

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 promoted on routes to schools, community roads, arterial roads in urban areas and others.

- ① In the "Safe Pedestrian Areas" that are 582 designated zones in residential or commercial areas with high occurrence rates of fatal accidents involving pedestrians and bicycles, comprehensive traffic accident prevention measures including the improvement 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 "Zone 30" 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, to provide traffic separation schemes, and to create safe and secure road spaces where people and cars can coexist.

- ② Based on the results of the urgent joint inspections implemented in FY2012, the schools, education boards, road administrators and the police collaborated on promoting measures to ensure traffic safety on routes to schools.

In addition to places where traffic safety measures were found to be needed in the urgent joint inspections, the following measures for ensuring safety on routes to schools and others were implemented to ensure the safety of children and infants on their way to and from elementary schools, kindergartens, nurseries, and children's houses: Improvement of sidewalks including routes to schools and elsewhere, installation of physical devices such as humps, coloring of road shoulders, installation of guard fences, improvement of push-button traffic lights and signal lights for pedestrians, etc., improvement of pedestrian overpasses, and expansion of crosswalks, etc.

- 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, the safe and smooth transit for the elderly, disabled persons and others was pursued and an increase in the number of elderly drivers was dealt with by developing barrier-free traffic lights, easy-to-see roadway signs and markings, pedestrian overpasses with lifting and lowering devices, resting facilities for pedestrians, parking for bicycles, car parking with parking grids for disabled persons and others and also promoting the use of LED lights in traffic lights and the elimination of electric poles.

● 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 July 2013, 3,490 places on arterial roads with a particularly high accident occurrence rate were designated as "Black Spots." For these places, prefectural public safety commission and road administrators intensively implemented road traffic accident prevention measures in a joint

and coordinated manner, which included the installation and sophistication of traffic lights, separate and independent traffic lights for vehicles and pedestrians, installation of intensely illuminated roadway signs as well as improvement of sidewalks, etc., improvement of intersections, improvement of visual distances, development of additional lanes, construction of central islands, installation of parking zones on bus routes, etc., improvement of defense guards and compartment lines, installation of road illumination and visual 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 bicycles in the society, dividing pedestrians, bicycles and cars conveniently depending on the traffic situation, and by providing measures to prevent accidents between pedestrians and cyclists. To this end, the Ministry of Land, Infrastructure, Transport and Tourism and the National Police Agency developed the "guidelines for the development of an environment which allows safe and comfortable use of bicycles" in November 2012 to create a plan for a bicycle network, develop such a network, and promote full compliance with riding rules. The road administrators and relevant organizations such as the police collaborated to promote the development of bicycle lanes based on the guidelines in a coordinated manner.

● **Use of Intelligent Transport Systems**

Introduction and use of intelligent transport systems (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. Based on the "Declaration to be the World's Most Advanced IT Nation" endorsed by the Cabinet in June 2013 and revised in June 2014, research and development, field tests*, improvement, dissemination and standardization of infrastructures was promoted under industry-academia-government collaboration, and cooperation in the international arena including information exchange and standardization in the ITS World Congress was proactively promoted.

- ① For the sake of optimization of traffic control using the cutting-edge information and communication technology, etc., the development and improvement of the Universal Traffic Management Systems (UTMS) utilizing the function of infrared beacons*, including the Public Transportation Priority Systems (PTPS), FASTEmergency Vehicle Preemption Systems (FAST), and Driving Safety Support Systems (DSSS), was pursued in an effort to promote ITS and realize a safe, smooth, and comfortable traffic society with a low environmental load.
- ② Government-private cooperation encourages the dissemination of the ETC2.0 service based on the ETC communication technology. The combination of ETC2.0-compatible car navigation systems and ETC2.0-compatible on-board units enables information provision service, such as service to avoid being involved in traffic congestion, service to support safe driving as well as ETC. In the future, route information collected by ETC2.0 will provide new services, such as giving preferential treatment for the drivers who took less congested routes and supporting for commercial vehicles operation.

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

* Field tests

Practical tests, outdoor tests and others

* Infrared beacons

An infrared communication device which is installed on roads to perceive passing cars, to measure traffic loads and mediate the information between the on-board unit and the Traffic Control Center.

training of elderly traffic safety instructors (silver leaders) were 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**

Public awareness-raising activities addressed to cyclists were promoted making use of the “5 Rules for Bicycle Safety Usage” shown in the Central Traffic Safety Policy Council Decision, 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. In addition, in view of the fact that bicycles are allowed to transit only on the side strips provided on the left side of the road by the Amended Road Traffic Act in 2013, enlightenment activities were developed to improve the understanding from citizens that cyclists should ride on the left side of the road. Furthermore, educational activities on traffic safety were promoted along with bicycle safety class based on participation, hands-on experiment and practice that target wide variety of bicycle users regarding the correct way to ride a bicycle taking into account pedestrians and other vehicles. Such education applies automobile area training courses, audiovisual aids, simulators, and the ‘scared straight method’ (an experiential educational method that makes participants face fear by producing opportunities for them to see accidents being reproduced by stuntmen, and so on).

3 Ensuring Safe Driving

- **Promotion of Measures for Elderly Drivers**

The compulsory training courses for elderly drivers aged 70 and over are aimed at checking their driving aptitude, by asking them to drive by themselves, 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 courses are not required to take other courses when renewing their driving licenses. A total of 2,298,006 people took these courses in 2014.

In addition, in the course at the time of renewing the license, an effort was made to hold classes for people between 65 and 69 years old focused on the characteristics of elderly drivers as well as of traffic accidents in which they were involved.

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

On a basis of the “Plan to recover the security and safety of highway and chartered buses” formulated (formulated in April 2013) in the wake of the highway tour bus accident occurred on the Kanetsu Highway in April 2012, a variety of measures including the shift from the highway tour bus and integration into the new highway passenger bus, establishment of standards for the arrangement of replacement drivers to prevent overwork driving, transfer to a fair tariff system reflecting safety cost and the like were rapidly and steadily adopted for two years between 2013 and 2014. In addition, follow-up operations have been performed as necessary to check on the state of the implementation and their effects.

In addition, in the wake of the highway passenger bus accident on the Hokuriku Expressway that occurred in March 2014, “Measures to Prevent Bus Accidents Due to Sudden Changes in Physical Conditions of Drivers” was established in April 2014 and, as part of these Measures, “Health Management Manual for Drivers of Business Vehicles” was revised to ensure follow-up of health examinations, careful labor management of each of the drivers, and identification of signs and appropriate responses to them at roll call and during driving in order to achieve dissemination and compliance by the parties concerned including the transportation operations in the field.

- **Enhancement of Transport Safety Management System**

In accordance with the “transport safety management system” which was introduced in October of 2006, the transportation companies build and improve the safety management system company-wide, and the government implement “The Transport Safety Management Audit” which is the system that

the government checks the implementation status of The Transport Safety Management system of transportation companies.

In 2014, the government implemented this audit on 116 companies.

In addition, the government extended the target of the audit to all companies about chartered bus companies in October of 2013, and the government implemented this audit on 72 chartered bus companies in 2014.

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 continued to be provided for ASV devices such as collision damage mitigation brakes, vehicle stability control systems, and lane departure warning systems. In addition, special tax provisions that became effective in FY 2012 for vehicles with collision damage mitigation brakes were applied to a wider range of vehicles in the FY 2015 tax revision, and new special provisions were established for vehicles with vehicle stability control systems.

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 February 16, 2015, 44 doctor helicopters in 36 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 (1948, Law 186) 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 “practice standard”) and it became compulsory to establish consultative councils made up of members of fire institutions and medical institutions to discuss matters concerning the practice standard. Currently, the practice standard is in place in all the prefectures.