# Aiming to reduce the number of fatalities originating in traffic accidents by half

5,155 people died in traffic accidents in 2008, less than one third of the worst-ever recorded fatalities in 1970 of 16,765 persons while also casualties fell to below 1,000,000 for the first time in 10 years, the target of the Eighth Fundamental Traffic Safety Program being having been achieved two years faster.

However, it would still appear to be quite—serious in so many people have still died in traffic accidents. On January 2, 2009 the "Comments made by the prime minister (chairman of the Central Traffic Safety Measures Council) concerning the number of fatalities in traffic accidents being reduced to below the target of the Eighth Fundamental Traffic Safety Program" was published and the aim clarified of reducing the number of fatalities originating in traffic accidents by half in realize the safest road traffic in the world by about ten years from now. The government has set the target of decreasing the number of fatalities originating in traffic accidents to less than 2,500 by about 2018, according to the comments made, and has been promoting traffic accident prevention measures. Some special features will be presented here on the main factors in the decrease in number of fatalities originating in traffic accidents in recent years and the present approach to reducing the number of fatalities originating in traffic accidents by half etc.

1. Comments made by prime minister (chairman of the Central Traffic Safety Measures Council) concerning the number of fatalities in traffic accidents being reduced to below the target of the Eighth Fundamental Traffic Safety Program.

January 2, 2009

5,155 people died in traffic accidents in 2008, but with the target of the Eighth Fundamental Traffic Safety Program of the number of fatalities originating in traffic accidents being reduced to below 5,500 by 2010 being achieved two years faster.

The decrease in number of fatalities originating in traffic accidents over recent years was the result of efforts made by the government, local governments, associated private bodies, and regionally, and included the approach of improving the ratio of people wearing seat belts and the eradication of drunk driving etc. I wish to express my gratitude to everyone that endeavored to prevent traffic accidents form occurring during that period.

Moreover, the government has declared a target of the number of fatalities originating in traffic accidents needing to be reduced by half, i.e. to below 5,000, in ten years starting in 2003. Its realization is near at hand.

However, it would still appear serious that so many people have still died in traffic accidents.

A new year has arrived and I determined to further reduce the number of fatalities originating in traffic accidents by half in about ten years from now.

This target will be difficult to realize, but we are aiming at realizing the safest road traffic in the world through the concentrated efforts of the government, associated private bodies, and the nation.

For that purpose, and after considering the growing aging population, the government has decided to tackle measures for elderly persons in particular.

The government will also put a great deal of effort into the eradication of drunk driving, the promotion of traffic safety education, and the maintenance of a safe and smooth road traffic environment.

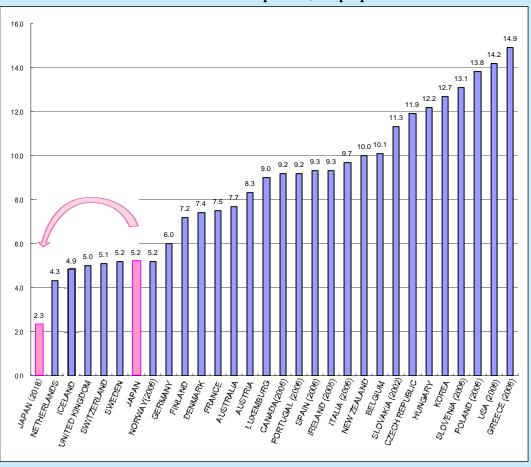
I sincerely beg the understanding and support of the nation.

Chairman of the Central Traffic Safety Measures Council
Prime minister Taro Aso

## 2. Traffic fatalities per 100,000 people

Comparing data on traffic fatalities per 100,000 people of 29 countries from the International Road Traffic and Accident Database (IRTAD) reveals Japan to be in sixth place at 5.2 people per 100,000 people (2007). If the target of traffic fatalities being less than 2,500 could be achieved by about 2018 the traffic fatalities per 100,000 people in Japan would then be 2.3 people.

# Traffic fatalities per 100,000 people



- 1. Source: IRTAD
- 2. Except when otherwise indicated in parenthesis the data is for 2007.
- Except when otherwise indicated in parentiness die data is on 2007.
   The data is based on all deaths occurring within 30 days of an accident.
   The figure (2018) for Japan was calculated using the estimated deaths and forecasted population of Japan in 2018 of 123,915,000, the former having been obtained by multiplying the target figure of fatalities made by the government within 24 hours of accident in 2018 of 2,500 by the ratio of fatalities within 30 days of an accident to those within 24 hours of an accident in 2007, i.e. 2890. (The figure of 123,915,000 is cited in "Population by three divisions of the age of the total population and age structure coefficient: medium level of births (medium level of deaths) estimation made by National Institute of Population and Social Security Research" (estimated in December, 2006))

### 3. Target of each country relating to a decrease in number of traffic fatalities

In Japan the Fundamental Traffic Safety Program that establishes numerical objectives based on the Traffic Safety Measures Basic Law is formulated every 5 years, with in addition comments on the number of traffic fatalities needing to be reduced by half in ten years from now also being published. Many OECD countries have also set the target of decreasing the number of traffic fatalities over the middle term, but Japan has the high level targeted.

Name of country	National Target
United Kingdom	In 2010 the number of traffic fatalities will have decreased by 40% when compared with the average of 1994 through 1998.
Australia	In 2010 the number of traffic fatalities per 100,000 people will have decreased by 40% when compared with 1999.
Netherland	In 2020 the number of traffic fatalities will have decreased to less than 580 when compared with the average of 1,106 from 2000 through 2002.
Canada	In 2012 the number of traffic fatalities will have decreased by 30% when compared with the average of 1996 through 2001.
Sweden	In 2007 the number of traffic fatalities will have decreased by 50% to less than 270 when compared with the 537 recorded of 1996.
Denmark	In 2012 the number of traffic fatalities will have decreased by 40%, less than 200, when compared with 2005.
New Zealand	In 2010 the number of traffic fatalities will be 300 rather than the 455 in 2001.
Finland	In 2010 the number of traffic fatalities will be under 250, and by 2025 under 100.
France	In 2012 the number of traffic fatalities will be under 3000 rather than the 4709 in 2006.
United States	In 2011 the number of traffic fatalities per 100,000 VMT will decrease by 40% when compared with 1996
EU	In 2010 the number of traffic fatalities will have decreased by 30% when compared with 2001.

- 2. Number of traffic fatalities (died within 30 days)( IRTAD) 3. VMT is an abbreviation for Vehicle Miles Traveled.

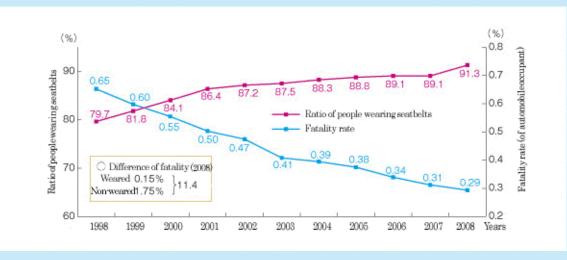
### 4. Main factors in the decline in number of traffic fatalities over recent years

The decline in fatalities is largely attributable to efforts to carry out a comprehensive set of measures based on the Traffic Safety Basic Plan, which include measures aimed at improving the road traffic environment, at disseminating and reinforcing messages on traffic safety, and at ensuring safe driving practices. In addition, measures aimed at advancing vehicle safety, preserving order on roads, and improving rescue and emergency medical systems have also played a part. Certain quantitatively measurable improvements contributable to the decline include (1) increased seat belt usage, (2) a reduction in high-risk accidents such as accidents caused by drinking driving, (3) a reduction in accidents caused by high-speed driving, and (4) a reduction in the number of pedestrians who violate rules and regulations and (5) improved vehicle safety.

#### (1) Increased seat belt usage

The fatality rate of those not wearing a seat belt was 11.4 times higher than that for those that were wearing them, thus revealing the contribution they made to decreasing the fatality rate. Along with increased seat belt usage the fatality rate (of automobile occupants) decreased to 0.29% from 0.65% in 1998, which is also considered to be a factor in the decrease in fatalities.

# Transition in ratio of people wearing seat belts and fatality rate (of automobile occupants)



Notes: 1. Source: National Policy Agency

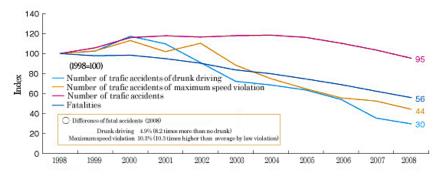
2. Ratio of people wearing seat belts = casualties with seat belt wearers (of automobile occupants) / casualties (of automobile occupants) x 100

3. Fatality rate (of automobile occupants) = fatalities (of automobile occupants) / casualties (of automobile occupants) x 100

#### (2) Reduction in high-risk accidents such as those caused by drinking driving

Compared with 10 years ago accidents caused by drinking driving have decreased to about one third, while accidents caused by maximum speed violations have decreased to about one half. The decrease in these kinds of high-risk accidents involving violations is considered as to be a factor in the decrease in fatalities.

# Transition in number of traffic accidents and fatalities caused by drinking driving and maximum speed violations

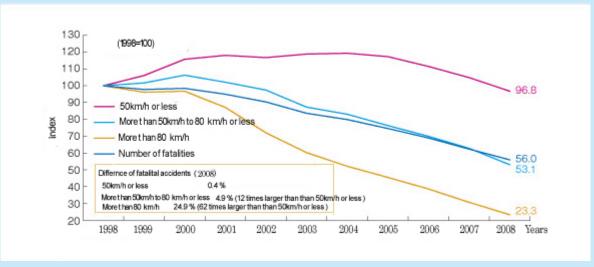


Notes: 1 Source: National Police Agency

#### (3) Reduction in high-speed driving accidents

In terms of the hazard recognition speed on public highways the fatal accident rate was 0.4% for vehicles traveling at or under 50 km/h, 4.9% (12 times higher than that at or under 50 km/h) for over 50 km/h, and 24.9% (62 times higher than that at or under 50 km/h) for over 80 km/h, clearly indicating that the fatality rate rises with the speed of the vehicle. Compared with ten years ago the fatal accident rate at or under 50 km/h of the lowest fatality rate represented a decrease of about 3%, while conversely that with over 80 km/h of the highest fatality rate represented less than one fourth, thus revealing that the decrease in high speed accidents is a factor in the decrease in fatalities.

# Transition in number of traffic accidents on public highways (by hazard recognition speed) and fatalities



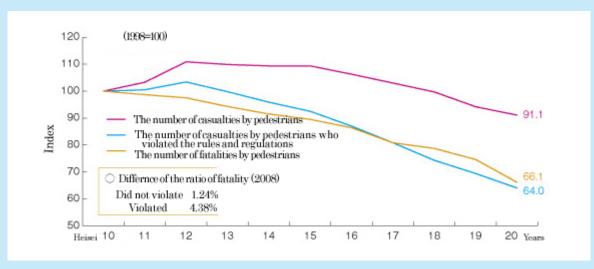
Notes: 1. Source: National Police Agency

"Hazard recognition speed" refers to the speed at which an automobile or moped was traveling at when the driver noticed a hazard (moving or parked vehicle, pedestrian, safety fence, telephone/electricity pole or other obstacle, etc.).

3. Ratio of fatal accidents = number of fatal accidents / number of traffic x 100

(4) Reduction in pedestrian fatalities resulting from rules and regulations being violated Compared with ten years ago the number of pedestrian fatalities resulting from rules and regulations being violated decreased by 30%. The fatality rate of pedestrians that had violated a rule or regulation was 3.6 times higher than those who followed the relevant rule or regulation, thus revealing that the decrease in the number of accidents resulting from the rules and regulations being violated is a factor in the decrease in fatalities.

# Transition in number of casualties of pedestrians and casualties of pedestrians resulting from the rules and regulations being violated



Notes: 1. Source: National Police Agency

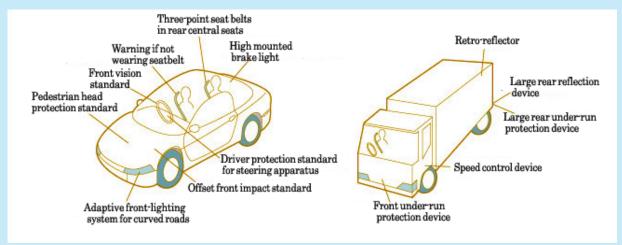
2. Number of casualties of pedestrians excludes accidents where the vehicle was a bicycle or other light vehicle.

3. Fatality rate of pedestrians (whether the rules and regulations were violated or not) = Number of pedestrian fatalities (whether the rules and regulations were violated or not) ÷ Number of pedestrian casualties (whether the rules and regulations were violated or not) x 100

#### (5) Improved vehicle safety

(a) Expansion and reinforcement of vehicle safety measures

In reducing the number of fatal accidents safety standards such as three-point seat belts having to be installed in the rear central seat of automobiles etc were both expanded and reinforced, and the development, practical use, and promotion of the advanced safety of automobiles such as brakes reducing injuries and in automobile assessments etc implemented according to data on accidents.



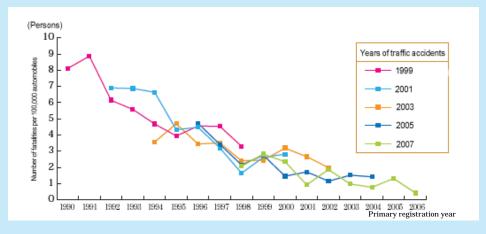
Note: Source: The Ministry of Land, Infrastructure, Transport and Tourism

(b) Fatalities of automobile occupants per 100,000 vehicles by accident year and primary registration year

Examining the fatalities of automobile occupants per 100,000 vehicles by primary registration year resulting from traffic accidents during 1999 reveals 8 people to have registered in 1990 and under 4 people in 1998.

Moreover, a similar tendency can also be seen with traffic accidents in recent years, with traffic accidents during 2007 resulting in fatalities for automobile occupants per 100,000 vehicles registered in 2006 falling well short of one person.

From this point of view the improvement in vehicle safety through expanding and reinforcing vehicle safety measures such as the adoption of collision absorption bodies, improved collision safety through installing airbags etc and improved prevention safety through dissemination of vehicles needing to have ABS installed etc can be considered a factor in the decrease in fatalities.



Notes:
1. Created based on data provided by ITARDA.
2. Number of fatalities per 100,000 vehicles = number of fatalities for automobile occupants by primary registration year / number of registered automobiles by primary registration year in the year the of accident

# 5. The present approach of decreasing it by half

#### [Measures for elderly people]

1 Proper implementation of course pretests (function acknowledgment tests) and promotion of the understanding of elderly people

The situation with the New Road Traffic Act through which course pretests have to be taken by driver's license holders of age 65 and older when they renew their licenses was enforced as of June 1, 2009, along with the proper implementation of that course pretesting, shall be verified and its operation improved as well as ensuring the Act is being enforced. Moreover, a temporary aptitude test needs to be taken if an inadequate memory and judgment are revealed as the result of a course pretest, or specific violation such as ignoring a traffic light has occurred. Efforts are actively made to raise the awareness of elderly people as well as maintaining the execution system that includes enhancing inquiry counters with the aim of promoting correct understanding of the course pretest.

2. Promotion of traffic safety education for elderly people
To help elderly people understand the influence etc of the
impaired body functions that occur with age traffic safety
education oriented toward being involved in hands-on
experience and personal practice utilizing various educational
devices is being actively carried out. For elderly people who
may not sufficiently understand traffic rule etc as they have
fewer opportunities to receive safety guidance safety education
is being implemented to the extent that they can understand
the knowledge that pedestrians and bicycle users should
possess. Senior drivers are being provided with seminars to
enable them to master the necessary safe driving knowledge
and skills.

A community-based support system was created to disseminate traffic safety education to elderly people in allowing them to acquire the necessary knowledge necessary in their daily lives by instructors visiting the residences of elderly people in cooperation with related organizations and group etc in their region, including by welfare-related staff such as local welfare commissioners who usually frequently come in contact with elderly people.

In addition, projects are being pursued to improve the safety awareness of elderly through peer-to-peer instruction, and such as in efforts to actively promote the establishment of traffic safety committees and instructors to provide safety education to seniors at seniors clubs and nursing homes as well as promoting volunteer activities being involved in by seniors related to safety education.

3. Promotion of measures for senior drivers

Along with the enhancement of driving aptitude consultations for senior drivers, and notification of the license cancellation system through an application reinforcement of support for people returning their licenses and comprehensive measures for senior drivers are being promoted that include enhancement of the content of the course for elderly people and the implementation of a more effective course.

Moreover, education for drivers is being launched to promote to senior drivers displaying signs on all occasions, the inclusion of a course for elderly people, and also through







helping other age groups understand the characteristics of senior drivers to improve their awareness of cars displaying signs that they are being driven by senior drivers.

#### [Approach to eradicating drinking driving]

1. Establishment of precept awareness of people involved in drinking driving
Projects are being pursued to continuously promote traffic safety education and raise awareness of
danger of drinking driving and the actual situation with traffic accidents caused by drinking driving
while further efforts are also being made to advance approaches used with drinking driving

prevention in regions and at work places etc such as in striving to raise awareness on "handle keeper movement" in cooperation with volunteers and safe driving managers, liquor producers and sellers, restaurants offering liquor and parking lot companies etc and establish precept awareness of the nation on "never do yourself or allow any drinking driving."

Moreover, a sound proxy driving service is being pursued based on the "environmental reform program of a proxy driving service" (set of concrete measures that the National Police Agency and the Ministry of National Land and Transport need to follow in reforming the environment of a "safe proxy driving service of quality" of February, 2008) in being responsible for the eradication of drinking driving.

Degree of influence of alcohol

The table on the right lists the approximate time it takes for a person weighing about 60 kilograms to sober up after drinking (does depends on an

One middle-sized bottle of beer or 0.18 liters of Sake	4 hours
Two middle-sized bottles of beer or 0.36 liters of Sake	8 hours
Three middle-sized bottles of beer or 0.54 liters of Sake	12 hours

(Source: Material provided by Nonprofit Organization Ask)

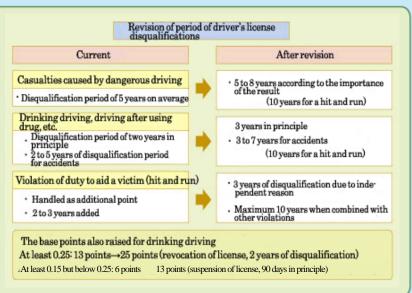
individual however). The decomposition speed of alcohol differs with individual constitutions, and can be quite fast or relatively slow. Generally 0.18 liters of Sake will take about half a day for its influence to dissipate. "Having an adequate sleep" is prohibited and not enough. Alcohol remains in the body longer than one would expect. People need to rightly understand the influence alcohol has and appropriately drive their automobiles.

# 2. Exclusion and improvement of dangerous driving

The exclusion of dangerous driving on roads at an early stage is being pursued through use of the proper implementation of extra aptitude tests etc for people suspected of having a disease that could affect their driving as well as through prompt and apt administrative actions such as temporary suspensions. Moreover, to improve dangerous drivers with traffic violations nurturing course leaders systematically to hold courses for new drivers, traffic offenders, and suspended and revoked license holders while maintaining and improving the materials made available at course facilities etc in ensuring the proper guidance is provided.

With courses for people that have had their licenses revoked in particular the hope is that the specified course organization system will be appropriately operated and the level of the course maintained and improved.

The Revised Road Traffic Law (enacted in June 1, 2009) raised the upper limit of the disqualification period of a driver's license, thus excluding dangerous drivers from roads for a longer period of time. Furthermore, the Revised Road Traffic Law raised the violation point count for drinking driving etc.



# 3. Measures against habitual drunk drivers

Recently the number of traffic accidents caused by drinking driving has declined as a result of the penal code etc being strengthened as a result of revising the Road Traffic Act. Compared to the ratio of fatalities due to drunken driving 10 earlier on it has decreased to approximately one fourth of the number.

However, in order to understand the problem of repeated habitual drinking driving requires the issue of regular drinkers, heavy drinkers and alcohol dependant people also being examined. To comprehensively deal with preventing drinking driving by habitual drunk drivers the Cabinet Office has



Driver breathing into testing device before starting the engine. Source: The Japan Automobile Research Institute

carried out investigative research on comprehensive measures to use with habitual drunk drivers, which include an educational program (brief intervention) and usage of an alcohol interlock apparatus as well as investigating other issues and readjusting the measures used.

The police are moreover taking prompt apt administrative actions such as revoking drunk driver's licenses and in order to prevent drinking driving by habitual drunk drivers and so on are providing information on consultation agencies etc to anyone suspected habitual drinking through courses for people subjected to punishment as well as promoting the contents of classes for problem drinkers.

#### 4. Enforcement of ban on drinking driving etc.

Accurate analysis of the results of enforcement and the situation with traffic accidents etc in the effective enforcement of the ban on drinking driving where great importance is placed on the time zone and place it can often be seen is being carried out.

Moreover, after arresting drivers caught drinking driving or after hit and run accidents not only the drivers are being investigated but also the other users of the vehicle, places they drank at, the passengers in the car at the time, and any companions they drank alcoholic beverages with etc in the strict application of the penal codes related to



the provision of vehicles, serving of alcoholic beverages and the request for vehicles to be supervised, and thus strictly investigate those cases as instigation.

Furthermore, the penal code related to casual accidents resulting from dangerous driving is being strictly applied against casual accident occurring from dangerous and reckless driving that includes drinking driving.

5. Development and promotion of technology to prevent drinking driving Manufacturers have developed technology for use in easier prevention of drinking driving than the alcohol interlock apparatus, and the Ministry of Land, Infrastructure, Transport and Tourism are to discuss putting the drinking driving prevention technology into practical use.

#### [Promotion of traffic safety education]

1. Promotion of traffic safety education based on the situation with traffic accidents etc.

Various ways are being pursued of making infants and children more interested in specific dangerous places on roads around schools etc and traffic safety education promoted according to their developmental stage. The endeavor is being made to allow the technology and knowledge needed to be mastered voluntarily and raise consciousness on securing the safety of road traffic by encouraging pupils to take part in traffic safety activities etc.

Efforts shall be actively made to raise awareness of the promotion of the early lighting of the front-light system of vehicles and practical use of reflectors as measures in preventing accidents in the evening and at night along with implementing traffic safety education that focuses on the situation with accidents occurring most frequently in the area.

Support in nurturing the activities of leaders that can appropriately promote the direction of traffic safety education is being pursued in ensuring independent implementation takes place in all regions, work places, and schools etc.

#### 2. Promotion of Nationwide Traffic Safety Campaign

This aims at providing and disseminating traffic safety messages broadly to everyone in the nation and support them in making a habit of observing traffic rules and the right traffic manner practices and also at being a national movement to promote approaches to improving the road traffic environment by the nation, organizations, and other bodies such as the traffic measures councils of local governments, including the organizations hosting the movement and cooperating with each other in deploying traffic safety messages consistent and systematic manner.



Central Meeting of the Nationwide Traffic Safety Campaign in spring of 2009

On April 13, 2009, as the central event accompanying implementation of the Nationwide Traffic Safety Campaign in spring, a Central Meeting was held to carry out citizen-involvement projects that promote traffic safety education such as providing instructions on the use of crossings and holding bicycle classes etc for newly enrolled children which was at attended by Prime Minister Aso, the cabinet ministers concerned etc at Haginaka Elementary School in Ohta-ku.



Traffic safety education at elementary school

#### [Maintenance of safe smooth road traffic environment]

### 1. Measures for residential roads etc

With residential roads in areas where traffic accidents related to pedestrians and bicycle riders frequently occur the aim is to promote route measures that maintain a walking space network which pedestrians can freely use through the maintenance of sidewalks and barrier-free walking spaces etc, zonal measures in creating zones that allow first priority to pedestrians and bicycles, and the road structure etc by controlling the speed of vehicles through speed bumps and chicanes etc. Measures are also being used on outskirt roads through controlling vehicles being able to pass other vehicles within the area, securing smooth traffic through major thoroughfares on outskirt roads through improving etc intersections, as well as through the aim of controlling the approach and speed of detouring traffic and the smooth traffic stream through major thoroughfares and securing the safe and smooth passage of pedestrians and bicycle riders by focused implementation of conversion of traffic signals to LED systems, and efforts to enhance the visibility of road signs and markers and maintain optical beacons and traffic information boards etc on peripheral major thoroughfares.

Moreover, traffic accident prevention measures of the point and line type are being carried out at dangerous points and routes for pedestrians and bicycle riders that reflect the opinions of local residents etc through use of an "Accident prevention measures on residential roads manual" on other residential roads.

In addition, emphasis is being placed on roads that are used as the main routes in daily life as important maintenance districts, based on the law concerning the promotion of the smooth movement of elderly people and physically handicapped people etc (Heisei 18, law 91), preparation of acoustic signals etc, use of separate pedestrian and vehicle signals, and brighter road markings to improve visibility etc.

- 2. Creation of safe stress-free school walking routes, etc.
  - Traffic safety measures are being intensively implemented along school routes where the risk of accidents is high and that many elementary school children use, including "Safe Pedestrian Areas" and "Life Zone Routes". In this case, the creation of safe stress-free walking spaces, including simple methods such as coloring the pavement of shoulders differently and installing protection fences is being promoted in regions where maintenance of the pavements etc, for example in urban areas, is difficult.
- 3. Enhancement of bicycle traffic environments
  - In securing the safety of bicycle riders and pedestrians measures to enhance bicycle roads and bicycle parking lots, and installation of traffic belts etc for bicycles only are being intentionally promoted.
  - The approach of completing at an early stage in particular of a model district business in preparing a bicycle traffic environment is being emphatically promoted.
- 4. Measures for major thoroughfares
  - At "black spot" designated intersections and road sections that have had a high incidence of casualty inflicting accidents efforts are being made to improve intersections and to intensively enhance traffic safety facilities etc, including pavements.
- 5. Maintenance of road network and promotion of high standard road usage Systematic maintenance of roads is being promoted so that their functionality can be properly shared by network form major thoroughfares of the high standard of roads within residential area. Moreover, promotion of use of major thoroughfares of the high standard of safety of local roads is being pursued.

