

## Chapter 3 Achieving New Objectives

The objectives set in the 11th Traffic Safety Basic Plan and the measures that should be promoted in the future from the perspective of the three elements of traffic (people, vehicles, and traffic environment) will be introduced.

### 1. Objectives in the 11th Traffic Safety Basic Plan

#### Objectives

- (1) Aiming to realize “the world's safest road traffic,” the number of fatalities within 24 hours is to be reduced to 2,000 people\* or less. (\*Number of fatalities within 30 days: 2,400 people)
- (2) The number of serious injuries is to be reduced to 22,000 people or less.

#### The reasons for setting the objectives

- Multiplying the number of traffic accident fatalities within 24 hours per year (2,000 people) by the average ratio of the number of fatalities within 24 hours and the number of fatalities within 30 days (1.20) during the period from 2016 to 2019, we obtain 2,400 people.
- If the number of fatalities within 30 days is 2,400 per year, the number of fatalities within 30 days per 100,000 population is 1.96.
- The number of fatalities within 30 days per 100,000 population in Japan (3.29) is the eighth lowest among the 34 countries for which the International Road Traffic Accident Database (IRTAD) publishes data in 2018. However, if this objective is achieved, Japan will be the country with the lowest number of fatalities in the case that the situation of traffic accidents in other countries does not change significantly.
- The main objective of this plan is to reduce the number of fatalities. However, since efforts to prevent traffic accidents that result in serious injuries will also lead to a reduction in the number of fatalities, it was decided to set objectives related to serious injuries, which are life-threatening and have a high priority in this plan.
- With the development of advanced technology and emergency medical services, the damage caused by traffic accidents has been reduced, and there are many accidents that only result in serious injuries, even when they would have resulted in fatality in the past. For this reason, the goal value has been set in order to further focus on reducing the number of accidents with serious injuries that have a lasting impact on daily life

### 2. Perspective: People

#### Measures to ensure the safety of pedestrians

- Efforts to ensure pedestrian priority and correct crossing
  - Drivers should be thoroughly instructed on how to protect pedestrians by observing the obligation to give priority to pedestrians at crosswalks in traffic safety education at workplaces. In addition, drivers should be briefed on matters related to the protection of pedestrians at license renewal seminars.
  - Promote traffic enforcement against drivers that contributes to the protection of pedestrians who are crossing the road.
  - Regarding traffic safety education and guidance for pedestrians, promote traffic safety education that promotes traffic behavior to protect one's own safety.
  - Strive to properly maintain and manage road signs and road markings such as crosswalks.
  - Strive to maintain physical devices such as humps and narrow strips in appropriate locations.

#### (Safety measures for the elderly drivers)

- Amendment of the Road Traffic Act (introduction of driving skills tests, and limited licenses for "safe driving support vehicles", etc.)
  - Introduction of a driving skills test at the time of driver's license renewal for those who are 75 years of age or older and meet certain requirements.
  - The Prefectural Public Safety Commission may decide not to renew a driver's license based on the results of the driving skills test.
  - A person who has obtained a driver's license may apply to the Prefectural Public Safety Commission for attaching certain conditions to his/her driver's license, which include limitation to the eligibility of his/her driver's license only for driving vehicles with certain functions.

**Safety measures for fleet vehicles**

○ Safety Plan for Fleet Vehicles (Comprehensive Safety Plan for Fleet Vehicles 2025)  
 The "Comprehensive Safety Plan for Commercial Vehicles 2025" was formulated in March 2021.

- In addition to the number of fatalities (225 or fewer fatalities within 24-hours and zero passenger fatalities in buses and cabs) and the number of personal injury accidents (16,500 or fewer), reduction targets have been set for the number of serious injuries (2,120 or fewer) and accidents characteristic of each type of business.
- The Plan includes measures against drunk driving that continue to occur and health-related accidents, measures based on the development and spread of advanced technologies, accident prevention measures based on the strengthening of universal service coordination in a super-aged society. The Plan also includes safety measures in the changing business environment with the transition to a "new normal" due to the spread of COVID-19 infection and disasters that are becoming more severe and frequent.

**Measures against obstructive driving**

- Amendment of the Road Traffic Act (obstructive driving)
- Penalties for obstructive driving ("road rage") and basic points for it were established.
- Those who commit certain violations for the purpose of obstructing other vehicles, such as violating the prohibition of sudden braking or not maintaining a safe distance from other vehicles, will be punished by imprisonment for not more than five years, and will also be subject to revocation of their driver's license, making it possible to remove malicious and dangerous drivers from the road traffic more effectively.

**Maintaining traffic order for bicycles**

- **Traffic enforcement against bicycle users**
- The police actively give warnings to bicycle users who commit traffic violations such as riding without lights, double riding, disregarding traffic signals, and not stopping at designated places. In addition, against malicious or dangerous bicycle users who do not follow such warnings and continue to violate the law, or who cause a specific hazard to passing vehicles or pedestrians through their violations, the police make an arrest by measures are applied using traffic tickets and so on.



**Traffic accident prevention measures for bicycle delivery workers**

- **Traffic accident prevention measures for bicycle delivery workers**
- Conduct safety seminars and participative, hands-on and practical traffic safety classes using bicycle simulators for bicycle delivery workers and promote awareness of basic traffic rules and manners.
- Encourage related bodies and businesses to conduct traffic safety education and public relations and enlightenment activities, such as distributing e-mails to bicycle delivery workers regarding compliance with traffic rules and holding traffic safety seminars.

Topics: Measures to prevent traffic accidents in the delivery of food and beverages by bicycle and motorized bicycle.

**Training of transportation volunteers**

Topics: Community-based volunteer transportation activities

**[Support for victims of traffic accidents**

- Support for people with severe residual disabilities

**to all delivery workers** working in food and beverage delivery services using a bicycle and a motorized bicycle

**To prevent road traffic accidents during delivery**

Do you know about road traffic accidents during delivery service operations? Demand for restaurant delivery services is increasing to prevent the spread of the COVID-19. Under such circumstances, road traffic accidents during delivery services have recently been well covered in the news.

Have you ever been involved in a near accident?

**Analysis of road traffic accidents during restaurant delivery service\***

Age Group	Percentage of those involved in road traffic accidents during delivery operations	Percentage of those involved in road traffic accidents during delivery operations
Age 19 or younger	17%	12%
Age 20-29	43%	18%
Age 30-39	32%	2%
Age 40-49	8%	2%

**Road traffic accident cases:**

- Crossing collisions (often caused by failing to stop)
- Slip accidents on the road (especially at night or in the rain)
- Falling accidents caused by sudden braking
- Inappropriate operation due to being distracted by a smartphone
- Collision with an oncoming light-turning vehicle while proceeding straight ahead at an intersection

**If you have a traffic accident, you may...**

- Be unable to work due to medical treatment;
- Have a lifelong disability or even die; or
- Have to pay compensation to the other party of the accident.

\* To avoid traffic accidents. See the back page.

### 3 Perspectives: Vehicle

#### Ensuring the safety of vehicles

##### ○ Safety Support Cars

As a safety measure for elderly drivers, promote vehicle safety measures have been promoted to improve the performance of Safety Support Cars and accelerate the spread of them.

A subsidy for the purchase of Safety Support Cars (suppocars) equipped with safe driving support systems has been established for elderly drivers aged 65 and over.

In order to promote and raise awareness of suppocars, the portal site and guidebook for prevalence of suppocars have been renewed, and the suppocar poster contest for elementary school students has been held to promote and raise awareness of suppocars.

The installation rate of the safety driving support system:

(Adaptation rate of advanced emergency braking systems: 1.4% in 2011 → 93.7% in 2019)

Topics: Advanced Safety Vehicles (ASV)

##### ○ Use of drive recorders and event data recorders

- Use in investigations of traffic accidents
- Dissemination of drive recorders.

##### ○ Promotion of the use of the Help system for Emergency Life saving and Public safety (HELP)

##### ○ Efforts for safety measures and technological advancement of vehicles

Topics: Public-Private ITS Initiative and Roadmap

### 4 Perspective: Transportation environment

#### Development of safe and secure walking space with priority given to pedestrians on community roads

##### ○ Road Policy Vision "2040 Vision for Roads in Japan"

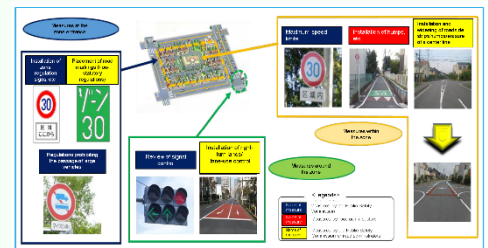
- One of the visions of the society to be achieved is "A society where everyone can move, interact and participate in society freely, no matter where they are located in Japan". In order to achieve this, the objective of "Zero road accidents" is set as one of the policy directions.
- The objective is to create a living space with no road accidents by developing universal design roads that allow people and vehicles to share space while they can move and stay safely and comfortably.



Safe and comfortable community road

##### ○ Measures to ensure the safety of community roads through Zone 30 and physical devices, etc.

- In order to ensure the safe passage of pedestrians on community roads, certain zones have been set up to regulate the maximum speed of 30km/h, and roadside strips have been installed and widened.
- In order to increase the effectiveness of the regulations, community road development measures such as the installation of physical devices (humps, narrow strips and so on) have been promoted.



##### ○ Traffic enforcement using portable automated speed cameras

In order to ensure that enforcement can be carried out even on community roads where it is difficult to secure enforcement locations and during hours when it is difficult to deploy police officers, portable automated speed cameras have been installed and expanded. In doing so, appropriate traffic guidance and enforcement on community roads where there is a lot of traffic among children have been promoted.

[Topic: Ensuring the safety of routes where children, especially preschool children, travel in groups on a daily basis].

Topics: Distinctive traffic safety measures in communities

- Toyota City, Aichi Prefecture: "Establishment of both Zone 30 and Kids Zone", etc.

#### Securing and improving means of transportation for the elderly

- Formulation of community public transportation plan
- Promotion of MaaS
- Last mile automated driving

Topics: Global situation regarding road traffic safety



## Chapter 4. Outline of the 11th Traffic Safety Basic Plan

\* The main text of the White Paper provides an overview in written form.

### Outline of the 11th Traffic Safety Basic Plan

- Outline of comprehensive and long-term policies relating to traffic safety issues in accordance with the g the Basic Act on Traffic Safety Measures(Act No.110 of 1970)
- Plans for the safety of road traffic, railway traffic, traffic at railway crossings, marine traffic, and air traffic.
- The term period for this Basic Plan: Five years from FY 2021 to FY 2025

#### Basic Principles of the Plan

- As there is a strong demand for the realization of a society that supports child-rearing as well as appropriate measures for the aging of the population, traffic safety initiatives that meet the needs of the times are required.
- On the principle of respect for human life, and taking into account the huge social and economic losses that traffic accidents cause, our ultimate aim is to achieve a society with no traffic accidents. [Achieving a Society with No Traffic Accidents]
- It is necessary to further ensure the safety of vulnerable people such as the elderly, people with disabilities, and children in all forms of transportation. A society free from traffic accidents is also a society in which vulnerable people can become socially independent. Conduct all measures based on a Traffic Safety Concept of "Prioritizing People". [Traffic Safety Concept of Prioritizing People]
- We will build a society where people can move safely even as they grow older, enjoy moving with peace of mind, and lead rich lives, and a "Cohesive Society" where people can live safely and with peace of mind regardless of age or disability. [Building a Society that Enables Safe Movement even as the Population Ages]

### Chapter 1: Road Traffic Safety (Objectives, Perspectives of measures, Key areas of measures)

#### Objectives

- (1) Aiming to realize "the world's safest road traffic," the number of fatalities within 24 hours is to be reduced to 2,000 people\* or less. (\*Number of fatalities within 30 days: 2,400 people)
- (2) The number of serious injuries is to be reduced to 22,000 people or less.

#### Perspectives of measures

- |   |   |  |
|---|---|--|
| (1) Securing the traffic safety of the elderly and children | (2) Securing the safety of pedestrians and bicycle users and improving their awareness of compliance with the law | (3) Securing the safety on community roads                             |
| (4) Promoting the use of advanced technologies              | (5) Promoting detailed measures based on actual traffic conditions  | (6) Promoting traffic safety measures in which the community is united |

#### Key areas of measures

- |  |   |   |  |
|--|---|---|--|
| (1) Improving the road traffic environment | (2) Comprehensively implementing traffic safety awareness initiatives | (3) Securing safe driving   | (4) Ensuring vehicle safety            |
| (5) Maintaining road traffic order         | (6) Enhancing rescue and emergency services systems                   | (7) Promoting victim support, including the appropriate compensation system | (8) Enhancing R&D and study activities |

### Chapter 2 Railway Traffic Safety

Objectives, Perspectives of measures, Key areas of measures

#### Objectives

- (1) The number of passenger fatalities is to be reduced to zero.
- (2) The overall number of fatality accidents during operations is to be reduced.

#### Perspectives of measures

- (1) Preventing serious train accidents
- (2) Utilizing lessons learned from past accidents

#### Key areas of measures

- (1) Improving the railway traffic environment
- (2) Dissemination of knowledge about the safety of rail traffic
- (3) Securing safe railway operation

### Chapter 3 Traffic Safety at Railway Crossings

Objectives, Perspectives of measures, Key areas of measures

#### Objectives

The number of accidents at railway crossings is to be reduced by 10% compared to 2020 by 2025

#### Perspectives of measures

Promoting effective measures that consider the conditions of each level crossing

#### Key areas of measures

- (1) Promoting replacement of railway crossings with grade-separated crossings, structural improvements, and improvement of grade separation facilities for pedestrians
- (2) Improving level crossing maintenance facilities and implementing traffic regulations
- (3) Promoting streamlining of railway crossings

### Chapter 4 Maritime Traffic Safety

Objectives, Perspectives of measures, Key areas of measures

#### Objectives

- (1) The number of marine vessels accidents occurring in Japan is continuously to be reduced by approximately 50% (or approximately 1,200 vessels or less) by 2029, in comparison to the annual average of the 9th Program period (2,256 vessels). The number of marine vessels accidents in Japan is to be reduced to 1,500 or less by 2025.
- (2) The occurrence of large-scale maritime accidents in the "congested waters," which cause significant social impact such as routes obstruction is to be reduced to zero.
- (3) The rate for the number of rescued people to the number of rescue-required people which encountered maritime accidents: 95 percent or higher

#### Perspectives of measures

- (1) Preventing accidents due to human error
- (2) Preventing large-scale maritime accidents in the "congested waters"
- (3) Preventing accidents on passenger ships
- (4) Enhancing the systems for prompt lifesaving and measures for self-protection

#### Key areas of measures

- (1) Improving the maritime traffic environment
- (2) Disseminating knowledge on maritime safety

### Chapter 5 Air Traffic Safety

Objectives, Perspectives of measures, Key areas of measures

#### Objectives

- (1) The fatal accident rate and total loss accident rate are to be reduced to zero for scheduled flights operated by domestic air carriers.
- (2) Twenty-one performance indexes related to the air traffic accident rate, serious incident rate, etc., are to be reduced by approximately 17% over five years.

#### Perspectives of measures

- (1) Deepening and sophisticating aviation safety measures
- (2) Promoting response to increased demand for air services and maintenance and improvement of safety
- (3) New developments in safety administration due to new technologies and industry growth

#### Key areas of measures

- (1) Further promoting the aviation safety program
- (2) Ensuring safe operation of aircraft
- (3) Improving the air traffic environment

Title 1, Part 1, Chapter 1: Road Traffic Accident Trends

### Road Traffic Accident Conditions during 2020

● Overall Condition	
○ Number of accidents:	309,178 accidents (- 72,059 accidents, - 18.9 % over the previous year)
○ Number of casualties:	372,315 people (- 92,675 people, - 19.9 % over the previous year)
○ Number of injuries:	369,476 people(-92,299 people, -20.0% over the previous year)
○ Number of serious injuries:	27,774 people(-4,251 people, -13.3% over the previous year)
○ Number of fatalities (within 24 hours):	2,839 people(- 376 people, - 11.7 % over the previous year)
○ Number of fatalities (within 30 days):	3,416 people(- 504 people, - 12.9 % over the previous year)

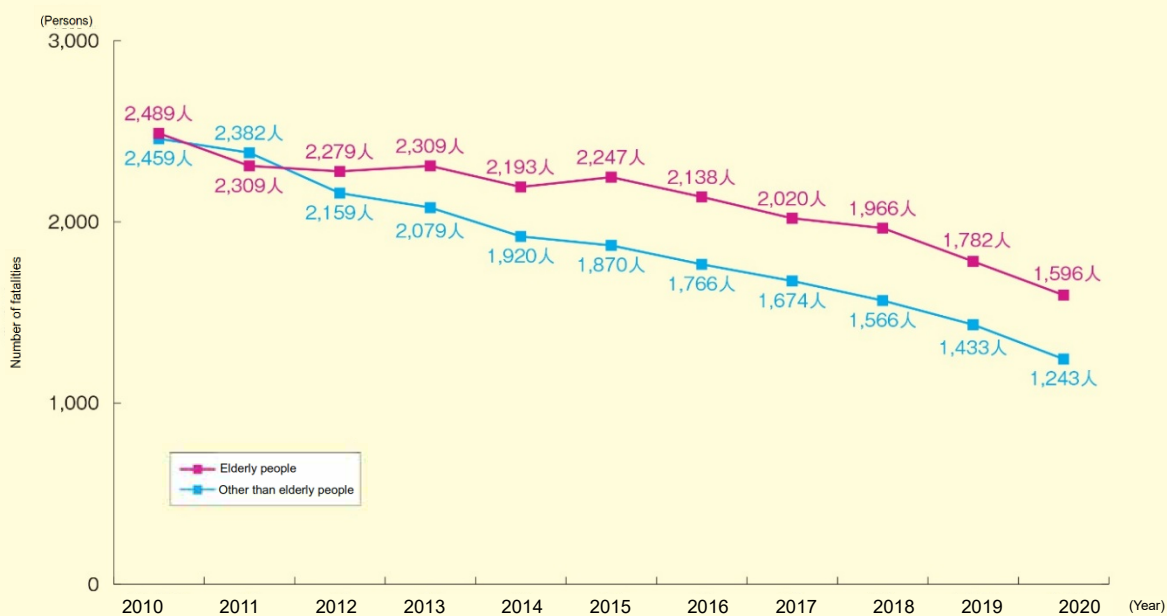
Objectives in the 10th Traffic Safety Basic Plan (covering 2016 to 2020)

- Reduce the number of fatalities within 24 hours to 2,500 people or less per year by 2020.
  - Reduce the number of the casualties to 500,000 people or less per year by 2020.
- \* The Basic Act on Traffic Safety Measures was established in 1970 and the Traffic Safety Basic Plan was formulated every 5 years based on the Act since 1971.

### Number of traffic accident fatalities of elderly people

Although the number of traffic accident fatalities of elderly people per a population of 100,000 people has continued to decrease, the number of elderly people among people killed in traffic accidents was 1,596 people, which is still high at 56.2%.

▶ Chart 1-1 Trends in traffic accident fatalities of elderly people and others



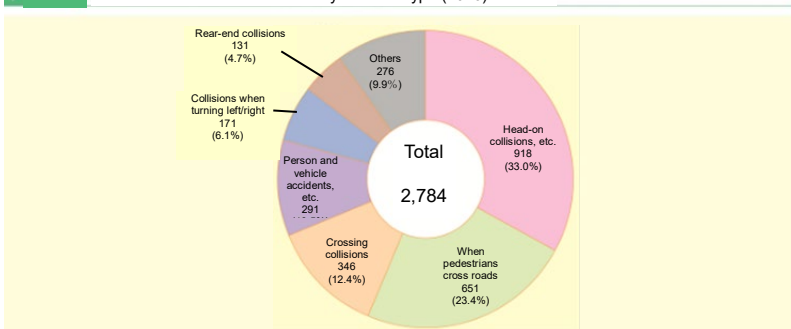
Note  
Source: National Police Agency

## Occurrence of fatal traffic accident by type of accident

Looked by type of accident in 2020 the most common type of accidents was “Head-on collisions, etc.” \* (918, with the component ratio of 33.0%), followed by “When pedestrians cross roads” (651, with the component ratio of 23.4%), “Crossing collisions” (346, with the component ratio of 12.4%). These three types accounted for 68.8% of fatal accidents.

\* Head-on collisions. etc.  
 Includes accidents of a similar cause such as leaving the road and driving into objects.

Chart 1-3 Number of fatal traffic accidents by accident type (2020)

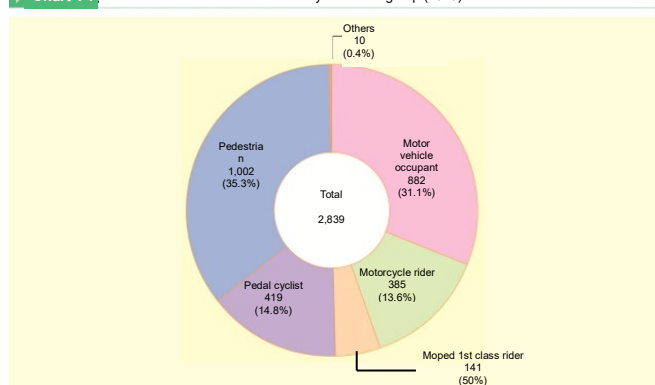


- Note
1. Source: National Police Agency
  2. “Person and vehicle accidents, etc.” means accidents between vehicle and person excluding “When pedestrians cross roads.”
  3. “Head-on collisions, etc.” means head-on collisions, road departure and hitting objects.
  4. The figure in the bracket ( ) shows the component ratio.

## Number of traffic accident fatalities by road user group

The number of traffic accident fatalities is the highest pedestrian (1,002 with the component ratio of 35.3%) followed by motor vehicle occupant (882 with the component ratio of 31.1%) and the sum of both accounts for 66.4% of the total.

Chart 1-7 Number of traffic accident fatalities by road user group (2020)

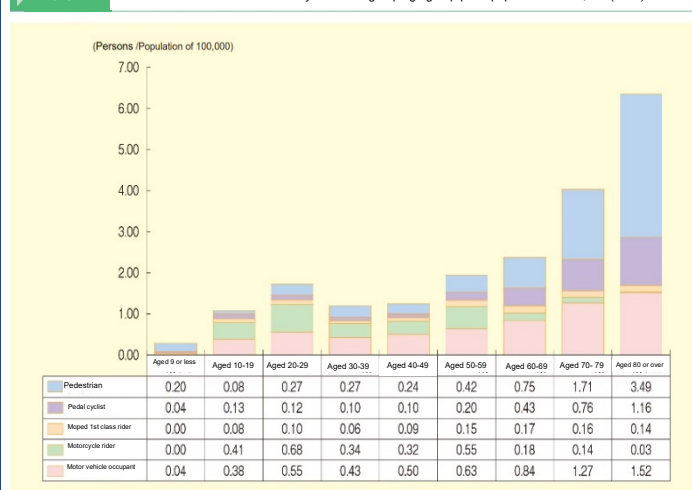


- Note
1. Source: National Police Agency
  2. The figure in the bracket ( ) shows the component ratio.

## Number of traffic accident fatalities by age group and by road user group

The number of pedestrians killed in pedestrian (per a population of 100,000) is numerous in elderly people, and in particular, that of elderly people older than 80 years (3.49 people) is about four times higher than that of all age groups (0.79 people).

Chart 1-14 Number of traffic accident fatalities by road user group/age group per a population of 100,000 (2020)



- Note
1. Source: National Police Agency
  2. The population used for the calculation is based on statistical data “Population Estimate” (as of October 1st, 2019) by the Ministry of Internal Affairs and Communications.

## Title 1, Part 1, Chapter 2: Overview of Current Road Traffic Safety Measures

### Improvement of road traffic environment

○ **Development in pedestrian-first walking spaces offering safety and security on community roads**

In order to secure the safe passage of pedestrians and bicycle users, low speed regulations such as the “Zone 30” (4,031 areas by the end of FY 2020) in which a maximum speed of 30 kilometers per hour and other safety measures including those implemented in cooperation with road administrators were taken were introduced in areas of community roads. In the Zone 30 (3,649 areas) which had been developed by the end of FY 2018, the occurrence status of traffic accidents between the year before the development and the year after development was compared and it was found that the number of traffic accidents and the number of accidents involving pedestrians and bicycles decreased (by 23.9% and by 19.6%, respectively), by which it was confirmed that these measures were effective in preventing traffic accidents and reducing through-traffic speed of vehicles within the Zone.

○ **Use of Intelligent Transport Systems**

We are continually promoting the development and deployment of “Intelligent Transport Systems” (ITS) which is a new road transport system designed to build an integrated system consisting of people, road and vehicle by using the latest information and communication technology (ICT). For this reason, based on the “Declaration to be the World’s Most Advanced Digital Nation and Basic Plan for the Advancement of Public and Private Sector Data Utilization” decided by the Cabinet in July, 2020, we did not only promote further R&D, field tests, review for the development, diffusion and standardization of infrastructures, etc., through joint cooperation by industry, government and academia, but also promoted international cooperation actively, including international information exchange, international standardization, at international conferences.

### Dissemination and reinforcement of traffic safety

○ **Promotion of stepwise and systematic traffic safety education**

We conducted stepwise and systematic traffic safety education to people of all ages from infants to adults in accordance with their mental and physical development and life stages based on the Traffic Safety Education Guidelines (Public Notice of National Public Safety Commission No. 15 of 1998). In particular, we not only enhanced the elderly’s traffic safety awareness but also strengthened education for other generations to protect and consider the elderly through understanding their characteristics in this rapidly aging society. In addition, considering the fact that elementary, junior high and high school students are members of the traffic society and a significant number of them frequently use bicycles, we made efforts to enhance education on the basic road traffic rules for bicycle users, traffic safety awareness and traffic manners.

### Ensuring safe driving

○ **Promotion of measures for elderly drivers**

It is mandatory for elderly drivers aged 70 or over upon the expiration date of their driver’s licenses to undergo senior driver training within six months before the date upon which their new license expires. A total of 3,255,050 elderly people attended the courses in 2020.

In addition, it is mandatory for those who are aged 75 or over upon the expiration date of their driver’s licenses to undergo cognitive assessment within six months before the date. The police set three-hours training for elderly who were determined as the people who may have dementia or cognitive dysfunction as the result of the cognitive assessment, which is involving individual guidance using images of their driving conditions recorded by the drive recorder. The rest of them need to take two -hours course. A total of 1,882,776 people took the cognitive assessment in 2020.

Considering the fact that the reduction of waiting times before cognitive assessment or senior driver training has been regarded as a problem in some prefectural, cognitive assessment and senior driver training, which is outsourced to driving schools in most cases, are implemented by the prefectural police directly and consultation services for elderly drivers are expanded for ensuring appropriate and smooth implementation of them.

### Ensuring vehicle safety measures

○ **Promotion of the development and diffusion of advanced safety vehicles (ASV) including automated driving technologies that contribute to safety**

In order to promote the development, practical application and diffusion of advanced safety vehicles (ASV), we set the goals of developing and commercializing advanced safety technologies required for realizing automated driving in the 6th ASV Promotion Project started from FY 2016. Under this Project, we examined strategies to fully diffuse the ASV technologies that have been put into practical application and the technical requirements of Emergency Driving Stop System, such as evacuation of a vehicle to road shoulder, under a joint cooperation of industry, government and academia. On December 11, 2020, in order to prevent drivers from falling asleep or driving sideways, we published guidelines for a "driver monitoring system" that monitors the driver's wakefulness and other factors, and issues an alarm when an abnormality is detected.

## Title 1, Part 2, Chapter 1: Railway Traffic Accident Trends

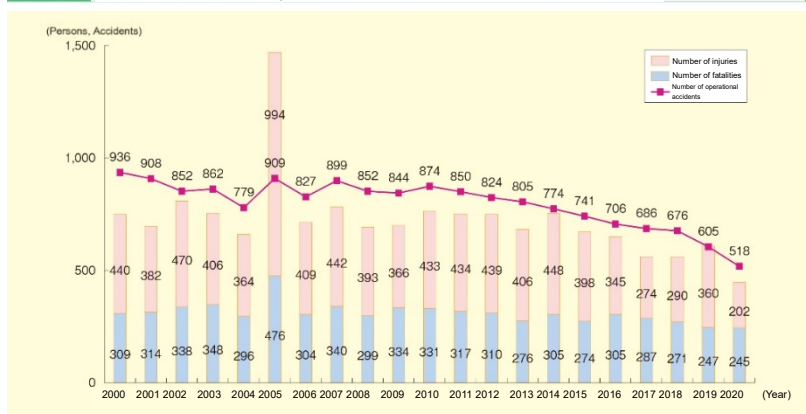
The number of operational railway accidents\* has been in a long-term decline. There were 936 accidents in 2000 and the number fell to 874 in 2010, 518 in 2020, a decrease of 14.4% compared to the previous year.

The number of fatalities in operational railway accidents was 245 people, a decrease of 0.8% compared to the previous year and the number of fatalities of passengers was none.

**\* Operational railway accidents**

Operational railway accidents include train collision accidents, train derailment accidents, train fire accidents, railway crossing accidents, road impediment accidents, railway accidents causing injury or death and railway accidents causing property damage. Incidentally, operational accidents regarding streetcars are treated as operational railway accidents.

▶ Chart 1-40 Trends in the number of operational accidents and the number of casualties



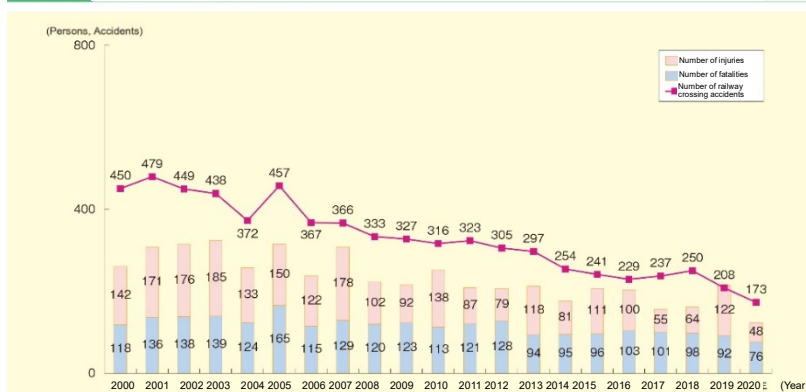
Note  
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism  
 2. The number of fatalities was registered within 24 hours after accidents.

Railway crossing accidents\* have been in a decreasing trend in the long run due to the development of safety facilities at railway crossings, etc. There were 173 accidents in 2020, a decrease of 16.8% compared to the previous year, while the number of fatalities due to railway crossing accidents was 76 people, a decrease of 17.4% compared to the previous year.

**\* Railway crossing accidents**

Railway crossing accidents include train collision accidents, train derailment accidents and train fire accidents that occur at a railway crossing and the accidents in which a train or rolling stock collide or come into contact with a person or automobile passing through a railway crossing.

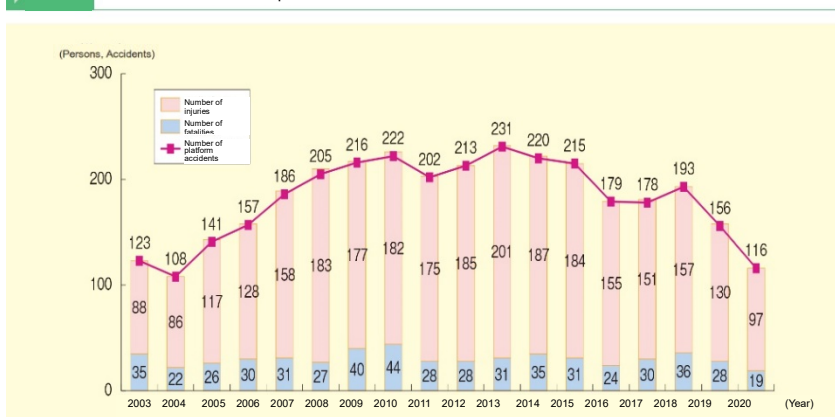
▶ Chart 1-41 Trends in the number of railway crossing accidents and the number of casualties



Note  
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism  
 2. The number of fatalities was registered within 24 hours after accidents.

The number of railway accidents causing injury or death in 2020 was 310, a decrease of 10.4% compared to the previous year, while the number of fatalities was 168 people, an increase of 9.8% compared to the previous year. The number of railway accidents causing injury or death in 2020 by falling from the platform, or by being brought into contact with a train (platform accidents) was 116, a decrease by 40 (25.6%) compared to the previous year, while the number of fatalities in platform accidents was 19 people, a decrease by nine people (32.1%) compared to the previous year.

▶ Chart 1-43 Trends in the number of platform accidents and the number of casualties



Note  
 1. Source: Ministry of Land, Infrastructure, Transport and Tourism  
 2. The number of fatalities was registered within 24 hours after accidents.



## Title 1, Part 2, Chapter 2: Overview of Current Railway Traffic Safety Measures

### Improvement of railway environment

○ **Strengthening countermeasures against torrential rain at railway facilities.**

Torrential rain countermeasures have been promoted to deal with the torrential rain damage occurring in recent years with increased frequency and ferocity. These measures include preventing railway bridges over rivers from being washed away and defending against landslides from slopes near railway lines.

○ **Promotion of measures to improve safety at station platforms**

In order to improve the safety at station platforms, we are promoting both hardware and software measures to prevent people from falling from a station platform, such as the advancement of the platform door installation schedule and guidance by station staff. Of these, our goal was to install platform doors at about 800 stations by FY2020, and as of the end of FY2019, 858 stations had been equipped with platform doors, achieving the goal ahead of schedule. In addition, at stations without platform doors, a study group was held to examine measures to prevent visually impaired people from falling from a station platform using IT and sensing technology, and necessary measures are being taken based on the results of the examination.

### Dissemination of knowledge about the safety of railway traffic

In addition to conducting campaigns to prevent accidents at railway crossings using posters and others, dissemination of knowledge and awareness-raising on the manner to safely cross railway crossings and on the prevention of railway accidents were conducted for schools, residents along the railway tracks and road transport operators among others.

Furthermore, the railway operators in the Tokyo metropolitan area have come together positively work on PR activities for the “zero platform accidents” campaign to raise awareness about preventing accidents involving intoxicated passengers, and have tried to spread correct knowledge about railroad safety.

### Ensuring the safe operation of railways

○ **Improvement and use of meteorological information**

Measures such as the development of a weather monitoring system were taken to prevent accidents and mitigate damage by accurately monitoring natural phenomena that affect railway traffic and issuing and communicating forecasts and warnings in a timely and appropriate manner, and to enhance the content and effective use of such information. Earthquake Early Warning is provided to railroad operators so that they can use it to prevent the damage of rolling stock falling over by reducing the speed of or halting trains when an earthquake strikes.

○ **Appropriate response in cases of large-scale accident occurrence**

In order to cope with emergency situations such as a large accident or a disaster, procedures were taken to check and validate the emergency contact system at night and on a holiday, which enables the establishment of contact with relevant persons in the government and railway operators in a quick and appropriate manner.

In addition, railway operators were instructed to provide information appropriately to railway users and establish systems to quickly restore services in case of accidents including transportation failure with a view to reducing social impact in major cities and trunk railway lines. Regarding the protection of railways against tsunami, response guidelines for keeping railway passengers safe in times of tsunami based on the key concept of evacuation from the largest possible tsunami ever, such as one that could be caused by Nankai Tough megaquakes (that is, the prompt evacuation is the most effective and most important response, for example), have been worked out, along with specific examples of such evacuation, to encourage the railway operators drive their respective approaches.

### Measures for traffic safety at railway crossings

○ **Current status of measures for prevention of accidents at railway crossings**

In FY 2020, we designated additional 51 railway crossings to be improved based on the Act on Promotion of Railway Crossings. With the existing 1,129 locations designated in FY 2019, the total number of designated railway crossings reached 1,180 locations. Regarding the designated railway crossings, we held meetings to improve regional railway crossings sequentially and road administrators and railway operators agreed to promote further measures for railway crossings in accordance with regional conditions.

In addition, the number of railway crossings which were improved in FY 2019 including those designated in the past and those voluntarily improved by road administrators and railway operators was 17 (grade separation), 316 (structural improvement) and 32 (improvement in railway crossing security facilities). Moreover, streamlining of railway crossings were performed in conjunction with grade separation project, etc.