latest traffic accident data and road environment such as traffic conditions, by reviewing current curricula and improving instructors' qualities, contents of lessons and teaching methods.

Also, information on education standards at driving schools will be released to the public.

(b) Improving courses of study for the acquisition of a driver's license

The government will improve courses of study for the acquisition of a driver's license of mopeds under 50 cc, ordinary two-wheel vehicles, large-sized two-wheel vehicles, ordinary motor vehicles, large-sized motor vehicles, extra-large-sized motor vehicles, ordinary commercial vehicles, large-sized commercial vehicles and extra-large-sized commercial vehicles, respectively.

b. Improving driver's reeducation

For the purpose of ensuring effective implementation of driver's reeducation programs targeted to drivers whose license has been revoked or suspended, traffic offenders, novice drivers, those who are going to renew a license, and elderly drivers, the government will improve training facilities and equipment, enhance the quality of instructors, introduce high-level teaching materials and equipment, and improve contents and methods of education.

Real vehicles will be used for reeducation programs to ensure hands-on participation, direct experience and practical training, and education facilities and teaching materials/equipment will be improved.

Driving schools will promote reeducation programs for license holders and will improve their functions as the center of traffic safety education for local people.

c. Promoting safe driving of motorcycles

Education programs for motorcycle riders, including courses of study for the acquisition of a driver's license and safety seminars for users of two-wheel vehicles or mopeds will be effectively utilized and improved. The government will also improve traffic safety education programs at designated driving schools, for the purpose of reinforcing education for motorcycle riders.

In addition, they will promote safety education for double riding through practical training.

d. Enhancing measures for elderly drivers

From the viewpoint of enhanced assistance for elderly drivers to allow them to continue to drive safely, the government will improve training programs to maintain or improve their ability of safe driving. In addition, it is necessary to make careful judgment of the driving capability of individual elderly drivers to determine whether or not they are still qualified as a driver.

(a) Improving education for elderly drivers

The government will promote effective implementation of seminars for elderly drivers and improvement of classes for them at the time of renewal of their driver's license. Overall programs for elderly drivers will be improved by increasing examination items to evaluate their physical

qualifications and also introducing a method to effectively help them understand their own examination results.

(b) Improving aptitude tests

Detailed analysis of elderly-involved traffic accidents will be conducted to examine how the aptitude tests can be improved. Also, those elderly drivers who are suspected to develop dementia will be identified, and administrative measures to cancel their driver's license will be taken when those drivers are judged to be incapable of driving safely.

(c) Utilizing the "elderly driver" mark

In order to raise the level of safety awareness of elderly drivers, the government will promote active utilization of the "elderly driver" mark.

e. Promoting the proper use of seatbelts, child seats and helmets

In order to ensure people's proper use of seatbelts, child seats and helmets, campaign will be conducted vigorously to publicize the effects of the proper use, in cooperation with relevant organizations, using every possible opportunity including seminars and traffic safety campaigns. The government will also strengthen on-the-road control over illegal nonuse of seatbelts, child seats and helmets.

f. Improving functions of the Japan Safe Driving Center

By using various training facilities at the Central Training Academy for Safe Driving of the Japan Safe Driving Center, education programs with hands-on participation, direct experience and practical training will be promoted for occupational drivers, juvenile drivers, and safe-driving instructors who need high-level driving skills and special knowledge. The Center will also improve other works, such as the issuance of notification or certificates and the implementation of surveys and researches.

g. Enhancing guidance for driving service agencies

The government will conduct on-the-spot inspections on driving service agencies to secure their appropriate business operation and traffic safety practices, and protect users of their services. Illegal conduct such as uncertified business operation, noncompliance with the obligation to buy liability insurance, and driving without a license will be strictly controlled.

h. Improving aptitude tests for occupational drivers of the road transport industry to be conducted by the National Agency for Automotive Safety & Victims' Aid (NASVA)

As for aptitude tests for occupational drivers of the road transport industry to be conducted by NASVA, aptitude judgment methods, judgment equipment and overall test environment will be improved to encourage more occupational drivers to take the test.

i. Implementing countermeasures against dangerous drivers without delay

The government will promote countermeasures to reject dangerous drivers at an early stage through appropriate and effective administrative disposition as well as conducting stringent aptitude examination and aptitude tests at the time of renewal of driver's license for those considered a high risk for dangerous driving,.

(2) Improving the driver's license system

The government will review the current driver's license system by taking into consideration the recent trend of traffic accidents and traffic conditions. The current license examination programs will also be reviewed and improved as necessary, verifying their function to accurately assess applicants' ability in real traffic environments.

Also, with the aim to operate from the standpoint of the general public, simplification of the renewal procedures will be promoted to alleviate the burden of license renewal for drivers, and facilities, equipment and driving aptitude consultation services for disabled people at license testing centers will be improved.

Furthermore, the introduction of IC license cards with advanced security functions using electronic technology will be introduced to prevent forging and illegal alteration of driver's licenses and to streamline licensing management and administration processes.

(3) Promoting safe driving management

Qualities and safety awareness of safe driving managers and sub-managers, those in charge of improving in-house driving safety standards, should be improved by reviewing their training programs. Education for those managers will be promoted so that they can implement in-house traffic safety education appropriately in accordance with the Traffic Safety Education Policy.

The government will make sure that each company has a safe driving manager, strengthen an in-house management system to promote safe driving, and thereby ensure that each company implements safe driving management thoroughly.

Also, the reporting system, under which any violation of the Road Traffic Act committed in course of business activities is supposed to be reported to employers, will be further utilized. The responsibility of employers and safety managers who order or tacitly permit illegal acts by their workers will be thoroughly investigated to realize appropriate driving management.

In addition, as part of enhanced efforts to prevent traffic accidents in the course of business activities, the government will deliberate a new method of traffic safety education or safe driving management that effectively utilizes vehicle-mountable equipment to assist safe driving, such as a video-recording drive recorder, and encourage movement toward the wide use of such devices.

(4) Improving safety measures for motor carrier businesses

a. Improving the guidance and supervision of motor carrier businesses

The government will promote audits of those business entities that have caused serious traffic accidents or newcomers of the road transport industry for the purpose of ensuring appropriate management of in-house driving operations and observance of the Labor Standards Act and other relevant acts and ordinances. Also, they will promote strict administrative disposition of badly-behaved companies by implementing joint audits and supervision in cooperation with relevant

organizations. To this end, the appropriate audit system will be established and audit implementation structure will be strengthened to ensure effective, efficient audit.

Through the utilization of liaison meetings held among relevant administrative organs, as well as the mutual reporting system of supervision results, the government will adequately operate the reporting system of any traffic accident caused by an overworked driver, etc., strengthen guidance for the road transport industry, and also work to give guidance through industrial associations and relevant organizations as well. Especially for road freight transport companies, organizations engaged in road freight transport improvement works will enhance guidance to ensure operational safety, such as prevention of drivers' overwork and overload of vehicles.

Also, road transport companies will be encouraged to establish an organization-wide safety management scheme through concerted efforts of all members from executives to field drivers, to raise the level of safety awareness and improve the level of safety standards at all workplaces. At the same time, the government will introduce the "safety management evaluation system" by which they assess safety management schemes of those companies.

Targeting expressway buses, trucks and taxis, guidance for the proper use of seatbelts will be enhanced to mitigate damage of traffic accidents on expressways.

In course of giving guidance, promotion of "eco driving" (the environment-conscious use of vehicles to reduce environmental burdens) will also be taken into consideration.

b. Promoting the Trucking Business Safety Assessment Program

The government will promote "Trucking Business Safety Assessment Program" conducted by nationwide organizations engaged in road freight transport improvement works with the aim to assist users of road freight transport services in selecting reliable safety-conscious companies and also assist the industry in promoting safety initiatives.

When the national or local governments or private organizations use road freight transport services, the government will encourage them to actively select certified "companies of excellence in safety" in view of the number of certified companies, seeking the understanding of relevant parties, from the viewpoint of contributing to the promotion of road traffic safety through their respective work.

c. Implementing multilateral analysis of accident information

In order to improve information on traffic accidents of commercial vehicles, the government will not only collect and analyze accident information in accordance with the Regulation on Motor Vehicle Accidents Report (Ministry of Transport Ordinance No.104 of 1951), but also enhance collection and analysis of information and data contributive to the root cause analysis of traffic accidents involving road transport service vehicles, and then promote multilateral analysis on those accident information and data.

In addition, by mounting video-recording driving recorders on commercial vehicles to video-tape driving information (views in front of a driver, vehicle speed and any sudden increase or decrease

of speed) at the time of an accident, the government will investigate and analyze their accident prevention effects and promote wide utilization of such device.

d. Improving training of transport operation managers

The government will improve training programs and seminars for transport operation managers by utilizing results of multilateral analysis of accident information, improve education standards, and implement effective training programs using audiovisual education materials, etc., to strengthen guidance for securing safe transport operation through prevention of drivers' overwork and overload of vehicles.

(5) Preventing traffic accidents at work, etc.

a. Preventing traffic accidents at work

By instructing business entities to fully observe the guidelines for the prevention of traffic accidents at work, the government will promote establishment of safety management scheme at workplaces, management of appropriate work hours, appropriate driving schedule control, education for drivers, their health management and improvement of attitudes toward the prevention of traffic accidents at work.

Through cooperation with relevant organizations to ensure effective implementation of those measures, the government will give instructions to business entities to appoint a manager responsible for the prevention of traffic accidents at work, and promote education for the managers and drivers in accordance with the guidelines. Also, private guidance for individual companies will be carried out by instructors specialized in measures for preventing traffic accidents at work.

Furthermore, in response to traffic accidents caused by occupational drivers after long-hour driving, which has attracted peoples' close attention in recent years, the relationship between driving hours and traffic accidents will be examined, and the results will be utilized for the introduction of any necessary measures.

b. Improving working conditions of drivers

In order to improve working conditions for occupational drivers, including conditions of work hours, holidays, overtime pay, wage structure, etc., the government will supervise employers to ensure their compliance with all relevant labor acts, including the Labor Standard Act (Act No.49 of 1947) and the Standard for Improving Work Hours and Other Conditions of Occupational Drivers (Ministry of Labor Notice No.7 of 1989).

Also, liaison meetings among relevant administrative organs will be held and mutual reporting of audit/supervision results will be utilized. In addition, joint audit/supervision with relevant administrative organs will be implemented when necessary.

(6) Improving information on road traffic

a. Improving road traffic information

In order to satisfy diverse needs of road users, essential road traffic information will be provided for them to secure safe, smooth road traffic. Also, along with the introduction of new advanced information technologies such as optical fiber networks, etc., existing information tools, including traffic monitoring cameras, Highway Advisory Information Radio (HAIR), vehicle sensors, traffic information boards and other conventional equipment for distributing road information will be upgraded

In addition, the government will promote guidance for and supervision of traffic information service providers in accordance with the Road Traffic Act (Act No.105 of 1960) and the Guidelines for the Provision of Traffic Information (National Public Safety Commission Notice No.12 of 2002). The former stipulates the notification system of traffic forecasts service providers and government actions to urge necessary rectification on providers who give out any inaccurate or inappropriate traffic forecasts, etc. The latter stipulates rules with which traffic information service providers have to comply. Through those guidance and supervision, the government will ensure appropriate business practices of the overall traffic information service providers, and then promote provision of accurate and appropriate traffic information by private companies, utilizing information collected from police and road management agencies.

Furthermore, by actively promoting improvement and wide utilization of VICS, which provides drivers with road traffic information such as congestion conditions, as part of efforts to develop ITS, traffic volume will be dispersed to mitigate traffic congestions and promote safer, smoother traffic flows.

Also, the government will promote enhancement of the overall system of UTMS and improvement of the near-infrared beacon, which is a key infrastructural component of the system, based on the UTMS plan. This plan aims for securing traffic safety and comfortable road use with the deployment of advanced traffic control centers and utilization of near-infrared beacon that enables the centers to make two-way communication with individual vehicles. Specifically, this would make it possible to provide high-level traffic information, ensure vehicle operation management as well as the right of way for public transports, reduce traffic pollution, assist drivers for their safe driving and secure the safety of pedestrians.

b. Ensuring the access to necessary information on dangerous materials under transportation

For the purpose of preventing large-scale accidents during transportation of dangerous materials and ensuring access to information which helps minimize damages caused by such accidents, the government will more strongly instruct road transport companies of dangerous materials to observe relevant acts and ordinances, implement driver education, and carry the “yellow card” (which is the emergency contact card including necessary information in case of an accident, such as the descriptions on characteristics of the hazardous materials, the treatment agent, its suppliers, etc.).

Also, for taking safe, prompt counter-accident actions at the time of leakage of the dangerous materials caused by traffic accidents that involve vehicles carrying dangerous materials, the government will work to prepare the database on dangerous materials as well as materials and equipment needed for handling them.

They also deliberate on an appropriate way of indicating and identifying those vehicles carrying dangerous or toxic materials, taking into consideration the United Nations' suggestions on this matter.

c. Improving meteorological information

The government will accurately understand any weather conditions or natural phenomena which could affect road traffic, and make efforts to improve qualities of meteorological information including alerts, warnings and forecasts of extraordinary weather, tsunami, typhoon, flood, earthquake, volcanic eruptions, etc., and to ensure appropriate timely announcements and swift provision of such information. They will also promote collection of information on road snow conditions and surface conditions, etc., and improve equipment used for providing road users with timely road information.

Furthermore, facilities for observing weather conditions, earthquake, tsunami and volcanic activities will be constructed as necessary, and maintenance and improvement of those facilities will be promoted. At the same time, the government will promote information sharing with disaster prevention organizations, and strengthen IT-utilized observation or monitoring systems. Improvement of people's knowledge about meteorological phenomena will also be promoted by way of publicity activities, seminars, etc.

4. Ensuring vehicle safety

Motor vehicle technology has advanced significantly over recent years, particularly through the increasing use of electronics technology in motor vehicles. As a result, there is an expanding range of technology that can be effectively applied to improve vehicle safety. In view of this, it is necessary to strengthen measures for vehicle safety.

Recognizing this point, while the government will take measures to prevent accidents attributable to vehicle structure, they will also try to prevent accidents attributable mainly to human factors, such as driving errors, by taking all possible measures on vehicle structure.

At the same time, the government will enhance measures on vehicle structures to minimize the harm and damage resulting from traffic accidents that unfortunately occur. As part of this effort, measures aimed at preventing vehicles from catching fire and making it easier for occupants to escape from vehicles after an accident will be promoted.

Particularly, considering the seriousness of residual disabilities and the fact that the number of accidents, deaths and injuries still remains high, the government must evolve and mature the existing policies, which have worked well to reduce harm until now, and at the same time, further improve the vehicle safety measures for preventing accidents by utilizing advanced technologies. In promoting vehicle safety measures, the government must aptly implement not only improvement and strengthening of the safety-related standards but also policies for encouraging vehicle manufacturers and research organizations to develop safer vehicles and those for encouraging drivers to select safer vehicles, at respective stages from basic research to commercialization and dissemination, to make regulations and inductive measures coordinated with each other.

Furthermore, to ensure safety of motor vehicles in use, the government must promote appropriate maintenance of motor vehicles. This is because many motor vehicle parts and components such as brake pads and tires deteriorate and wear out when used and some parts such as brake oil and rubber parts such as belts deteriorate over time even when the vehicle is not used. Thus, if vehicles are not properly maintained, there is a growing risk that defective performance will eventually result in an accident.

The maintenance of a motor vehicle is primarily the responsibility of the vehicle user. However, since the risk of traffic accidents endangers not only the lives of the vehicle driver but also those of third parties, motor vehicle inspection will be conducted to ensure the safety of each vehicle.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Developing and promoting advanced safety vehicles ((1) a, b)
○ Improving Japanese Industrial Standards relating to vehicle safety ((1) c)
○ Improving motor vehicle check and maintenance ((3) c)
○ Improving and reinforcing the recall system ((4))

(1) Improving vehicle safety-related standards

a. Strengthening safety regulations for road transport vehicles

(a) Promoting vehicle safety measures

The Council for Transport Technology submitted a recommendation report titled "The Strategic Plan of Future Motor Vehicle Traffic Policy Taking Due Regard of Safety and the Environment" (June 1999). The report proposes future vehicle safety policies, details on how to implement the policies and reduction targets for traffic accident fatalities. Based on this recommendation and the status of implementation, the government will accurately assess the state of motor vehicle accidents by conducting detailed investigations and gathering information meticulously into motor vehicle structure and equipment, and on harm and damage suffered by passengers, making use of the Institute for Traffic Accident Research and Data Analysis. They will also draw up and carry out concrete safety policies by taking into account changes in the use of motor vehicles, new technological developments, and overseas trends in motor vehicle safety policies.

The safety policies will be efficiently and systematically discussed in the commission consisting of representatives from the worlds of industry, government and academia. The commission will work continuously to study the specific details of the policies and measures, their predicted effects, and evaluation of their actual effects, and to understand and analyze the reality of traffic accidents, which is the premise of the formulation of effective policies. Furthermore, the government will publicize the results of their investigations by organizing annual symposiums to ensure transparency of the process of drafting safety policies, and review and amend the policies as needed in response to opinions from relevant parties.

Particularly, considering the seriousness of residual disabilities and the fact that the number of accidents, deaths and injuries still remains high, the government must evolve and mature the existing policies, which have worked well to reduce harm until now, and at the same time, further improve the vehicle safety policies for preventing accidents in view of the progress of new technologies. In doing so, they will deepen comprehensive and effective coordination between the improvement and strengthening of the safety regulations and other policies such as development and promotion of Advanced Safety Vehicles (ASV) and the provision of vehicle assessment information for drivers.

(b) Improving safety regulations for road vehicles

The safety regulations for road vehicles stipulate safety requirements of vehicle structure and equipment, which form the basis of safety policies. The government will work to appropriately improve and strengthen safety regulations, based on the results of studies mentioned above, in areas of preventive safety technologies to prevent accidents through precautionary measures; damage mitigating technologies to protect passengers and pedestrians in the event of an accident; and post-collision damage minimizing technologies to preventing the occurrence of secondary accidents, e.g. fires and explosions following a traffic accident.

In improving safety regulations, deliberations will be carried forward with international cooperation so as to keep the regulations from hindering global distribution of vehicles.

b. Developing and promoting advanced safety vehicles

The government will work to improve vehicle safety by promoting greater use of electronics and information technology to make motor vehicles more intelligent. In addition, they will promote research and development of advanced safety vehicles which will serve as the vehicles for ITS technology, under the Study Group for Promotion of ASV, a cooperative framework among industry, government and academia.

Among the ASV technologies, the government will also continue to diffuse autonomic ASV technologies that are ready for practical application, by establishing technical guidelines and guidelines concerning matters of safety to be noted, and evaluating the effectiveness of ASV technologies.

c. Improving Japanese Industrial Standards relating to vehicle safety

The government has been working to improve the hardware-related vehicle safety standards of Japanese Industrial Standards (JIS), which was established based on the Industrial Standardization Act (Act No. 185 of 1949). The government is also working to make improvements from the aspects of i) vehicle control, ii) sensing external information, and iii) man-machine interface with drivers, based on recent technical advances.

Technology to alert and control for supporting the driving of vehicles is one of the areas where Japan is leading the world in practical application. Relevant government agencies will work together to establish the Japanese Industrial Standards related to reducing the operating duty of drivers, improving user-friendliness, calling attention to danger, avoiding accidents and reducing damage, including i) adaptive cruise control system, ii) forward vehicle collision warning device, iii) vehicle side obstacle warning, and iv) lane departure warning system.

Furthermore, the government will make efforts to establish Japanese Industrial Standards through the Japanese Industrial Standards Committee, which is Japan's representative organization for the ISO, in order to contribute to preventing traffic accidents in harmony with international standards.

(2) Providing motor vehicle assessment information

The government will promote the project of Japan New Car Assessment Program (JNCAP) in cooperation with the National Agency for Automotive Safety & Victim's Aid. The purpose of this project is to compile impartial information on safety performance comparisons between vehicle models, together with information on general safety issues such as the proper use of motor vehicle safety devices and installation status of those devices, and then provide this information regularly to consumers. Through this project, the government will help motorists to choose safer vehicles, and thereby promote more widespread use of safer

vehicles, and simultaneously encourage vehicle manufacturers to boost research and development efforts into making safer vehicles.

The government will also provide comparisons on the safety performance/usability of each model of child seat to help consumers select safer child seats and promote more widespread use of safer child seats.

(3) Improving motor vehicle inspection, check and maintenance

a. Improving motor vehicle inspection

The government will ensure a steady implementation of initial inspections and other motor vehicle inspections based on the Road Vehicle Act (Act No. 185 of 1951). For example, they will promote upgrading of vehicle inspections by developing inspection machines which enable malfunction diagnosis of computerized safety devices, and utilizing vehicle inspection information through the introduction of IT, in response to developing automobile technology which keeps pace with the improvements of safety regulations for road vehicles. Meanwhile, in order to prevent illegal modification, on-site inspections of motor vehicle users will be carried out accordingly, and roadside inspections will be improved and strengthened to exclude poorly maintained vehicles including illegally modified and nonconforming vehicles.

In addition, they will strengthen supervision of designated maintenance garages to ensure proper operation and utilization of the designation system for motor vehicle maintenance garages. They will also encourage the Light Motor Vehicle Inspection Organization, the organization authorized to conduct inspections of light motor vehicles, to improve the efficiency of their inspection procedures and reinforce their inspection system.

b. Improving Type Designation System

In order to prevent accidents caused by vehicle structure, the examination system on the safety of new model vehicles will be enhanced through the Motor Vehicle Type Designation System.

Furthermore, the government will carry out particularly stringent examinations on the vehicles whose manufacturers have committed fraudulent acts associated with recalls.

c. Improving motor vehicle check and maintenance

(a) Promoting motor vehicle check and maintenance

The government will implement a national Motor Vehicle Check and Maintenance Promotion Campaign in cooperation with relevant parties to raise awareness about vehicle check and maintenance amongst vehicle users and promote steady implementation of vehicle check and maintenance, for the purpose of vigorously promoting maintenance by vehicle users.

In addition, to improve the safety of commercial vehicles operated by road transport companies, the government will make use of all possible opportunities such as audits of those companies and seminars to maintenance managers to give guidance on vehicle maintenance and promote proper implementation.

Furthermore, the government will investigate the causes of accidents caused by vehicle defects and provide drivers with information concerning maintenance methods to prevent similar accidents in the future.

(b) Eliminating illegally modified vehicles

Illegally modified vehicles of motorcycle gangs and vehicles illegally modified to increase loading capacity present a significant road traffic danger and have become a serious social problem. In order to eliminate those vehicles and improve vehicle safety, the government will work with the support and cooperation of motor vehicle-related organizations to implement "a campaign to eliminate illegally modified vehicles" nationwide. Through publicity activities, providing guidance to relevant parties and implementing more extensive roadside inspections, the government will raise awareness about illegally modified vehicles amongst motorists and motor vehicle-related companies.

In addition, prohibition of illegal modification and a strengthened ordering system of vehicle maintenance for illegally modified vehicles will be applied appropriately.

(c) Rationalizing and modernizing certified maintenance garages

Certified maintenance garages will be instructed to promote the rationalization of maintenance charges and maintenance contents to gain the understanding and trust of motor vehicle users concerning check and maintenance. The government will support the modernization of facilities in certified maintenance garages, and the improvement of their business management.

(d) Improving maintenance skills by responding to new automotive technology, etc.

As new automotive technologies come to be adopted and widespread and the environment of motorized society changes, a need arises for automotive maintenance service businesses to respond to such changes to offer proper maintenance services. The government will grasp the current conditions of the automotive maintenance service businesses through fact-finding surveys, and also promote the advancement of technology for automotive maintenance service businesses to cope with new automotive technology and diversifying needs of the users.

The government will also improve the technology of maintenance engineers by implementing seminars on new technology for maintenance managers. They also promote the utilization of the first class auto mechanic system to respond to such needs as the maintenance of motor vehicles that adopt new technology and explanation on the correct use of motor vehicles for users.

(e) Strengthening measures against illegal cases such as forged vehicle inspection

Although the designation system of motor vehicle maintenance garages was established for the purpose of utilizing capabilities of the private sector, illegal cases such as a designated garage issuing forged certification without actually conducting required inspection has increased recently. Considering this situation, the government will strengthen the supervision of designated garages to secure the proper operation and utilization of the system.

(4) Improving and Reinforcing Recall System

The government will make sure that recall procedures are properly implemented so that motor vehicle manufacturers would surely and promptly remedy the problem of motor vehicles that do not comply with regulations due to design defects or inferior production process. The government will work for a speedy and steady implementation of the recall system by taking the following measures to prevent the reoccurrence of illegal acts such as concealing recall.

a. Reinforcing information gathering system

The government will reinforce the information gathering system by actively publicizing the information hotline on vehicle defects, and making it mandatory for motor vehicle manufacturers to regularly report any defects that threaten safety.

The government will also work on early detection of vehicles subject to recall by gathering information on defects with the cooperation of relevant organizations, such as by accurately applying the system whereby prefectural police are to notify traffic accidents caused by motor vehicles with suspected flaws to the Ministry of Land, Infrastructure and Transport .

b. Reinforcing audit

The government will carry out intensive audits on motor vehicle manufacturers in question and emphasized audits based on comprehensive analysis of various data. The auditing of dealers will also be improved.

c. Reinforcing technical validation system

In addition to technical validation by automobile engineering experts, recall investigation and validation committees will be held to carry out a factual and unified investigation.

(5) Ensuring safety of bicycles

The government will utilize the type approval system for motorized bicycles (those using a motor to support cycling) and ordinary motor vehicles to promote safer use of bicycles and prevention of bicycle-related accidents. At the same time, they will encourage bicycle riders to get their bicycles checked, and educate them on using their bicycles properly. The governments will also promote various insurances that compensate victims for harm and damage caused by bicycle accidents.

Furthermore, to prevent traffic accidents at night, the government will work to improve visibility of bicycles by promoting use of headlights and reflective materials.

5. Maintaining road traffic order

To reduce the increasing number of traffic accidents caused by a failure to observe traffic regulations, it is necessary to maintain road traffic order through more effective traffic controls, better investigation of traffic accidents and stricter control of motorcycle gangs.

To do this, more accurate evaluation and analysis of traffic accidents and stricter traffic guidance and control will be promoted, focusing on the malicious, dangerous and annoying traffic violations that are most likely to cause fatal and serious accidents.

Also, in response to the growing public interest in thorough investigation of the causes of accidents, accident investigation processes will be rationalized and initial and scientific investigation procedures will be improved, with the aim of analyzing traffic offenses and traffic accident cases more quickly and effectively.

Furthermore, in order to promote tougher measures against motorcycle gangs, all relevant bodies and organizations will cooperate to strengthen the resolve among citizens to eliminate such gangs from their communities and to promote the creation of an environment that does not tolerate such gangs' reckless driving, and to improve the system, equipment and materials for stricter controls.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Tightening traffic rule enforcement focusing on particularly vicious, dangerous, and annoying traffic offenses ((1) a (a))
○ Identifying the true locus of responsibility for the accident ((1) a (b))
○ Promoting guidance and enforcement concerning bicycle riders ((1) a (b))
○ Strengthening the investigation systems for traffic offenses and traffic accidents ((2))
○ Strengthening measures to crack down on motorcycle gangs ((3))

(1) Strengthening traffic guidance and control

a. Strengthening effective guidance and control on general roads

The government will promote more effective traffic guidance and control on general roads, focusing on the prevention of accidents involving pedestrians and bicycle users, and prevention of serious accidents on high-accident routes.

a) Tightening traffic rule enforcement focusing on particularly vicious, dangerous and annoying traffic offenses

The government will improve guidance and control systems, promote traffic controls to protect children, elderly people, and disabled people, and enhance guidance activities on high-accident routes. In addition, they will intensively implement stricter controls on malicious, dangerous and annoying traffic violations such as driving without a license, drunk driving, extreme speeding and extreme vehicle overloading.

b) Identifying the true locus of responsibility for the accident

In order to tackle commercial vehicle violations, such as vehicle overloading and use of overworked drivers, the government will vigorously administrate the responsibilities of registered vehicle users, and will impose restrictions on the use of vehicles or order freight owners to prevent reoccurrence, as needed. If it is found out that the employer is responsible for a violation, the government will provide them with guidance and supervision to ensure that they do not repeat such violations.

c) Promoting guidance and control for bicycle riders

The government will actively guide and alert violations that may cause harm to pedestrians such as cycling without headlights, cycling double, ignoring traffic lights, and not observing stop signs. They will also promote measures to crackdown malicious and dangerous bicycle riders who do not follow such guidance and alert.

b. Strengthening guidance and control on Expressways

On expressways, not only serious violations but also even minor violations of traffic regulations can lead to serious accidents. With this fact in mind, traffic guidance and control on expressways will be improved and effective mobile patrols will be implemented according to local traffic flow conditions and traffic accident frequency, in order to prevent traffic violations and regulate traffic flow.

The government will focus their traffic guidance and control measures on highly malicious, dangerous and annoying traffic violations, in particular, such as extreme speeding, drunk driving, tailgating, and misuse of traffic lanes.

c. Promoting scientific guidance and control

The government will promote the use of scientific guidance and control methods that take into account traffic accident conditions more effectively. This will be done by improving traffic accident analysis system, researching and developing systems that analyze traffic accident incidence status and the status of guidance and control, improving equipment for traffic control, implementing R&D responding to the advancement of technology, and promoting the installation of speed control cameras.

(2) Strengthening investigation systems for traffic crimes and traffic accidents

In order to carry out faster and more effective investigations of traffic accidents and serious traffic offenses such as hit and runs, rationalization of investigation procedures will be promoted, and personnel and equipment will be improved through following measures.

a. Enhancing investigation system by full-time personnel

The government will work to organize the investigation system by full-time personnel for significant cases, raise the level of investigative skills of full-time investigators and improve investigation procedures, with the aim of strengthening the investigation system for traffic offenses and traffic accident cases.

b. Enhancing initial and scientific investigation systems

In order to improve initial and scientific investigation systems, the government will promote development of accident processing vehicles and other type of vehicles, identification equipment and materials such as devices to automatically record traffic accidents, and traffic accident investigation support systems.

(3) Strengthening countermeasures against Motorcycle Gangs

To prevent increasingly serious cases of flagrant traffic violations by motorcycle gangs, protect traffic order, and contribute to the sound upbringing of young people, relevant bodies and organizations will cooperate to vigorously promote the following countermeasures against motorcycle gangs:

a. Strengthening communities' resolve to eliminate motorcycle gangs and improving guidance to youth at home and schools

To strengthen communities' resolve to eliminate motorcycle gangs, the government will offer cooperation to local governments to enact and operate bylaws aimed at eliminating motorcycle gangs. They will also actively carry out publicity activities to accurately show the reality of increasingly serious problems of motorcycle gangs, by providing the media with information. In addition, they will promote efforts to provide guidance to youth at home, schools, work places and communities, and promote guidance by holding "Class on Preventing Affiliation with Motorcycle Gangs," etc. The government will establish a system of motorcycle gang consultants in collaboration with relevant organizations to ensure disintegration of motorcycle gangs, prevention of participation in motorcycle gangs, and support and guidance for withdrawing from motorcycle gangs.

As issues of motorcycle gangs are closely connected to problematic behaviors such as juvenile delinquency, the government will work together with youth organizations to implement measures aimed for the sound upbringing of juveniles.

b. Creating environments that prevent rampage of motorcycle gangs

Relevant bodies and organizations in local communities will work together to create road traffic environments that do not allow motorcycle gangs to rampage and disturb the peace. For example, the government will ask for cooperation from the managers of facilities where motorcycle gangs and their curious spectators tend to congregate, and promote the creation of such environment by taking measures to prevent or discourage the gangs from assembling there.

They will also try to obtain information in advance. When there is a possibility of leading to an illegal group offense, they will take preparatory measures such as trying to isolate the gangs from their spectators.

c. Improving guidance and control of motorcycle gangs

In addition to the enhancement of the guidance and control system for motorcycle gangs and the development of equipment, the government will strengthen guidance and control of motorcycle gangs by tightening enforcement, applying various provisions such as a ban on collective dangerous acts, etc. for malicious offenses such as reckless riding sprees by groups and deliberately generating obnoxious levels of noise. Furthermore, the government will actively guide them to disintegrate gang groups.

The government will also conduct "campaigns to eliminate illegally modified vehicles" to control and seize illegally modified vehicles through roadside inspections, and urge judicial authorities to take measures to impound such illegal vehicles, in order to separate motorcycle gangs from vehicles. They will also identify the true locus of responsibility for actions that promote gang behavior including illegal modification of vehicles.

In order to promptly and efficiently tackle gangs that are active in multiple prefectures, prefectural police forces will cooperate with each other in carrying out investigations.

d. Preventing repeat offenses by motorcycle gang members

In carrying out investigations into offenses by motorcycle gangs, the government will strive to prevent convicted motorcycle gang members from repeating offenses by urging them to disintegrate their group or by getting them to leave their group. The government will clarify not only respective criminal facts but also the situation of the groups and various circumstances of the suspects, such as the background of their delinquency, personality, and environment. They will also understand the reality of those who have links with gangsters or organized crime groups, and guide them to break away from the group in question.

The government will provide individual and group guidance and education, to young motorcycle gang members who are put on probation, focusing on trying to help them avoid repeating their offenses. This can be done by cultivating their sense of conformity, adjusting the home environment, giving guidance on relationship with their friends, and encouraging them to leave their group.

In addition, the government will take administrative procedures relating to licenses of motorcycle gang members as strict and fast as possible. They will also organize special lectures and classes for offenders and improve education to prevent repeat offenses.

Furthermore, since motorcycle gangs are also issues that are deeply associated with local communities, the government will promote the establishment of the "Motorcycle Gang Prevention Executive Meeting," which consists of representatives from agencies and organizations involved in promoting measures against motorcycle gangs, under the "Motorcycle Gang Response Meeting" established in prefectures and municipalities.

e. Preventing illegally modification of vehicles

To stop illegal vehicle modifications that may encourage road rampages, and prevent parts of racing vehicles that do not conform to safety standards from being used for illegal modification, the government will actively promote national publicity campaigns and provide guidance for companies and related groups through "campaigns to eliminate illegally modified vehicles."

On-the-spot inspections will also be carried out where necessary, not only on vehicle users, but also on people who performed illegal vehicle modifications.

6. Enhancing rescue and emergency services systems

The government will improve rescue and emergency services systems and emergency medical care services by promoting closer liaison and cooperation with emergency-related organizations such as emergency medical facilities and fire fighting organizations. The improved systems will be designed to deal with road traffic accidents, including accidents on national expressways, to save the lives of people injured in traffic accidents and to minimize the harm and damage caused by accidents. To further improve the life-saving rate and the effectiveness of life-saving treatment, the government will focus particular attention on providing emergency medical care and emergency treatment to injured people by doctors, nurses, emergency life-saving technicians or ambulance attendants, as soon as possible at emergency scenes and on the way to medical facilities. At the same time, they will promote improved reporting of emergencies from the scenes of traffic emergencies and provide more widespread training on bystander's first aid procedures.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Promoting and educating first-aid measures including cardiopulmonary resuscitation with the use of an Automated External Defibrillator (AED) ((1) c)
○ Promoting the development and deployment of emergency life-saving technicians ((1) d)
○ Promoting the use of a doctor's car ((1) d)
○ Improving Help systems for Emergency Life saving and Public safety (HELP) and developing Fast Emergency Vehicle Preemption Systems (FAST) ((1) i)
○ Promoting the doctor's helicopter project ((2) c)

(1) Improving rescue and emergency services systems

a. Improving and expanding rescue systems

In order to deal with the increasing demand for rescue activities for traffic accidents and with the growing complexity and diversity of traffic accidents, the government will improve and expand rescue systems, with the aim of making rescue operations smoother.

b. Improving major rescue and emergency services systems

For dealing with major accidents in which large numbers of people are injured, such as large-scale road traffic accidents, the government will improve rescue and emergency services systems by improving liaison systems and conducting rescue training.

c. Promoting educational activity for diffusing first aid procedures such as cardiopulmonary resuscitation

Application of first aid by a bystander on site is expected to improve the effectiveness of life-saving treatment. As such, the government will promote the activity of providing education through workshops held by the fire services, etc. on emergency care including the use of AED.

With the view to promote the knowledge and skills of emergency care, such as standards on cardiopulmonary resuscitation established in 2000, relevant organizations such as the fire services,

public health centers, medical institutions, the Japanese Red Cross and private organizations will promote the creation and distribution of manuals, and holding of workshops. They will also actively promote publicity or educational activities through such opportunities as First Aid Day and Emergency Medical Care Week. As well as improving the training of first aid instructors, guidance on first aid will be promoted at the time of receiving calls for emergency care. Furthermore, the government will try to spread knowledge on emergency relief through education and training at driving schools, courses of study for the acquisition of a driver's license, and courses of study at the time of renewal of a driver's license, and also try to spread the knowledge to safe driving instructors, safe driving managers, and commercial vehicle drivers who have a high possibility of encountering scenes of traffic accident.

The carrying of first-aid kits such as rubber gloves, tourniquets, and medical dressing will also be promoted mainly for commercial vehicles.

In addition, guidance on emergency care such as how to stop bleeding, the use of medical dressing and cardiopulmonary resuscitation will be provided in "Health and Physical Education" classes at junior high schools and senior high schools. The teaching ability of teachers will be enhanced by holding various workshops including practical training on cardiopulmonary resuscitation and promotion of knowledge on AED.

d. Promoting training and placement of emergency life-saving technicians, and utilization of doctor's cars

To improve pre-hospital care (emergency treatment given at emergency sites or on the way to medical facilities), the government will work to train emergency life-saving technicians so that they can be assigned to fire-fighting stations nationwide, as well as promote utilization of doctor's cars (emergency cars with doctors on board). The government will also promote the implementation of workshops and practical training for smoothly administering tracheal intubation and medication, which emergency life-saving technicians have been allowed to do due to the expansion of their range of care. Furthermore, they will improve the medical control system that ensures the quality of emergency treatment administered by emergency service staff such as emergency life-saving technicians under the instruction or guidance and advice of doctors.

e. Promoting the improvement of rescue and emergency facilities

The government will promote the improvement of rescue vehicles and rescue materials and equipment, and also promote the improvement of high grade ambulances and high-grade emergency care equipment to enable emergency life-saving technicians to carry out sophisticated emergency care. At the same time, they will promote the introduction of communication and command facilities for fire fighting and emergency operations, integrating the abilities to issue emergency instructions, collect information on emergency medical treatment, and do searching and navigation for emergency services.

Furthermore, to improve access to emergency medical facilities, the government will promote the improvement of emergency access points on national expressways.

f. Promoting emergency duties by fire-fighting helicopters

Since helicopters are effective in grasping the situation of accidents and transporting the wounded, the government will promote the deployment of fire-fighting helicopters nationwide, and promote active utilization of helicopters in emergency duties, including a mutually complimentary system with doctor's helicopters.

g. Improving education and training of rescue workers and ambulance attendants

To deal with the increasingly complex and diverse nature of rescue and emergency situations, the government will strongly promote improved education and training of rescue workers and ambulance attendants to raise their level of knowledge and skills.

h. Improving emergency services on national expressways

As a part of its road traffic management work, the East Nippon Expressway Company, the Central Nippon Expressway Company and the West Nippon Expressway Company (hereunder called Expressway Companies) will provide emergency services on independent section of national expressways. At the same time, the municipalities along national expressways will also be responsible for providing emergency services on the expressways, in line with the Fire Fighting Act (Act No.186 of 1948) Both parties will cooperate with each other in carrying out appropriate and effective rescue and emergency services for road users.

To promote this, the relevant municipalities and the Expressway Companies will strengthen their cooperation by improving communication and liaison. The Expressway Companies will also provide financial support to municipalities with expressway interchanges that are not included in independent emergency service sections of expressways, so that those municipalities can improve their emergency services.

The Honshu-Shikoku Bridge Expressway Company will also provide financial support in a way similar to the relevant municipalities to ensure that they provide emergency services for the road links between the islands of Honshu and Shikoku (Seto-Chuo Expressway and Kobe-Awaji-Naruto Expressway). At the same time, the municipalities will promote the improvement of their emergency services to take every possible measure for their emergency services.

Furthermore the Expressway Companies, the Honshu-Shikoku Bridge Expressway Company and relevant municipalities will promote improvements in facilities necessary for emergency services and implementation of employee education and training.

i. Improving HELP and FAST

To rescue the injured as soon as possible and expedite accident processing in case of emergency, such as traffic accidents, the government will promote wide application of the Help system for Emergency Life saving and Public safety (HELP), based on the idea of the UTMS. This help system will enable emergency vehicles to reach the sites of accidents promptly by reporting the location of the accident through an in-car device or cell-phone, utilizing GPS technology that determines the position of a vehicle involved in an accident using satellites.

Also, to reduce the response time between the time an emergency is reported and the time emergency vehicles arrive at the scene, and also to prevent emergency vehicles from causing traffic accidents, the government will promote the introduction of the Fast Emergency Vehicle Preemption Systems (FAST) for controlling traffic lights to give priority to emergency vehicles.

(2) Improving emergency medical systems

a. Improving emergency medical facilities

With the aim of expanding and improving procedures for initial emergency medical systems, which forms the basis of emergency medical care services, the government will promote the establishment of after-hours emergency medical centers and the systems of on-duty doctors at home. In addition, to ensure prompt treatment of critically injured patients who cannot be treated by initial emergency medical systems, the governments will work to improve secondary emergency medical services. The system for providing secondary medical care will be decided based on the conditions of local medical facilities in each area for which those facilities are responsible. One type of system is that wherein each hospital in the area takes it in turn to remain on duty and provide emergency services. Another type of system is that wherein the facilities of one hospital are shared by other hospitals in the area. The government will also work to upgrade the tertiary emergency medical system, to handle the most serious emergency patients, by increasing the number of Emergency and Critical Care Centers that provide 24-hour service with specialized medical and surgical services in multiple departments. The quality of these kinds of facilities will be enhanced through evaluation.

Furthermore, the government will improve emergency medical information centers that coordinate all these systems and ensure that they operate as effectively as possible, by collecting information on emergency medical facilities and providing emergency medical information.

b. Training doctors and nurses in charge of emergency medical treatment

With the aim of ensuring the participation of more doctors in emergency medical care, the government will improve education and training relating to emergency medical care in the clinical education provided in undergraduate medical study programs. The government will also improve training for doctors working at local Emergency and Critical Care Centers to increase the life-saving rate in their areas. In all these ways, they will secure the availability of more doctors for work in the field of emergency medical treatment, and raise the standard of their quality.

The government will also work to increase the number of nurses specializing in emergency treatment, by improving the emergency medical care training included in training courses for nurses, both before and after graduation, so that more nurses are available to properly assist doctors in emergency work. The government will also hold lecture classes for instructors of emergency resuscitation techniques, targeting workers in public institutions such as public health centers, to train those who plan and operate promotion measures on emergency resuscitation in communities. Furthermore, from the viewpoint of improving emergency activities in and out of hospitals, the government will promote training to improve the ability of standard initial response to injuries.

c. Promoting the doctor's helicopter project

The government will aim for nationwide deployment of doctor's helicopters, by which onboard doctors can give emergency medical treatment while transporting injured people. This is expected to enable emergency medical treatment to be provided immediately to seriously injured people at the scene of emergencies, to transport the injured to emergency medical facilities as quickly as possible, and to save as many lives as possible and minimize the residual disabilities of the people injured in traffic accidents.

For smooth operation, the government will strengthen efforts in cooperation with related organizations and groups, such as for sharing information on areas and places where doctor's helicopters can land safely, creating an "operation manual," and providing wireless devices with a common frequency.

(3) Cultivating the cooperation of emergency-related organizations

To transport critically injured patients to emergency medical facilities quickly and smoothly, the government will promote closer communication and cooperation among related organizations, such as emergency medical facilities and fire fighting organizations, and also work to clarify procedures for accepting emergency patients and contacting between emergency medical facilities.

Also, in order to try and save as many lives as possible, the government will try to make available more doctors and nurses to provide emergency medical care to seriously injured people at the scene of accidents and en route to the hospital by deploying more doctor's vehicles to medical facilities. The government will also promote the introduction of a system (hot line) that allows ambulance attendants to communicate directly with doctors using car phones installed in ambulances or mobile phones and devices that transmit data on patients' conditions to medical facilities, so that doctors can directly deliver advice and instructions to emergency scenes. In these ways, they will promote a more effective emergency system featuring closer coordination and cooperation between medical facilities and rescue services such as fire fighting organizations.

To prepare for large scale accidents that result in many victims, the government will promote the utilization of the Disaster Medical Assistance Team (DMAT).

This applies not only to accidents in the road transport sector, but also to large scale accidents in all transport sectors.

7. Promoting victim support, including the appropriate compensation system

Traffic accident victims suffer enormously in many ways. Those victims face serious physical, psychological and financial loss, or even lose their precious lives or their family members'. In recognition of the extreme importance of supporting such traffic accident victims, the government will comprehensively promote measures for traffic accident victims in a well planned manner under such acts as the Basic Act on Crime Victims, etc.

The Automobile Liability Security Act (Act No. 97 of 1955) makes it compulsory for all motor vehicles to be covered by compulsory automobile liability insurance (mutual relief), in order to ensure that the responsible parties in motor vehicle accidents can provide compensation to the accident victims, and to facilitate execution of compensation processes. This act also ensures appropriate insurance (mutual relief) payment by insurance companies (associations), and obligates the government to carry out the Automobile Liability Security Scheme, which guarantees compensation to traffic accident victims of hit and run accidents and accidents caused by uninsured (non-mutual relief) vehicles. Furthermore, the government will implement measures such as the Victim Protection Scheme funded by investment profits of a part of accumulated profits at the time of the abolition of the government reinsurance scheme at the end of FY2001. Through these measures, protection and relief of motor vehicle accident victims has been pursued to this date, and will be improved further in the future. One particular area of concern over recent years is the increase in the number of people suffering from serious physical disabilities after traffic accidents. To address this concern, the government will continue to improve policies to increase the welfare of such accident victims.

In addition, since traffic accident victims also often suffer from serious mental trauma and are not provided with adequate knowledge and information about traffic accidents, the government will actively promote policies aimed at making available more counseling opportunities for such people and informing them better about their traffic accidents and the progress of investigations.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Strengthening measures to help victims claim damages ((2) b)
○ Implementing measures with due consideration to victims' feelings ((3) b)

(1) Improving the Automobile Liability Security System

The national and local governments will continue to improve the Automobile Liability Security System that plays a central role in policies to protect the interests of vehicle accident victims, in accordance with changes in social and economic conditions and the traffic accident situation.

a. Improving compulsory automobile liability insurance (mutual relief)

(a) The government will work to ensure that traffic accident victims are properly compensated through such new measures introduced after the abolition of the government's reinsurance system at the end of 2001 to replace the function of the reinsurance system that aimed at appropriate insurance (mutual relief) payment. They include insurance companies' obligation to provide information to

victims, instruction or order by the Ministry of Land, Infrastructure and Transport for such information provision, and arbitration of disputes related to payment of insurance claim by the Automobile Liability Insurance and Mutual Relief Dispute Settlement Organization.

(b) The government will work to ensure that accident victims are appropriately compensated for medical treatment expenses incurred as a result of traffic accidents

b. Improving the Automobile Liability Security Scheme by the government

The government will improve the Automobile Liability Security Scheme, a system for assisting traffic accident victims who cannot qualify for benefits from compulsory automobile liability insurance (mutual relief), e.g. victims of hit and run accidents or accidents involving uninsured (non-mutual relief) vehicles. The improvements will be implemented after reviewing the level of support to be provided, based on the compulsory automobile liability insurance (mutual relief) system.

c. Fully implementing policies for uninsured (non-mutual relief) vehicles

Through publicity activities, the government will lead the public to understand that they need to be careful to not leave their compulsory automobile liability insurance (mutual relief) expired and to not forget to insure their vehicles. At the same time, they will make every effort to keep uninsured (non-mutual relief) vehicles off the road, by reinforcing guidance and control on streets.

d. Improving optional automobile insurance (automobile mutual relief)

In addition to compulsory automobile liability insurance (mutual relief), optional automobile insurance policies (automobile mutual relief) also play an important role in protecting traffic accident victims. With the advent of free market competition, an increasingly diverse range of optional automobile insurance policies in terms of coverage, amount of benefits and the details of service have become available. The government will continue to guide the insurance companies providing these policies to improve their systems and market reach, in order to enhance support for traffic accident victims.

(2) Offering assistance for compensation claims

a. Improving traffic accident counseling activities

Traffic Accident Counseling Centers operated by local governments will be utilized to improve the activity of providing traffic accident counseling in the communities.

(a) To make the activity of providing counseling smoothly and appropriately at Traffic Accident Counseling Centers, the Centers will liaise and coordinate with the Traffic Accident Consultation Center of the Japan Federation of Bar Associations, the Japan Center for Settlement of Traffic Accident Disputes, and other relevant private organizations such as crime victims support organizations.

(b) As well as promoting counseling work sympathetic to the feelings of traffic accident victims, the government will work to improve the skills of their counselors by organizing training for them in order to meet the increasingly diverse and complex nature of counseling needs.

(c) The government will offer opportunities to use counseling services for a wider range of the parties involved in traffic accidents by publicizing these counseling activities extensively through wide-range publicity activities at Traffic Accident Counseling Centers and through local government publications.

b. Improving support for compensation claims

Police will actively inform the public about the support systems available to victims of traffic accidents and offer traffic accident counseling services, aiming at contributing to effective and prompt relief to traffic accident victims. In addition, the legal affairs bureaus, the district legal affairs bureaus and human rights volunteers actively engage in consultations regarding traffic accidents as a part of their human rights counseling services. At the same time, the government will promote improvement of consultations and support on traffic accident compensation claims provided by the Japan Legal Support Center, the Japan Center for Traffic Accident Dispute Resolution, the Traffic Safety Promotion Center and the Traffic Accident Consultation Center of the Japan Federation of Bar Associations.

(3) Improving support for traffic accident victims

a. Improving policies to support automobile accident victims

The government will carry out regular reviews of the Victim Protection Scheme and enhance activities with a high social necessity.

The government will also support programs for children of traffic accident victims such as the loans for living expense by the National Organization for Automotive Safety & Victims' Aid, financial aid by the Foundation for Orphans from Automobile Accidents, as well as tuition exemption for high school students by prefectural governments.

In addition, to assist those with serious physical disabilities resulting from traffic accidents, the government will improve policies aimed at supporting the National Organization for Automotive Safety & Victims' Aid, which provides nursing care expenses for disabled victims, and establish and operate facilities specializing in providing treatment and nursing care for them.

b. Promoting policies to provide more compassionate treatment of traffic accident victims

To improve support for traffic accident victims, the government will promote measures including support for activities of self-help groups.

Through traffic counselors at police stations, the Traffic Safety Promotion Center and victim support officers at public prosecutors' offices, the government will promote services offering compassionate counseling for traffic accident victims. At the same time, they will cooperate with relevant bodies and organizations to promote such services, and also coordinate with private crime victims support organizations.

The police will provide victims with clear information on the outline of their traffic accidents and the progress of investigation. They will also create and make use of "guidelines for traffic accident victims" that summarizes the flow of procedures involved in criminal cases. They will improve victim

liaison procedures to inform victims about suspects' arrest, prosecution and other status of procedures, particularly in hit and run accidents and fatal traffic accidents. They will also provide proper information to victims, responding to their inquiries on the date of hearing related to administrative punishment of the perpetrators and the decision of administrative punishment.

Furthermore, the government will provide police officers in charge of investigating traffic accidents with education and training at police academies, and organize visits to police stations for educational activities, to promote sympathetic support for victims.

The Public Prosecutor's Office will provide victims with information on the result of the disposition, the date of trial, and the result of criminal trial by the system of notification for victims. District Public Prosecutor's Offices throughout Japan will assign victim support officers to handle various counsels from victims, provide information on the court of justice, accompany them to court proceedings, and help them with various procedures. They will also support victims by introducing them to relevant organizations that offer emotional, practical and financial support according to the circumstances of the victims, to promote measures that are sympathetic towards the feelings of the victims.

At the same time, they are encouraging prosecution staff involved in investigations and trials to be fully sympathetic to the feelings of the victims through individual instruction from their superiors in their daily duty. To push forward with this, they will work to increase understanding towards the emotional state of victims through various training and lectures by academic experts involved in crime victim support and working with victims.

8. Enhancing R&D and study activities

The causes of traffic accidents have become increasingly complex and diverse, which makes it harder to resolve the problems by simply taking countermeasures against obvious risk factors. To implement effective and appropriate traffic measures in such circumstances, there is a need to promote research and development required as a basis of those measures. Since traffic accidents are caused by a complex combination of the three basic factors of people, roads and vehicles, it is necessary to further implement research and development in relevant areas of these three basic factors, as well as to improve comprehensive study activities with cooperation among those areas.

Moreover, the government needs to carry out initial and ex-post evaluations of traffic safety policies using data based on objective analyses and make use of feedback on the findings of ex-post evaluation to formulate other measures.

For this, the government will promote comprehensive study activities of the causes of road traffic accidents by driving R&D related to road traffic safety and improving the analysis of traffic accidents including fatal accidents as well as accidents that resulted in serious injuries.

In promoting R&D and study activities, the government will expand R&D spending and improve research facilities of national and independent testing and research organizations that share tasks of R&D on traffic safety. They will also improve overall coordination for R&D, and strengthen mutual communication and coordination of testing and research organizations. Furthermore, the government will work on building close ties with universities and private testing and research organizations that carry out R&D on traffic safety.

In addition, they will incorporate the results of R&D in traffic safety policies, and promote dissemination of those results by providing technical guidance and resource materials for the private sector. They will also actively promote international cooperation in research study on traffic safety.

[Priority measures and newly-introduced measures in the Eighth Program]

○ Supporting safe driving ((1) a (c))
○ Promoting research on the traffic-related behavior of elderly people ((1) b (a))
○ Promoting R&D on the application of IC to license plates and seals ((1) c (b))
○ Enhancing comprehensive study to investigate the causes of traffic accidents ((2))

(1) Promoting research and development into road traffic safety

The government will systematically promote research and development in each field of people, roads and vehicles, taking into account the growing complexity and diversity of traffic accident causes, increase in the population of the elderly and older drivers, advancement of IT, trends in road traffic accidents and future directions in road traffic safety policies.

Major focal points of research and development are as follows.

a. Promoting research and development on Intelligent Transport Systems (ITS)

To significantly improve the safety, efficiency and convenience of transport by developing a system that intelligently links the basic factors of people, roads and vehicles using state-of-the-art IT, as well as to contribute to environmental conservation through smoother road traffic such as reduced congestion, the government will promote research and development work in the following areas,

(a) Upgrading navigation systems

To make driving more convenient for road users by promoting safer and more comfortable travel to destinations, the government will promote research and development directed at upgrading navigation systems. Areas of focus will be the creation of a system that collects and distributes more accurate traffic information concerning traffic congestion conditions, travel time to destination, and traffic regulation, etc. in real time.

(b) Promoting development of non-stop Electronic Toll Collection Systems (ETC)

To promote widespread adoption of ETC, which is expected to help in reducing traffic congestion, the government will promote the development of improved ETC technology, as well as technology that allows ETC to be applied in contexts other than roads, e.g. car parks.

(c) Offering support for driving safety

To improve traffic safety by promoting ITS, the government will promote research and development of system that detects road and traffic conditions and surrounding vehicles conditions using on-road vehicle sensors and other various sensors. Also, as a measure against accidents that cannot be prevented only by improvements on vehicles, industries, governments and academia will carry out R&D to realize a driving support system that utilizes vehicle-to-vehicle and road-to-vehicle communication technologies. In particular, the government will promote 1) demonstration experiment of DSSS, 2) pilot program of AHS and 3) R&D of the ASV project.

(d) Optimizing traffic management

With the aim of improving the safety and convenience of traffic and contributing to environmental conservation through active and comprehensive control of traffic flow and volume, the government will promote research and development into the following areas.

[1] Optical control algorithms (processing order) for efficient traffic signal control at intersections.

[2] Systems for providing traffic information to in-vehicle devices to promote dispersed traffic flow.

[3] Effective operation of traffic signals that give priority to public transportation

[4] Methods for supporting more efficient operation of commercial vehicles through providing information on the state of vehicles.

[5] Methods to provide detour information and facilitate traffic signal control with the aim of reducing traffic pollution.

[6] Technology to guide drivers on optimum routes, based on forecasts of traffic congestion and calculation of best routes.

[7] Method for utilizing information from vehicles (probe information) in information provision to support traffic information provision, signal control and safe driving.

(e) Making road management more effective

The government will promote research and development into a variety of systems to help prevent road traffic dangers by dealing quickly and accurately with road management problems. Examples are systems for quickly collecting and distributing information on road and weather conditions, systems for permitting special vehicles, and systems for automatically detecting their actual driving routes.

(f) Offering support for public transport

The government will promote research and development into a variety of systems aimed at improving the convenience and comfort of public transport and making traffic smoother. Examples are systems for monitoring the operating conditions of public transport and providing this information to public transport operators and their users, and systems to enable smoother operation of public transport.

(g) Making operation of commercial vehicles more effective

To greatly improve transportation efficiency, to reduce commercial traffic volume and to improve transportation safety, the government will promote research and development into systems that support efficient operation and management of commercial vehicles.

(h) Offering support for pedestrians

With the aim of forming a safe and comfortable road traffic environment where all pedestrians, including elderly and disabled people, can walk around with peace of mind, the government will promote research and development into systems that provide route information to elderly and disabled people, or guide them using technology featuring portable terminals, optical communications, magnetism and voice functions. They will also promote research and development for designing more advanced traffic signals for elderly and disabled people.

The government will also promote R&D of “autonomous mobile support project” that aims to create an environment where everyone including the elderly, the disabled and foreign tourists can get around comfortably at ease.

(i) Offering support for emergency vehicle operations

To promote faster and more effective implementation of restoration and rescue activities in the event of disasters or emergencies, the government will collect information on traffic conditions and road damage in real time and then rapidly convey this information to relevant organizations and make use of it to quickly guide emergency and rescue service vehicles to affected areas. They will also promote research and development into systems to implement more effective traffic management.

b. Promoting research on traffic-related behavior

(a) Promoting research on the traffic-related behavior of elderly people

To implement appropriate safety policies to enable elderly people to move and drive safely and at ease in response to the trend of traffic accident situation with the increase in the population of elderly people and elderly driving license holders, the government will promote research on the traffic-related behavior of elderly people and elderly drivers.

(b) Promoting traffic safety research based on pedestrians' behavior

To reduce the large number of accidents involving pedestrians, which characterizes traffic accident situation in Japan, the government will promote research on the characteristics of pedestrians' behavior and on traffic safety policies based on those findings.

c. Promoting research on driving safety

(a) Developing equipment and materials for traffic safety

The government will further promote research and development on driving simulators and other equipment and materials for more effective practice-oriented driver education.

(b) Promoting R&D on the application of IC to license plates and seals

The government will promote research studies into traffic safety policies using IC number plates and seals and their technical specifications for their practical application.

d. Promoting research on vehicle safety

(a) Promoting research on preventive safety technologies

The government will promote research on preventive safety technologies for vehicles, which are necessary to prevent traffic accidents.

(b) Promoting research on damage mitigating technologies

The government will promote research and development on damage mitigating technologies for vehicles, which are necessary to protect passengers and pedestrians from injuries in the event of traffic accidents.

e. Improving evaluation of traffic safety policies and effect prediction method

In order to promote traffic safety policies more efficiently, effectively and intensively, the government will improve the methods of gathering and analyzing data and predicting the effects to effectively conduct objective initial and ex-post evaluations on the effects of various measures in reducing traffic accidents and damage after accidents, such as physical injury.

f. Promoting other research

(a) Improving long-term prediction of traffic accidents

In order to formulate and implement more efficient, effective and intensive traffic safety policies with diversified aspects, the government will analyze traffic accidents from a statistical standpoint, and improve long-term predictions on the trend and characteristics of the occurrence of traffic accidents.

(b) Promoting research on the social and economic costs of traffic accidents

The government will promote research aimed at comprehensively analyzing and understanding all the costs associated with traffic accidents, taking into account the physical damage caused by accidents, as well as all social and economic costs resulting from the accidents.

(c) Promoting research on traffic safety policy from the perspective of traffic accident victims

The government will promote research to examine traffic safety policies from the point of view of traffic accident victims, making use of civil court cases.

(d) Promoting research into mental health recovery of traffic accident victims

The government will promote research into treatment techniques for people who suffer ongoing psychological aftereffects such as severe PTSD. They will also promote research focusing on the recovery of traffic accident victims through the support of activities by self-help groups.

(2) Enhancing comprehensive study to investigate the causes of traffic accidents

To fully and accurately assess the state of road traffic accidents and to use the findings for drawing up more effective traffic safety policies, the government will call on the Institute for Traffic Accident Research and Data Analysis to improve their macro database and strengthen the implementation of micro studies. In addition, by making active use of the institute, the government will conduct comprehensive analysis of traffic accidents on the basic factors of people, roads and vehicles.

Also, by communicating and cooperating with specialists in the fields of engineering, medicine and psychology, universities and private research institutions, the government will promote comprehensive scientific research and investigations of traffic accidents with the aim of establishing a system for clarifying the mechanism of accident occurrence and developing policies to prevent accidents.

Furthermore, the government will work to raise public awareness about traffic safety by actively publishing information of traffic accident studies and analyses conducted by government and private-sector organizations.

Chapter 2: Railway Traffic Safety

1. Achieving a Society with No Railway Accidents

○ A single accident not only seriously interferes with the convenience of commuters but also can cause enormous damages.

○ Various safety measures must be promoted so as to develop unshaken public confidence in railway services.

2. Objectives Set in Railway Traffic Safety

① To reduce the number of passenger fatalities to zero.

② To reduce the number of operations accidents.

3. Measures for Railway Traffic Safety

< Two viewpoints>

1) Solving specific problems underlying past individual accidents

2) Utilizing lessons learned from past accidents

< Six pillars>

i) Improving the railway traffic environment

ii) Securing safe railway operation

iii) Ensuring railway vehicle safety

iv) Enhancing rescue and emergency services systems

v) Promoting victim support

vi) Enhancing R&D and study activities

Section 1: Achieving a Society with No Railway Accidents

Railways are a mode of transport essential to the daily life of the people, as they can transport vast amounts of people and goods speedily and on time.

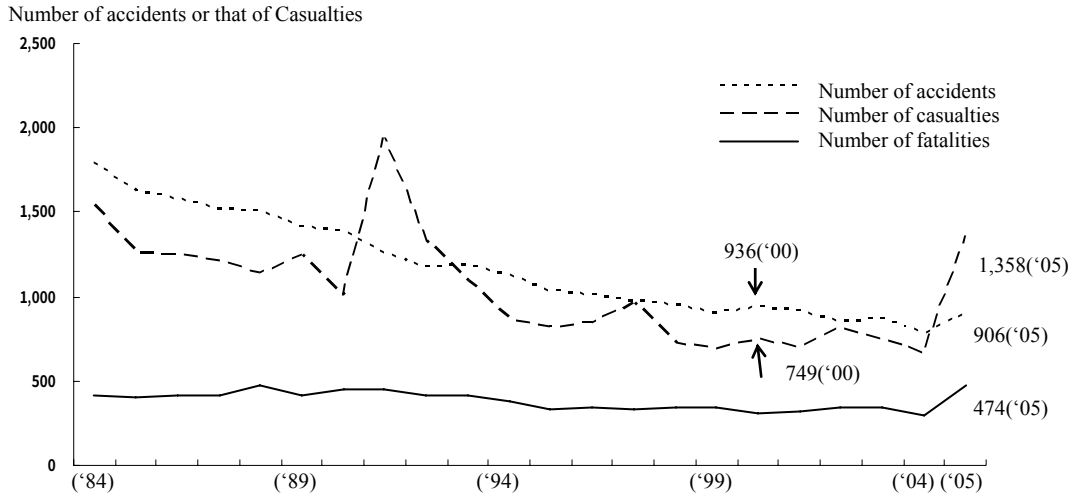
With the current highly-condensed operation of trains, a single accident can not only seriously interfere with the convenience of commuters but also cause immense damage. Therefore, the nation needs to promote various safety policies and establish an unshakable trust in railway transport among the people.

I. Current Status of Railway Accidents, etc.

1. Current status of railway accidents

Railway accidents are on a decline in the long term. There were 905 operations accidents and 1,358 deaths or injuries in 2005, which were a 3% reduction and an 81% increase compared with 936 accidents and 749 deaths or injuries in 2000. Meanwhile, there have been operations accidents that have had significant social impact, such as the derailment of East Japan Railway's (hereinafter called JR East) Joetsu Bullet Train caused by the Mid Niigata prefecture Earthquake in October 2004, the derailment on the Tosa Kuroshio Railway's Sukumo Line in March 2005, the derailment on the JR West Fukuchiyama Line in April 2005, and the derailment on the JR East Uetsu Line in December 2005.

Changes in Railway Operations Accidents, Casualties, and Fatalities



Note: 1. Source: Ministry of Land, Infrastructure and Transport
2. Fatalities are defined as people who died within 24 hours after an accident.

2. Characteristics of operations accidents in recent years

The noticeable feature of operations accidents of recent years is that those at level crossings and those resulting in injury or death have collectively accounted for 90% of the total accidents.

II. Objectives Set in the Fundamental Traffic Safety Program

[Numerical objective] To reduce the number of passenger fatalities to zero

Although operations accidents on railways are on a decline in the long term, serious accidents such as the derailment of the train on the JR West Fukuchiyama Line had occurred and brought about significant impact on society. These accidents exemplified as a consequence that, with the high-density of train operation today, a single accident not only seriously interfere with the convenience of the commuters but also causes great damage. This has even led to the situation where the people's trust in the railway system itself is on the verge of collapse.

On the other hand, demand for operation efficiency is growing in all companies due to the sluggish growth of traffic volume in recent years. Furthermore, many businesses of local railways are being forced to deal with unfavorable business conditions due to the declining and aging population along the railway lines.

With this reality in mind, the government will comprehensively and strongly promoting various measures set out in Section 2, with the understanding and cooperation of the people, and thereby aim to bring the number of passenger deaths to zero and reduce the number of operations accidents.

Section 2: Measures for Railway Traffic Safety

I. Viewpoints in Considering Future Railway Traffic Safety Measures

Operations accidents with railways are on a decline in the long term, and it is evident that measures based on the past fundamental traffic safety programs have been effective to a certain extent. However, in view of the present situation in which several hundreds of operations accidents occur annually, the problems underlying individual accidents have to be solved and the lessons learned from past accidents should be utilized to implement effective measures. Therefore, the government will promote various traffic safety policies from a comprehensive viewpoint, including the improvement of railway traffic environments, securing of safe operation of railways, and securing of railway vehicle safety.

II. Measures to Be Taken

[Priority measures and newly-introduced measures in the Eighth Program]

○ Improving operational safety systems (Installation of ATS and other devices to prevent speeding) (1 (2))
○ Reinforcing anti-earthquake measures for railways (1 (3))
○ Improving education for and quality of railway crews and safety personnel (2 (1))
○ Implementing safety audits of railway operators (2 (4))

1. Improving the railway traffic environment

To secure the safety of railway traffic, the government needs to maintain a high level of reliability for railway facilities such as railway tracks and operational safety facilities, and build the foundation of safety for the whole of their systems. For achieving this, safety measures should be implemented by ensuring the maintenance management of railway facilities and promoting the improvement of operational safety facilities and the reinforcement of the earthquake resistance of railway structures.

(1) Checking and improving railway facilities

To ensure the safety of railway traffic, the maintenance and upgrade of facilities such as railway tracks and roadbeds will be carried out appropriately. At the same time, improvements in railway track protection equipment will be promoted to prevent tracks and facilities from damage due to landslides caused by heavy rain, falling rocks and avalanches.

In terms of regular inspection, maintenance and repair of railway structures, since it has turned out in the past that some railway operators had not conducted required regular inspections of railway structures , the government will ensure that stringent regular inspections and proper maintenance and management of facilities are implemented.

The government will also promote appropriate maintenance and repair of facilities and vehicles in small and medium-sized local railways based on the maintenance improvement program, which sets out particulars that the railway operators have to implement urgently or in the long and medium terms.

As for safety measures for underground railways, it has recently been made compulsory for railway operators to implement improvements on stations that do not conform to fire disaster standards for underground railways (established in 1975) by FY2008, in response to the subway fire that occurred in South Korea. These safety improvements on railway stations will be promoted.

With regard to station facilities, the government will give due consideration to the safe use of railway stations by elderly and disabled people , and promote the elimination of level differences and the installation of fall prevention equipment in order to create a "barrier-free" environment. They will also encourage railway operators to take safety measures to prevent falls from platforms where trains run at high speed or in rapid succession. Examples of such measures include installation of emergency stop buttons or fall detection mats and the provision of an evacuation space below platforms.

(2) Improving operational safety systems

In light of the derailment accident of the train on the JR West Fukuchiyama Line, the government will work to improve operational safety systems by completing the installment of ATS for preventing over-speeding on sharp curves by FY2009, based on the urgent improvement program.

In addition, the government will promote the improvement and upgrade of communication devices, train radio systems, for example, so that necessary information can be conveyed quickly in emergency situations such as accidents and earthquakes.

[Numerical objective] To install ATS to prevent over-speeding on 2,865 sharp curves

(3) Strengthening anti-earthquake measures of railways

In view of the conditions of damage in the Mid Niigata prefecture Earthquake in October 2004, the government will promote earthquake resistance measures based on the evaluation by the Conference on Shinkansen Derailment Countermeasures consisting of JR companies, the bullet train operators, and others. Measures for tunnels that have been confirmed to cross with active faults and require anti-seismic reinforcement will be taken by FY2007, and elevated bridge pillars confined around their middle sections will be thoroughly investigated and strengthened against earthquakes by FY2006. In addition, the government will also deliberate on derailment prevention measures. As for seismic strengthening of elevated bridge pillars for other bullet trains, the schedule will be pushed forward from its original due date of FY2008, and the overall strengthening will be completed by FY2007. Seismic strengthening of elevated bridge pillars for conventional railway lines will also continue to be promoted.

Furthermore, the government will promote improvements of seismic strengthening in major railway stations, and provision of equipment which retransmits disaster information in underground railway facilities where radio waves are shielded, to prepare for large-scale earthquakes that are predicted to occur in the future.

[Numerical objective] To implement all measures for bullet train tunnels that require earthquake resistance measures and seismic strengthening of elevated bridge pillars

2. Securing safe railway operation

In view of the derailment accident on the JR West Fukuchiyama Line, the government will review how their instructions and supervision should be given to operators and promptly implement measures for which they finish the review. Specifically, the government will promote the building of safety management systems that involve all levels of the workforce from top management to on-site workers, and introduce a mechanism of "safety management assessment," wherein the government checks these systems.

Furthermore, in light of the derailment accident on the JR East Uetsu Line, the government will deliberate measures against the gale force wind from both tangible and intangible aspects, and promptly implement measures on which they reach a decision.

In addition to this, the government will direct the operators to maintain and improve the quality of their crews and maintenance personnel, and strengthen and improve safety audits. They will also promote greater public awareness about safety through a range of publicity and educational activities.

(1) Improving education for railway crews and safety personnel

The government will instruct railway operators to improve the performance of their education and training programs for railway crews and safety personnel. The operators will be encouraged to carry out regular scientific aptitude tests in order to secure the competencies of railway crews and safety personnel. The government will also carry out driving license tests for train operators appropriately in order to secure their quality.

In addition, to improve the quality of train operators, the government will study the ideal education for train operators and the way to improve their working environment, and promptly implement measures on which they reach a decision.

(2) Improving management of train operation and railway crews

The government will work with railway operators to improve their after-hours contact procedures and expand communication systems, so that they can collect and communicate information more quickly and accurately in the event of a major accident or disaster.

In addition, the government will instruct railway operators to improve their operations management system to enable them to quickly take appropriate measures in the event of a schedule disruption or accident. This can be done, for example, by accurately assaying train operation conditions, making emergency contacts, providing appropriate information to passengers, taking prompt emergency measures to restore services, and improving emergency transportation systems. Such measures will reduce the damage and social effects caused by transport disorder in arterial railways and in large cities.

The government will also lead railway operators to strictly implement work place safety management procedures such as checking the physical and psychological conditions of railway crews and so forth, in order to confirm that they are fit to perform their duties fully and ensure safe operations.

Furthermore, the government will examine the possibility to systemize quality management of train operators and implement measures on which they reach a decision.

(3) Promoting diffusion of knowledge about railway traffic safety

It is necessary to widely disseminate knowledge about safe passage on roads at railway crossings and avoidance of railway accidents, in order to prevent the occurrence of operations accidents such as accidents at level crossings and accidents due to external factors such as railway obstructions caused by rocks placed or thrown onto tracks and entering onto tracks. For this reason, the government will instruct railway operators to actively carry out publicity and educational activities in schools, among people living along railway lines and among road transport companies, through events such as the National Traffic Safety Campaign, by putting up posters and distributing flyers.

The government will instruct railway operators to take thorough safety measures to protect workers engaged in construction and maintenance of railway facilities.

(4) Implementing safety audits of railway operators

The government will carry out safety audits of railway operators, either on a regular basis or in consideration of the occurrence of an accident. Based on the results of the audit, they will provide appropriate instructions to the operators regarding the maintenance and management of facilities and trains, railway operation procedures, education and training of railway crews and safety management systems.

In addition, in view of the derailment accident on the JR West Fukuchiyama Line, the government will deliberate on the strengthening and improvement of safety audits such as strengthening follow-up of guidance given in the past, and promptly implement measures on which they reach a decision.

The government will also hold the railway safety liaison conference regularly and exchange information on accidents and accident prevention measures.

In addition, the government will provide guidance through various opportunities, in belief that it is fundamental for securing transport safety for operators themselves to grasp the safety-related conditions of the field, and improve an in-house reporting system.

(5) Improving weather information

The government will accurately understand any weather conditions or natural phenomena which could affect railway transport, and make efforts to improve qualities of meteorological information including warnings, advisories and forecasts of severe weather, tsunami, tropical cyclone, heavy rain, earthquake, volcanic eruption, etc., and to ensure appropriate timely announcements and swift provision of such information. Railway companies will work to quickly collect and interpret this meteorological information and reflect it in their operations management, and thereby reduce the damage on railway facilities and maintain safe train operation.

Furthermore, facilities for observing weather conditions, earthquake, tsunami and volcanic activities will be constructed as necessary, and maintenance and improvement of those facilities will be promoted. At the same time, the government will promote information sharing with disaster prevention organizations, and strengthen IT-utilized observation or monitoring systems. Improvement of people's

knowledge about meteorological phenomena will also be promoted by way of publicity activities, seminars, etc.

(6) Strengthening cause investigation systems of railway accidents

To investigate the cause of railway accidents and serious incidents in a prompt and proper fashion, and to contribute to preventing railway accidents, the government will improve specialized investigative techniques of accident investigation officials and work to improve analysis ability by utilizing various equipments for investigation. They will also work to improve the investigation system by reinforcing staff and such.

3. Ensuring railway vehicle safety

Making use of the latest scientific and technological advancements, the government will review technical safety standards relating to the structure and equipment of railway vehicles in appropriate ways and at appropriate times. At the same time, they will work to enhance the method and substance of inspections to maintain and improve railway vehicle safety.

(1) Improving technical safety standards for construction and equipment of railway vehicles

The government will promptly reflect newly-introduced railway vehicle technology and the results of causal analysis of vehicle malfunction and vehicle safety research in technical standards.

(2) Improving railway vehicle inspections

The government will improve the accuracy of railway vehicle inspections by promoting the introduction of new inspection instruments incorporating IT and other new technologies. Along with the introduction of new technology, they will upgrade education and training programs for inspectors.

In addition, the government will scientifically analyze malfunction data and inspection data of vehicles to prevent vehicle malfunction by reflecting the results in maintenance and management.

4. Enhancing rescue and emergency services systems

In order to promote prompt and effective evacuation, rescue and emergency services in the event of a serious railway accident, the government will work to improve disaster drills at major stations, and strengthen systems of closer liaison and cooperation between railway operators and fire services, medical institutions and other relevant bodies.

5. Promoting victim support

The government will improve assistance activities for compensation claims and implement measures sensitive to the feelings of the victims. In particular, in case of large-scale accidents, the police, medical institutions, local authorities and private victims support organizations will cooperate together to support the victims.

6. Improving R&D and study activities

The government will implement R&D for preventing railway accidents, and promote comprehensive research studies for investigating the cause of accidents.

(1) Promoting R&D on railway transport safety

The government will try to improve the safety of railway transport by promoting R&D directed at preventing accidents.

The National Traffic Safety and Environment Laboratory will carry out research on evaluation and effect prediction of new technologies for facilities, vehicles and operation, and on prevention technologies for accidents caused by human-error in order to realize safer railway systems. In addition, to promote the practical application of safer new traffic systems, they will implement research on evaluation of their safety and reliability.

In view of serious railway accidents that have occurred in recent years, the government will promote technological development that contributes to improving safety further, including testing and technological development by the Railway Technical Research Institute for reducing damage during earthquake disasters and accidents.

(2) Implementing comprehensive research studies for investigating causes of railway accidents

To implement studies on investigating the causes of railway accidents and serious incidents promptly and accurately, the government will implement comprehensive research studies. To do so, they will improve the knowledge obtained from investigations of past accidents such as the analysis of various recording devices, improve various analysis techniques, and utilize stocks of accident analysis results, and reflect these results in investigations of the causes.

Chapter 3: Traffic Safety at Level Crossings

1. Achieving a Society with No Accidents at Railway Crossings

Although accidents at level crossings are on a decline in the long term, there are still level crossings that require improvements. The government will aim for a society with no level crossing accidents by continuing to promote measures to prevent level crossing accidents.

2. Objectives Set in Traffic Safety at Level Crossings

To reduce the number of accidents at level crossings by 10% compared to 2005 by 2010

3. Measures for Traffic Safety at Level Crossings

< Viewpoint >

Promoting effective measures that take into account the conditions of each level crossing.

< Four pillars>

i) Promoting replacement of level crossings with grade-separated crossings, structural improvements, and improvement of grade separation facilities for pedestrians

ii) Improving level crossing maintenance facilities and implementing traffic regulations

iii) Promoting integration and elimination of level crossings

iv) Implementing other measures to ensure safe and smooth traffic at level crossings

Section 1: Achieving a Society with No Accidents at Railway Crossings

Accidents at level crossings are on a decline in the long-term. However, almost half of railway operations accidents occur at level crossings, and there still remain level crossings that require improvements. In light of such conditions, the government will aim for a society with no level crossing accidents by continuing to comprehensively and actively implement measures to prevent level crossing accidents.

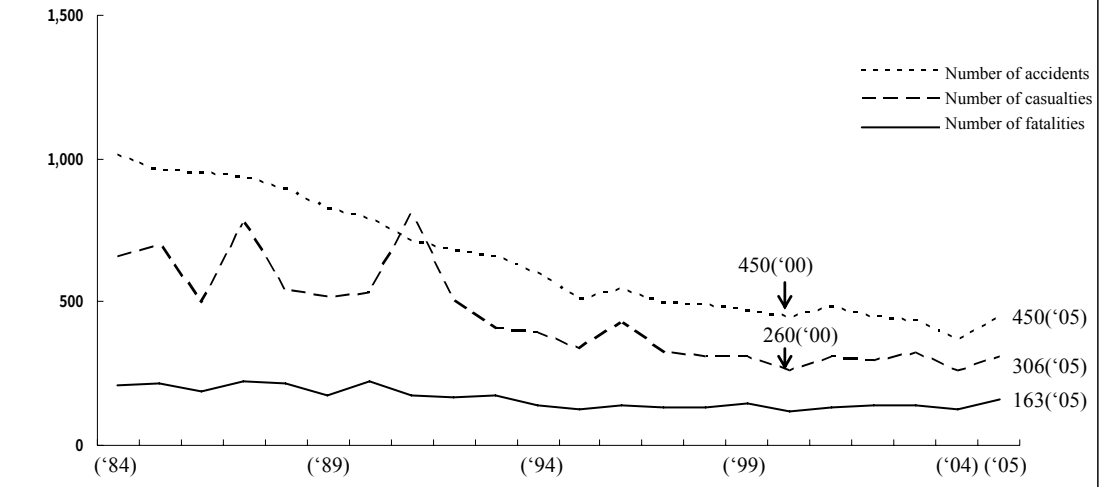
I. Current Status of Accidents at Railway Crossings

1. Current status of accidents at railway crossings

The long-term decline in the number of level crossing accidents (referring to level crossing failures and any resulting railway accidents among all railway operations accidents) is continuing. In 2005, the number of accidents was 450 and the number of deaths and injuries was 306. When compared to 450 accidents and 260 deaths and injuries in 2000, there was no change in the number of accidents, but the number of deaths and injuries rose by 18%.

Accidents at level crossings are on a decline in the long-term, and active implementation of safety measures such as improvements of level crossings appear to have had a significant influence. However, almost half of the operations accidents still occur at level crossings, and there still remain level crossings that require improvements.

Changes in Accidents at Level Crossings, Casualties and Fatalities



Note: 1. Source: Ministry of Land, Infrastructure and Transport
2. Fatalities are defined as people who died within 24 hours after an accident.

2. Characteristics of accidents at level crossings in recent years

As for the characteristics of accidents at level crossings in recent years, more than half of them were caused by direct crossing, and more than half of them were by collision with motor vehicles.

In terms of the types of level crossings, although the number of accidents that occurred at first-class level crossings (level crossings where flag-persons operate the crossing gate day and night, and level

crossings installed with automated crossing gates) is the largest, the incidence rate, the number of accidents per 100 level crossings, is the lowest among first-class level crossings.

II. Objectives Set in the Fundamental Traffic Safety Program

[Numerical objective] To reduce the number of accidents at level crossings by about 10%

Accidents at level crossings are on a decline in the long term. On the other hand, accidents at level crossings make up almost half of all railway operations accidents, and the reality is that there still remain level crossings that require improvements. In view of such conditions, the government will comprehensively and actively implement various measures set out in Section 2 with the understanding and cooperation of the people to facilitate smooth and safe traffic at level crossings. By 2010, the government will strive to reduce the number of accidents at level crossings by about 10% of the number in 2005.

Section 2: Measures for Traffic Safety at Level Crossings

I. Viewpoints in Considering Future Measures for Traffic Safety at Level Crossings

The declining trend in both the number of accidents at level crossings and the number of fatalities caused by these accidents indicates that the traffic safety measures at level crossings implemented based on the Seventh Fundamental Traffic Safety Program and the Seventh Comprehensive Policy to Prevent Level Crossing Accident have had a certain effect.

However, a single accident at a level crossing can produce serious consequences such as many casualties, and in reality there still remain level crossings that require improvements such as grade separation, structural improvements, development of grade separation facilities for pedestrians, level crossing maintenance facilities, traffic regulations, and level crossing integration and elimination. Moreover, these measures will also contribute to the facilitation of traffic and environmental protection by reducing traffic congestion. Taking into consideration all of these things, the government will comprehensively and actively implement more effective measures, in view of the conditions of each level crossing, such as measures for non-opening level crossings.

II. Measures to Be Taken

[Priority measures and newly-introduced measures in the Eighth Program]

- ○ Promoting replacement of level crossings with grade-separated crossings, structural improvements, and improvement of grade separation facilities for pedestrians (quick measures via structural improvements and drastic measures for grade separation at non-opening level crossings) (1)
- ○ Improving level crossing maintenance facilities and implementing traffic regulations (2)
- ○ Promoting integration and elimination of level crossings (3)

1. Promoting replacement of level crossings with grade-separated crossings, structural improvements, and improvement of grade separation facilities for pedestrians

As for “non-opening level crossings” for which it will take time to be replaced by grade-separated crossings, the government will urgently work on structural improvements to realize the effects of the measures in a short time and development of grade separation facilities for pedestrians.

They will also strongly promote structural improvements for pedestrian safety in level crossings with narrow walkways.

In an area where there are a series of level crossings with especially long wait times and high traffic volume, or at level crossings where railway lines intersect with main roads, the government will promote elimination of the level crossings by replacing them with grade-separated crossings, which is one of

the drastic traffic safety measures. In addition, grade-separated crossings will be introduced as much as possible in the case of new road constructions, road reconstructions or new railway constructions.

The government will urgently and intensively implement comprehensive measures with a two-pronged approach using "quick measures" via structural improvements mentioned above, and "drastic measures" via replacing existing level crossings with grade-separated crossings.

2. Improving level crossing maintenance facilities and implementing traffic regulations

Since level crossings with well-maintained crossing gates have the lower rate of traffic accidents in comparison to those with no crossing gates, the government will steadily install crossing gates, taking into account the use of level crossings, the road width, and the implementation of traffic regulations on the road.

Records also show that level crossings that have longer wait times tend to have a larger number of accidents occurring. In view of this, in large urban centers and major regional cities, the government will promote equipping warning time control devices as needed at level crossings where trains pass through frequently and warning time varies according to types of trains, and try to reduce wait times as much as possible.

Furthermore, for level crossings that carry a high volume of motor vehicle traffic, the government will promote installing necessary level crossing safety equipment that is more effective in preventing accidents, for example, obstacle detectors, overhead alarm equipment and large crossing gates, taking into account road traffic conditions and accident factors.

The government will implement traffic control measures at level crossings, i.e., passage prohibition for vehicles or oversized vehicles, and one-way traffic systems, in accordance with road traffic volume, width of roads intersecting railway lines, level crossing maintenance facilities and detour possibilities. At the same time, they will improve visibility by making road traffic signs larger and brighter.

3. Promoting integration and elimination of level crossings

Along with the implementation of improvement projects such as replacing level crossings with grade-separated crossings and improving level crossing structure, the government will proceed to integrate or eliminate level crossings located in proximity, on the condition that the integration or elimination of the crossings is supposed not to adversely affect the passage of local residents, in view of the use of the roads and detour possibilities. The government will also promote the integration and elimination of other level crossings in the same manner.

However, structural improvements that are necessary to build walkways or improve narrow ones at level crossings can be implemented without integration or elimination of level crossings in proximity, taking the urgency into consideration.

4. Implementing other measures to ensure safe and smooth traffic at level crossings

In order to make traffic on level crossings safer and smoother, the government will install level crossing notice signs and level crossing signals, and proceed with research and development to design more

advanced traffic safety facilities related to level crossings by making use of information technology (IT), and will also actively regulate offenses by vehicles at level crossings.

Also, in view of the fact that many level crossing accidents are caused by pedestrians crossing in front of approaching trains or vehicles getting caught in railway tracks, it is necessary to improve safety awareness among motorists and pedestrians and familiarize them with emergency measures such as how to operate the emergency button when a level crossing problem occurs.

For this purpose, the governments will enhance their publicity activities and continue to promote education at schools and driving schools on how to pass level crossings safely.

In addition to these measures, the government will work not to generate disparity in the width of roads at level crossings, when they widen the roads that connect to level crossings.