From Policy Evaluation of the Eighth Fundamental Traffic Safety Program

When examining road traffic fatality trends, they increase remarkably from the latter half of the 1940s with the peak record reaching 16,765 deaths in 1970. There was a downward trend afterwards, and reached 8,466 fatalities in 1979. The trend has been declining since the second peak was reached in 1992.

Concerning the number of injuries and fatalities, it increased alongside the number of fatalities until 1992, but the number of injuries and fatalities continued to increase until 2004, where the number reached a record high of 1.19 million people.

Given such conditions, in 2006 the Eighth Fundamental Traffic Safety Program was created with the basic philosophy of "aiming for a road traffic accident-free society" and "a traffic safety ideology that places first priority on people". The first established goal therein was to bring the number of 24-hour fatalities below 5,500, and the number of injuries and fatalities to below 1 million. Also, each measure shown in the 8 pillars displayed below were introduced in each ministries and agencies.

As a result, the goals of the Eighth Program were achieved in 2008 with 5,155 24-hour fatalities and 950 thousand injuries and fatalities.

In addition, we are aiming to achieve the traffic safety goal of less than 2,500 traffic accident fatalities by 2018, and this effort will be reflected in the next Fundamental program. In order to promote traffic safety measures furthermore, a policy evaluation of the Eighth Fundamental Traffic Safety Program (2006-2010) was implemented, which will be introduced here.

I. Evaluation Perspective

Within the Policy Evaluation of the Eighth Fundamental Traffic Safety Program, in order to further clarify the relationship between the goal of "Fatality/Injury & Fatality Reduction" and the individual policies implemented towards its realization, 4 viewpoints to be focused in the implementation of road traffic safety policies and 8 pillars introduced as policies to work out based on the Traffic Safety Policies Basic Act etc. were configured as a "policy group" and evaluated.

The Eighth Fundamental Traffic Safety Program, Part 1: Land Transport Safety, Chapter 1 Road Traffic Safety

Paragraph 1: Aiming for a Road Traffic Accident-Free Society

* Basic overview is “Aiming for a Road Traffic Accident-Free Society”

Paragraph 2: Goals Regarding Road Safety

* Reduce 24-hour fatalities to below 5,500 injuries, fatalities to below 1 million

Paragraph 3: Measures Regarding Road Traffic Safety

I Viewpoints Considering the future of Road Traffic Safety Measures

* Display the basic orientation of the countermeasures

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

II Attempted Pillars

* Display the current conditions and basic orientation of the countermeasures regarding each pillar
* Afterward, record a description regarding each individual policy

1 Improvement of the road traffic environment　2 Dissemination and Reinforcement of Traffic Safety Measures
3 Ensuring safe driving　4 Ensuring vehicle safety
5 Maintenance of road traffic order　6 Augmentation of rescue and emergency services systems
7 Promotion of victim support, including the appropriate damage compensation systems
8 Augmentation of R&D and study activities

II. Evaluation Example for the Eighth Fundamental Traffic Safety Program

(1) Example of Individual Evaluation of the Policy Group

① Evaluation of policy groups based on the 8 pillars

A brief overview is given below regarding evaluation cases of policy groups based on the 8 pillars.

<From evaluation results of "Improvement of the road traffic environment">

○Evaluation case regarding "promotion of for accident danger point countermeasures" and "promotion of sidewalk improvement for school routes"

[Perspective]

The "promotion of accident danger area countermeasures" is an initiative to specify "special areas" with a high probability or the potential for serious or lethal accidents and prevent the occurrence of traffic accidents based on the setting forth of prioritized countermeasures for such areas. With regard to these countermeasures, the number of specified areas, undertaking rate, number and rate of nearly completed areas, and accident prevention rate taken into account. In addition, the "promotion of sidewalk improvement for school routes is a countermeasure enacted as a nationwide initiative. The improvement rate and number of traffic accident injuries and fatalities involving children commuting to school (going to school + in school + returning from school) taken into account in relation to this countermeasure.

[Evaluation]

(Promotion of accident danger areas countermeasure)

Since 3,956 areas around the country were specified in July 2003, the number of places undertaken in the countermeasure has been gradually increasing. Furthermore, there were 2,149 measure areas (54.2%) that were nearly completed.

When focusing on the outcome (accident prevention rate in these specified areas), the target amount decided in the Priority Plan for Social Infrastructure Development has been nearly reached. Moreover, 25 prefectures have reached their goal.

■Number of Specified Areas: 3, 956 areas (specified July 2003), 3, 396 areas (specified March 2009)

■Number/Undertaking Rate of Countermeasure Areas: 3, 178 areas/80.3% (end of 2006), 3, 487areas/88.4% (end of 2007)

■Number/Rate of Nearly Completed Countermeasure Areas: 2, 149 areas/54.2% (end of 2007)

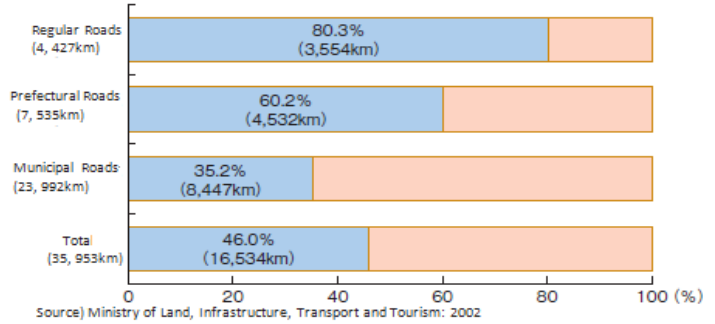
■Accident Prevention Rate (end of 2007): 25.2% (The target amount of 30% has been nearly met)

Source: Ministry of Land, Infrastructure, Transport and Tourism

(Promotion of sidewalk improvement for school routes)

The number of traffic accident injuries and fatalities involving children commuting to school is on a downward trend. Especially when focusing on the number of fatalities, the number of traffic accident fatalities involving school/kindergarten commutes is seen on greater downward trend when compared to the same trend of overall traffic accident fatalities.

■ Improvement Rate of School Route Sidewalks Frequently used by School Children 46.0%



Source) Ministry of Land, Infrastructure, Transport and Tourism: 2002
(Road Extensions)

■ Number of Traffic Accident Injuries and Fatalities Involving Children Commuting to School (going to school, in school, returning from school)(People)

	2001	2004	2006	2008
Number of Fatalities (Under 15 years old)	270	221	158	127
Commuting to School	28	14	10	8
Same Ratio	10.4%	6.3%	6.3%	6.3%
Number of Injuries (Under 15 years old)	89,070	90,920	82,067	73,071
Commuting to School	6,542	5,487	4,735	4,198
Same Ratio	7.3%	6.0%	5.8%	5.7%

Source) Traffic Accident Statistics

<From evaluation results of the "Dissemination and Reinforcement of Traffic Safety Messages">

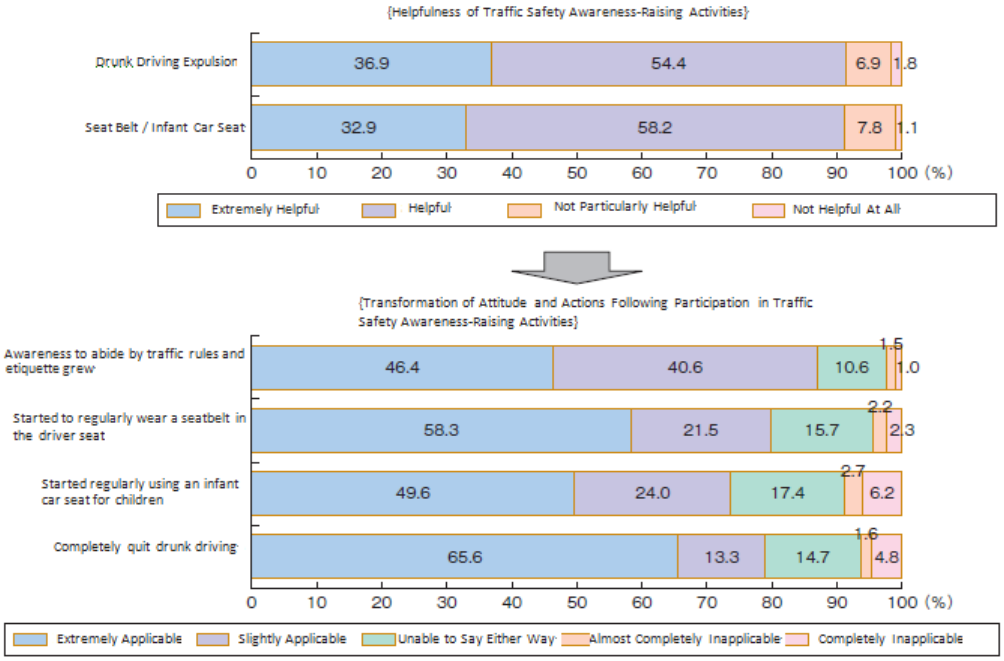
○**Evaluation case based on the all-round index "Dissemination and Reinforcement of Traffic Safety Messages"**

[Perspective]

The transformation of attitudes and actions was confirmed following participation in "traffic safety awareness-raising activities", which was implemented in order to improve the awareness of citizens toward traffic safety and to achieve circumstances whereby traffic accidents no longer occur.

[Evaluation]

Based on survey findings of individuals who participated for the last 3 years in traffic safety awareness-raising activities, the proportion of people who answered (1) "extremely helpful" or "helpful" comprised approximately 90%. In addition, the proportion of those who responded (2) "my awareness of traffic rules and etiquette grew" comprised approximately 90%. As such, there is a correlation shown between improving the awareness of abiding by traffic safety rules and the transformation of actions by such awareness improvement.



<From the evaluation results of "Ensuring Safe Driving">

○**Evaluation case regarding the index for "Policies Targeting Operators"**

[Perspective]

The "number of traffic accidents resulting from commercial vehicles" is set as an index. This index is used to measure if the safe driving of operators is ensured from policies that target operators said to promote voluntary Driving Safety management measures in companies and business offices. In addition, the appointment of Driving Safety managers, participation in training, and accident rate are understood from the conceivable connection between planning the ensuring safe driving based on driving safety management measures targeting operators and the prevention of traffic accidents.

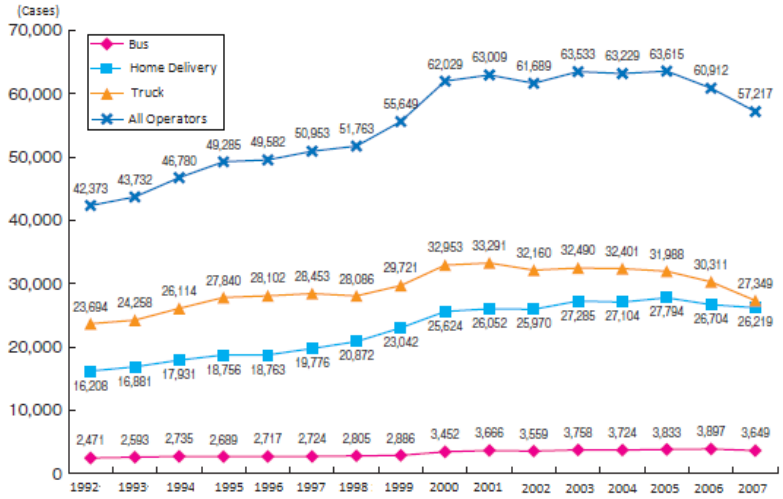
[Evaluation]

There is a downward trend from 2005 in the actual results of the "number of traffic accidents resulting from commercial vehicles".

From these results, there is a conceivable indirect correlation between properly ensuring safe driving in relation to operators, and the overall goal for the reduction of traffic accident fatalities and traffic accident injuries and fatalities.

In addition, along with an increase in drivers who almost all attend training under Driving Safety managers, and the overall accident rate is lessening when comparing the 69.68 cases per 10 thousand managed drivers and 89.94 cases per 10 thousand driver's license holders.

Transition of the Number of Traffic Accidents by Commercial Vehicle Business Category



Source: Created by National Police Agency.

■ Number of Managers

	Driving Safety Managers	Number of Managed Drivers
2006	338 thousand	6.59 million
2007	338 thousand	6.51 million
2008	336 thousand	6.86 million

■ Training Implementation Frequency and Attendance Rate

	Driving Safety Managers		
	Implementation Frequency	Attendees	Attendance rate
2006	2,355	328 thousand	98.0%
2007	2,345	327 thousand	98.1%

Source: Cabinet Office "2009 Traffic Safety White Paper".

■ Accident Prevention Rate

Managed Driver Accident Rate (per 10,000 drivers) 69.68 (during 2008)

— Number of Managed Drivers 6.86 million

— Number of Traffic Accidents 47, 796

Source: National Police Agency

<Reference>

Number of License Holders	80.45 million
Traffic Accident Cases	723, 520
Number of Traffic Accidents Caused by License Holders (per 10,000 drivers)	89.94 cases

<From evaluation results of "Ensuring Vehicle Safety">

○**Evaluation case regarding the all-round index for "ensuring vehicle safety"**

[Perspective]

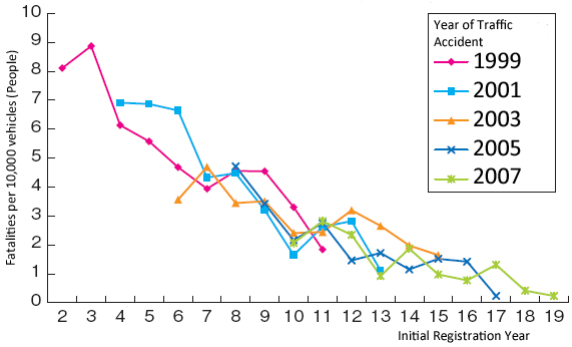
Because of the conceivability that the improvement of vehicle safety contributes to a reduction in the possibility of death resulting at the time of a frontal impact accident, the "fatal accident rate in vehicle-to-vehicle frontal impact accidents" was understood. In addition, the number of fatalities as well as injuries and fatalities by initial registration year were understood.

[Evaluation]

The fatal accident rate in vehicle-to-vehicle frontal impact accidents (head-on collision) reduced from 3.6% in 2000 to 2.9% in 2008, and it was evaluated that the policies for improving vehicle safety had been effectively functional.

In addition, when observing the number of passenger fatalities per 10 thousand vehicles by accident year and initial registration year, there is a downward trend in the number of fatalities in line corresponding to newer initial registration years. Also, as a result of the improvement of vehicle safety based on the improvement and strengthening of vehicle safety measures, it is conceivable that an alleviation of human suffering is being revealed.

Crew (Including Drivers) Fatalities (Passenger Cars)
Per 10,000 People by Accident Year and Initial Registration Year [Evaluation]



Source: Created based on data provided by ITARDA

<From evaluation results of "Maintenance of Road Traffic Order">

○Evaluation case regarding the all-round index for "Maintenance of Road Traffic Order"

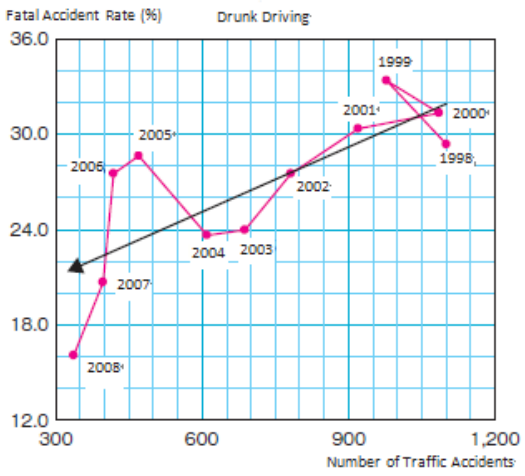
[Perspective]

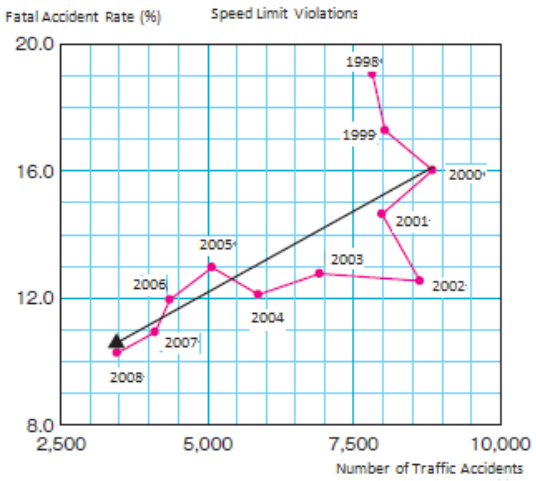
When a traffic accident occurs, traffic law violation is a factor. Because of this, it is expected that if traffic law violations are reduced there will also be a decrease in traffic accidents. In addition, even when a traffic accident has occurred once, if the fatality rate per accident can be reduced, traffic safety will also improve. Accordingly, the "number of traffic accidents by traffic law violation" and "fatality rate per number of traffic accidents by traffic law violation were configured as the outcome.

[Evaluation]

With regard to the "number of traffic accidents by traffic law violation", it is shown that accidents based on "drunk driving" and "speed limit violations" are decreasing. Furthermore, with regard to the "fatality rate per number of traffic accidents by traffic law violation", a downward trend is clearly shown with "drunk driving", "speed-limit violations", etc. where the existing fatality rate was high. It is conceivable that the reduction in traffic law violations and growth in the survival rate following an accident is the result of improving road traffic order.

<Transition of Fatality Rate per Number of Traffic Accidents by Traffic Law Violation>





<From evaluation results of "Augmentation of Rescue and Ambulance Service Systems">

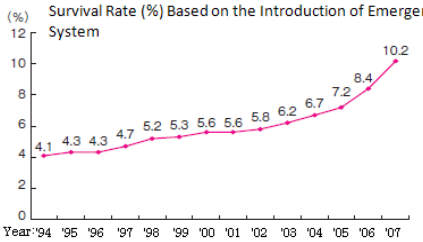
○Evaluation case regarding the all-round index for "Augmentation of Rescue and Emergency Service Systems"

[Perspective]

The survival rate during emergency transportation (proportion of survivors after one month comprising of injured persons treated by ambulance services when the cardiopulmonary function was seen to have failed) and improvement of emergency medical systems is understood in relation to improving the situation of rescue and ambulance activities.

[Evaluation]

The improvement of emergency medical systems advances based on the improvement of medical emergency centers and doctor-helicopters, and furthermore, within the optimization of emergency personnel hospital selections, quality improvement of observational judgments, and optimization of emergency treatment based on the seriousness and degree of urgency criteria in emergency activities, the survival rate has been further improving. This rate has increased between 2006 and 2007 within the plan period as a result of an increase in paramedic and expansion of the sequential treatment range (comprehensive defibrillation, tracheal cannulation, drug administration, etc.).



Source: Fire and Disaster Management Agency "Fire Service White Paper", Note) Annual Data

Transition of Maintenance Conditions of Emergency Response Centers (as of March 31 each year)

	2006	2007	2008	2009
Emergency Response Center (Number of Facilities)	189	201	208	214

(Source: Ministry of Health, Labor and Welfare: Health Policy Bureau investigation)

<From evaluation results of "Promotion of victim support including the appropriate damage compensation systems">

○Evaluation case relating to the "Promotion of victim support including the appropriate of damage compensation systems"
[Evaluation]

After the formulation of the Basic Plan for Crime Victims, etc as efforts are made to implement its measures, steady progress is visible including such as the realization of systems that are directly involved in the criminal case procedures of the victim participation system, etc. is visible. In addition, systems such as Automobile liability insurance systems continue to play a central role in victim relief.

<From evaluation results of "Augmentation of Research and Development and Study Activities">

○Evaluation case relating to the "Augmentation of research and development and study activities"
[Evaluation]

An investigative study was carried out regarding support of safe driving, traffic behavior attributes of the elderly, and road traffic accident factors, etc.

(2) Conclusion

When examining the number of traffic accident fatalities, in addition to achieving the goal of reducing the number of 24-hour fatalities to below 5,500 (and similarly reducing the number of fatalities within 30 days) in the third year of the program period, the effects from toughening severe punishments for drunk driving, improving the seatbelt user rate, and lowering the danger perceptual speed are conceivably large in terms of the reduction of the number of fatalities from 16.765 fatalities of so-called "traffic war" in 1970 to less than 1/3. Of course, not being limited to these results, the effects of a number of countermeasures such as the improvement of road traffic environment, dissemination and reinforcement of traffic safety messages, ensuring safe driving, ensuring vehicle safety, maintenance of road traffic order, and improvement of rescue and ambulance systems have also been demonstrated.

In addition, although the number of traffic accident injuries and fatalities has not necessarily been lowered by the seventh program period, the reduction is advancing in the Eighth Fundamental Traffic Safety Program period. The accomplishment of reaching the goal of "reducing the number of injuries and fatalities to below 1 million" in the third year of the eighth program period is noteworthy.

In this regard, it is conceivable that the effects from toughening severe punishments for drunk driving, improving road traffic environment though measures for danger areas, improving vehicle safety, improving the rate of seatbelt use, etc. have been contributory.

At the same time, the number of fatalities in 30 days per population of 100 thousand people caused by traffic accidents in Japan was 4.7 (2008), which ranked in sixth place after Iceland, the Netherlands, England, Sweden, and Switzerland (among data for 29 countries including in the International Road Traffic Accident Database (IRTAD)). In terms of the goal of "making Japan the safest country in road traffics", the goal has not been achieved entirely; the importance of promoting further traffic safety measures in the future is considerable.

In particular, further promotion is considered important for traffic safety measures for the elderly, pedestrians and bicycle users because of the proportion of elderly persons comprising the number of traffic accident fatalities and the increase of accidents where elderly persons are central players, the high proportion of pedestrians (33.4% in 2008) comprising the number of traffic accident fatalities, and the increasing trend in the proportion of bicycle-related accidents (21.2% in 2008) that comprise the number of traffic accidents.