

Chapter 2 Overview of Current Road Traffic Safety Measures

1. Improvement of Road Traffic Environment

- Development of People-First Walking Spaces Offering Safety and Security on Community Roads

With support from communities, traffic safety measures focused on people including the improvement of sidewalks were developed in school-commuting roads, community roads, arterial roads in urban areas and others.

 - ① In March 2009, 582 zones in residential or commercial areas with high occurrence rates of fatal accidents involving pedestrians and bicycles were designated as “Safe Pedestrian Areas” and comprehensive traffic accident prevention measures including the development of sidewalks and others were implemented by prefectural public safety commission and road administrators in a coordinated manner.

In addition, sidewalks were developed in community roads other than in the “Safe Pedestrian Areas” and furthermore, traffic accident prevention measures were implemented by prefectural public safety commissions and road administrators in a coordinated manner including efforts to control vehicle’s speed, to indicate shapes of roads and the presence of intersections, provide traffic separation schemes, and create safe and secure road spaces where people and cars can coexist.
 - ② Following a series of accidents that occurred in a row in which pupils on their way to and from school got killed and injured including the accident that occurred at Kameoka city in Kyoto in April 2012, emergency joint inspections of school-commuting roads to and from public elementary schools and public special support elementary schools were conducted jointly by school officials, education boards, road administrators and the police with the collaboration of parents and community people to ensure traffic safety. In addition to places where traffic accident prevention measures should be provided, in order to ensure the safety of transit of infants and children that commute to and from elementary schools, kindergartens, nurseries and children’s houses, measures were provided to ensure safety of school-commuting roads and others by improving sidewalks including school-commuting roads, coloring the shoulders, installing guard fences, push-button traffic lights and signal lights for pedestrians.
 - ③ Based on the Act (Law 91 of 2006) on Promotion of Smooth Transportation of Elderly Persons, Disabled Persons, etc. to ensure independent and self-sustained daily life and social activities for the elderly, disabled persons and others, roads leading or connecting to stations, governmental facilities, hospitals and others were actively provided with wide and leveled sidewalks. In addition, barrier-free traffic lights, traffic lights to separate vehicles and pedestrians, Escort Zone, pedestrian overpass with lifting and lowering devices, resting facilities for pedestrians, parking for bicycles, car parking with parking grids for disabled persons and others were developed. Elimination of electric poles was also promoted. Furthermore, smooth and safe transit for the elderly and disabled persons was provided and the use of LED lights for traffic lights and the adoption of higher illuminated roadway signs were promoted.
- Promotion of Traffic Safety Measures in Arterial Roads
 - ① In implementing road development projects with the aim to improve traffic safety, the “Traffic Accident Zero Plan (strategy for concentrated relief of accident prone sections) aimed at the eradication of traffic accidents was promoted in arterial roads in a focused and intensive manner based on the principles of “selection and concentration” and “community participation and community engagement” by scientifically checking the effect and applying management cycle in an efficient and cost-effective manner.
 - ② In March 2009, prefectural public safety commission and road administrators intensively implemented road traffic accident prevention measures in a joint and coordinated manner in the 3,396 places designated as the “Black Spots” in arterial roads with high accident occurrence rate based on measures which included the installation of new traffic lights and their sophistication, operation of separate traffic lights for pedestrians and cars, improvement of sidewalks, improvement of intersections, improvement of visual distance, development of additional lanes, installation of central islands, installation of parking zones and defense guards in bus routes, development of compartment lines, installation of road illumination and vision guidance signs, etc. among others.
- Comprehensive Development of Bicycle Usage Environment

In order to develop a sustainable urban transport system with highly efficient clean energy, it is necessary to create an environment which allows safe and comfortable use of bicycles by clarifying the role played by the bicycle in the society, dividing conveniently pedestrians, bicycles and cars depending on the traffic situation, and by providing measures to prevent increasing accidents between pedestrians and cyclists. To this end, the Ministry of Land, Infrastructure, Transport and Tourism and the National Police Agency jointly held the “committee meeting to study the development of an environment which allows safe and comfortable use of bicycles” and developed the “guidelines for the development of an environment which allows safe and comfortable use of bicycles” in November 2012

following the recommendations of the committee so that road administrators and the prefectural police can develop a bicycle network plan, promote full compliance, among other programs. In addition, road administrators, the police and other relevant organizations promoted the development of a bicycle network including roads for bicycles, bicycle-specific lanes based on the guidelines in a coordinated manner.

- Use of Intelligent Transport Systems

Introduction and use of intelligent transport system (ITS) is being promoted continuously in order to improve safety, transport efficiency and comfort by building a system to integrate people, roads and vehicles using latest information and communication technologies and contribute to the conservation of the environment through smoother traffic including the reduction of traffic jams. To this end, based on the overall ITS program and the “New Information and Communication Technology Strategy” formulated in May 2010, and coordination amongst a broad range of stakeholder groups from industry, academia, and government, a diverse range of issues including research and development, field test*, development, dissemination and standardization of infrastructures was reviewed in an accelerating manner and cooperation in the international arena including information exchange and standardization in the ITS World Congress was proactively promoted.

- ① The concept of UTMS is designed to provide sophisticated traffic information, conduct traffic control operation, give priority to the transit of public vehicles, reduce traffic-derived pollution, support safety driving and ensure safety of pedestrians in order to secure traffic safety and comfort by controlling the flow and volume of traffic in an active and comprehensive manner by means of optical beacons* capable of providing bidirectional communication with each vehicle through sophisticated traffic control centers. Based on such concept, a range of measures was implemented to enhance the system and develop optical beacons among others.

- ② Smartways which is a public and private collaboration will be promoted using ITS Spots based on the communication technology of Electronic Toll Collection (ETC) system.

The use of ITS Spots enabled the implementation of a variety of services including ETC, dynamic route guidance which enables vehicles to select routes appropriately based on a wide range of traffic congestion data, including safe driving support which reminds drivers of any situation that make one’s blood freeze.

2. Dissemination and Reinforcement of Traffic Safety

- Promotion of Traffic Safety Education for the Elderly

In order to elevate traffic safety awareness based on the mutual edification of elderly communities, the establishment of traffic safety divisions in seniors’ clubs and retirement homes as well as the training of elderly traffic safety instructors (silver leaders) was promoted. Subsequently, voluntary traffic safety activities such as the creation of “Close-call maps” were implemented, and instruction and support was given so as to fulfill the leading role of traffic safety activities in local areas and households.

- Promotion of the Safe Usage of Bicycles

In order to demonstrate that the bicycle is a vehicle, thus its user need to respect the rules as vehicles and practice traffic manners when passing through a road, public awareness-raising activities that apply “5 Rules for Bicycle Safety Usage” shown in the Central Traffic Safety Policy Council Decision were promoted along with traffic safety education such as participatory/revelatory/hands-on bicycle classrooms that target wide bicycle user groups regarding the correct way to ride a bicycle taking into account pedestrians and other bicycles. Such education applies automobile area training courses, audiovisual aids, simulators, and the 'scared straight method' (an experiential educational method that faces fear by seeing accident being reproduced by a stuntman, and so on).

3. Ensuring Safe Driving

- Augmentation for Better and More Effective Measures for Elderly Drivers

The mandatory seminars and courses for elderly drivers of 70 years and more are aimed at checking their driving aptitude, by asking them to drive on site, using equipment to test driving aptitude etc. so that they become conscious of changes in their physical functions, and proper advice and guidance are provided based on the checking results. It is provided that those who have attended these seminars and courses are not required to take other course when renewing their driving license. A total of 2,014,559 people took them.

In addition, in the course at the time of renewing the license, seminar was given to people between 65 and 69 years old focused on the characteristics of elderly driving as well as of traffic accidents in which elderly drivers were

* Field test

Practical tests, outdoor tests and others

* Optical beacon

Infrared communication device installed on the road which measures traffic volume and others by sensing passing vehicles, and allows communication between car navigation devices and the traffic control centers.

involved.

- **Augmentation of Supervision for Road Transport Operators**

In the wake of the highway tour bus accident on the Kanetsu Highway in April 2012, as an emergency measure for heavy traffic in summer, emergency audit and inspection of chartered bus operators that operate highway tour bus was conducted and standards such as driver's driving hours were strengthened. In addition, a variety of measures was implemented including those to prevent overwork driving by introducing a standard to regulate the need of arranging a replacement driver for a long-distance and long-hour operation, strengthening of audit system on road transport operators, promotion of shift from highway tour bus to a new highway passenger bus and others.

4. Ensuring Vehicle Safety Measures

- **Promotion of Vehicle Safety Measures**

The "5th Advanced Safety Vehicle (ASV) Promotion Program" was started since FY 2011 that helps safe driving using advanced technology in order to promote its development, commercialization and dissemination, and under industry-academia-government collaboration, efforts were made to conduct promotion of an enhanced self-sensing safe driving support system and a safe driving support system based on the next generation communication.

In addition, subsidies were provided for collision damage mitigation brakes of large vehicles since FY 2007 and for anti-wobble device since FY 2010 and exceptional tax exemption schemes were created for large trucks mounted with the collision mitigation brake in FY 2012 and for large buses in FY 2013.

In order to prevent accidents caused by defects of inspection and maintenance, such as the wheel fall off from large vehicles, fire on a bus and others, the "Automobile Inspection and Maintenance Promotion Movement" which is efforts to make inspection on large vehicles in a focused manner was implemented in September, October and November since FY 2007 in order to help get acquainted with the points to consider when conducting inspection and maintenance of large trucks and buses.

In order to gather information on defective vehicles from users, the activity aimed to help people to get acquainted with the "Defective Vehicle Hotline" (www.mlit.go.jp/RJ/) was actively conducted.

This was aimed at providing users with an easier access to the recall system based on the past information gathering systems and investigation analysis systems.

Furthermore, in addition to publishing information on defective vehicles and accidents as well as fires received by the Ministry, information was provided to users on a range of issues including all matters which are required for use, maintenance, and matters to deal with defects in an appropriate manner.

5. Development of Rescue and Emergency Medical Systems

- **Promotion of the "Doctor-Helicopter Business"**

To enhance medical treatment in the emergency site and on the way to hospital, the dissemination and promotion of helicopters for emergency medical treatment are currently conducted based on the "Act on Special Measures Concerning Ensuring Emergency Treatment Using Helicopters for Emergency Medical Treatment" (Law 103 of 2007) and as of the end of FY 2012, 40 doctor helicopters in 34 prefectures are deployed.

- **Augmentation of Fire Department and Collaborative Systems for Medical Agencies**

The time it takes to transport sick people to hospitals from the time a request for an ambulance is received through 119 is getting longer every year and there occur cases where it is difficult to find a medical facility to hospitalize a sick person quickly. In view of this situation, the Fire Service Act (Law 186 of 1948) was revised in 2009. In order to help the fire institutions to transport sick persons as a rescue operation and the medical institutions to receive them and provide adequate treatment quickly, the prefectural governments established standards on the transportation and reception of sick persons (hereinafter referred to as "practice standard") by establishing consultative councils made up of members of fire institutions and medical institutions to discuss matters concerning the practice standard. As of March 1 2013, the practice standard is in place in all the prefectures.