

FY 2018

Situation of Road Traffic Accidents and Current  
State of Traffic Safety Measures

FY 2019

Plans Regarding the Traffic Safety Measures  
(Outline)

June, 2019  
Cabinet Office

This White Paper on Traffic Safety reports on the status of traffic accidents, the current situation of Traffic Safety Measures in FY2018 and FY2019 Plans for Traffic Safety Measures that should be implemented pursuant to the provisions of Article 13 of the Traffic Safety Policies Basic Act (Act No. 110 of 1970).

**About the White Paper on Traffic Safety**

**This White Paper on Traffic Safety is an annual report to be submitted to the National Diet pursuant to the Traffic Safety Policies Basic Act. This year's White Paper is the 49th edition.**

Traffic Safety Policies Basic Act

Article 13: The Government must submit an annual report on the status of traffic accidents, plans for traffic safety measures and outlines of traffic safety measures conducted by the Government, to the National Diet.

**White Paper on Traffic Safety**

**Special Feature**

**Special Feature: Trajectory of Traffic Safety Policies: Towards a Society with Zero Traffic Accidents (outline)**

**FY2018 Situation of Traffic Accidents and Current Situation of Measures for Traffic Safety**

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**FY 2019 Plans of Measures Regarding Traffic Safety**

**Part 1 Measures Regarding the Safety of Land Transport**

Chapter 1 Measures Regarding Road Transport Safety

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**Part 3 Measures Regarding Air Transport Safety**

**Topics**

## Special Feature: Trajectory of Traffic Safety Policies: Towards a Society with Zero Traffic Accidents (outline)

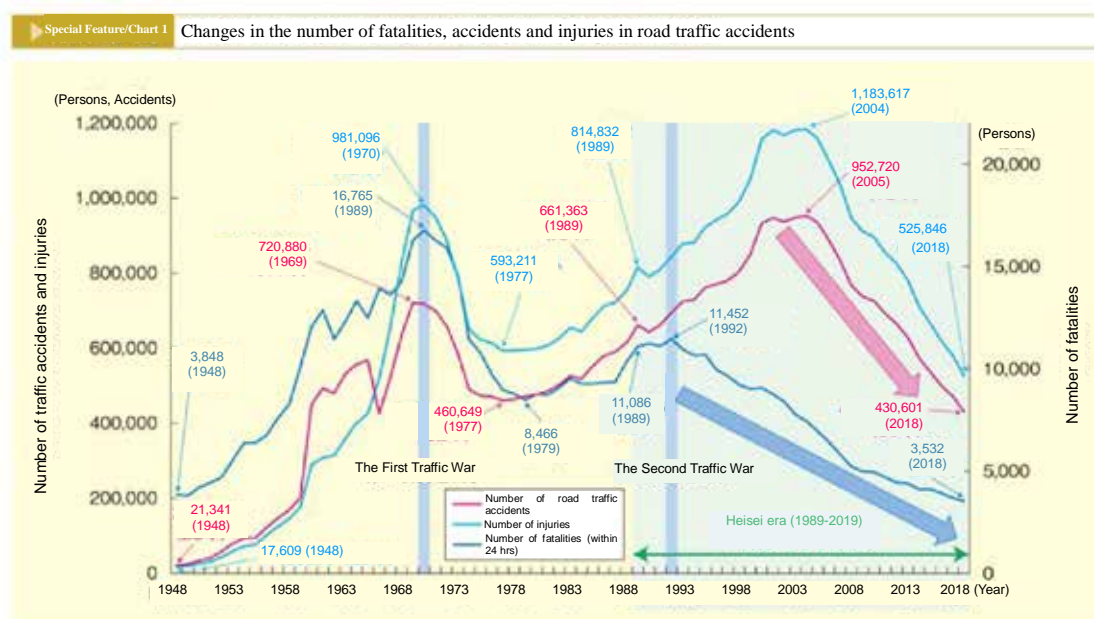
The number of traffic accident fatalities in 2018 was 3,532, which is approximately one fifth of the worst number, in 1970 (16,765). Over the 30 years of the Heisei era from 1989 to 2019, the number of fatalities significantly decreased, by over two thirds and the second half of the Heisei era, in particular, saw a dramatic fall in the number of traffic accidents, which was achieved through the efforts made by the relevant ministries and agencies, related organizations, groups and private sector companies, as well as the daily action taken for traffic safety at local level.

### Chapter 1 Trajectory of the Traffic Safety Policies and the Decrease in Traffic Accidents

#### 1. The two “Traffic Wars” and the policies prior to the Heisei era

Until around 1970, the mileage of cars increased together with growing car ownership and the progress of road development. With an insufficient number of traffic lights, the number of traffic accident fatalities rose substantially, in what was referred to as “the traffic war.” The Traffic Safety Measures Basic Act was established in 1970 and traffic accident countermeasures were taken nationwide, leading to a fall in the number of accidents.

However, from around 1980, the number of traffic accident fatalities again increased, reaching 11,452 deaths in 1992, the so-called “second traffic war,” due partly to an increase of young drivers, as the second baby boomers reached the age at which they could acquire driving licenses.



Note:

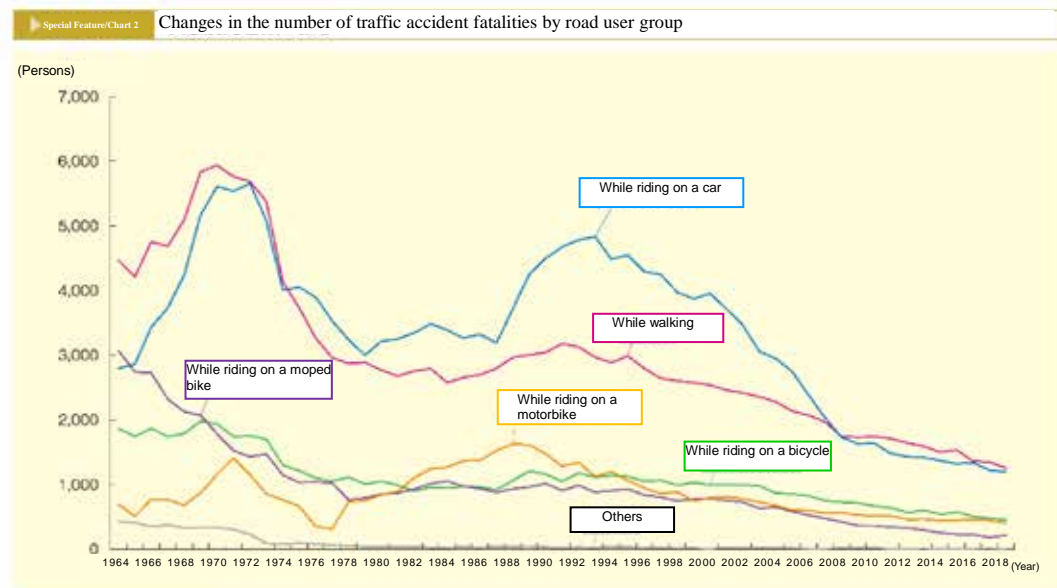
1. Source: National Police Agency
2. Data for 1959 and all preceding years do not include minor damage (incidents in which the injured required less than eight days' medical treatment and physical damage amounted to 20,000 yen or less).
3. Data for 1966 and all following years do not include property damage-only accidents.
4. Data for 1971 and all preceding years do not cover Okinawa Prefecture.

#### 2. Traffic safety policies in the Heisei era: after the “second traffic war”

##### 1 Seeking to reduce traffic accidents in the first half of the Heisei era from 1989 to 2004

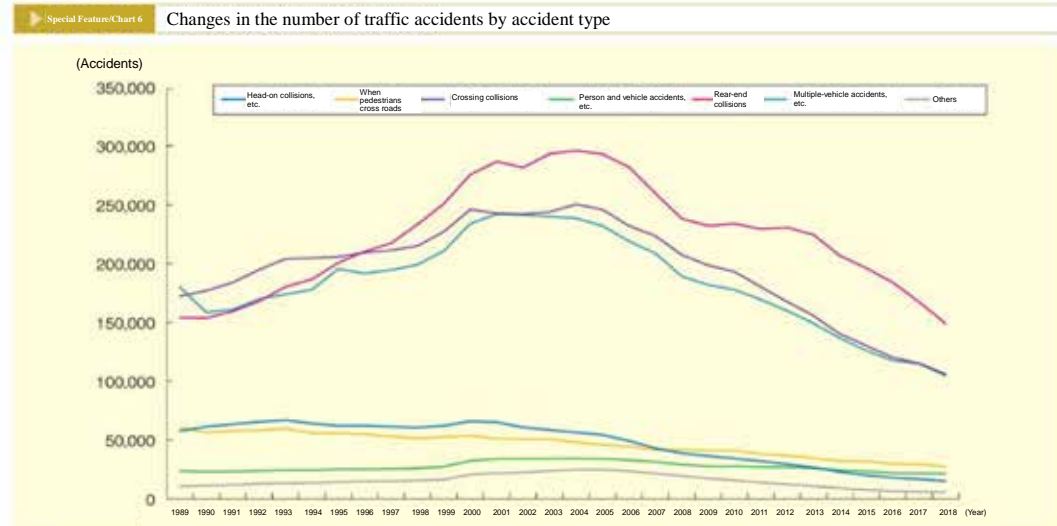
Since 1992, the number of traffic accident fatalities started to decline again, thanks particularly to the progress in the seat belt wearing rate from 1993, and improvement of car safety including more or less standard introduction of airbags and automatic braking systems (ABS), while the number of injuries increased to peak for the second time in 2004, together with the rise of car ownership and mileage growth.

During this period, there was a rise in vehicle-related accidents compared to those occurring while riding on a motorbike or while walking.



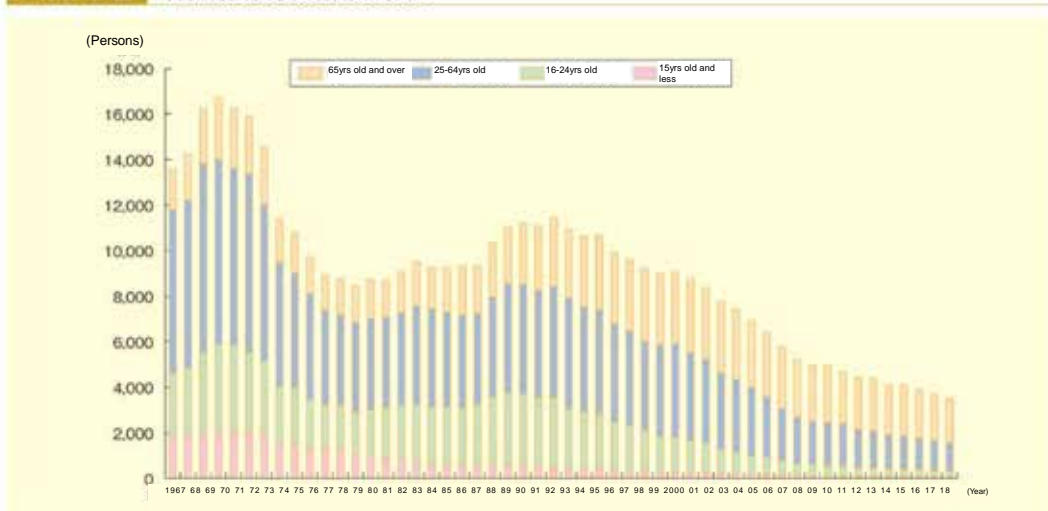
Note:  
 1. Source: National Police Agency  
 2. Data for 1971 and all preceding years do not cover Okinawa Prefecture.  
 3. "Moped bike" means motorcycles with an engine no larger than 50cc.

**I The second half of the Heisei era-2005 onwards: steady reduction of traffic accidents**  
From the year 2004 onwards, the numbers of both traffic accidents and injuries started to decline, in line with the number of fatalities that was already on the decline. They fell below 5,000 in 2009 and below 4,000 in 2016 (the 2018 figure of 3,532 was the lowest since 1948). Rear-end collisions and crossing collisions, which had both been on the increase, started to fall from 2004 onwards. During this period, vehicle mileage started to decline, and the number of fatalities caused by drunk-driving dropped to one sixth from 1998 to 2018, thanks to the increased severity of the punishments. It should also be noted that in the year 2010, the share of elderly among the number of traffic accident fatalities accounted for over 50% for the first time.



Note:  
 1. Source: National Police Agency  
 2. "Head-on collisions, etc." means head-on collisions, road departure and hitting objects.  
 3. "Multiple-vehicle accidents, etc." means multiple-vehicle accidents excluding head-on collisions and crossing collisions.  
 4. "Person and vehicle accidents, etc." means accidents between vehicle and person excluding "When pedestrians cross roads."  
 5. "Others" means collisions with parked vehicles, turnover, single vehicle accidents and collisions with trains).

Special Feature/Chart 4 Changes in the number of traffic accident fatalities by age group



Note:  
 1. Source: National Police Agency  
 2. Data for 1971 and all preceding years do not cover Okinawa Prefecture.

### Road traffic safety and major reforms to the Road Traffic Act and the Penal Code

Efforts to strengthen measures against bad or dangerous drivers including countermeasures against drunk-driving

Two tragic traffic accident fatalities caused by drunk-driving in 2001 led to partial amendments to the Penal Code, which defined the new categories of the crime of vehicular homicide, followed by further reforms:

- In 2002, the punishments and number of driver penalty points were increased for drunk-driving, driving while overworked, and unlicensed driving.
- In 2007, behavior that may lead to drunk-driving became liable to direct legal punishment and the penalties made stricter, while partial amendments were made to the Penal Code: the new crime category of negligent driving resulting in injury or death.

### Fundamental Traffic Safety Program: the six fundamental programs and road traffic safety

The 4th, 5th and 6th Programs for the period of the late 1980s and early 1990s, raised the problems of elderly drivers, nighttime accidents and the use of mobile phones.

The 7th Program covering 2001 to 2005, the first program formulated after the reorganization of the central government ministries and agencies, referred also to development and promotion of Advanced Safety Vehicles, In addition to the problems of increasing numbers of elderly drivers, insufficient seatbelt wearing, and the increase in nighttime traffic resulting from round-the-clock lifestyles spreading among the public.

The 8th Program (covering 2006 to 2010), the first program, formulated after the population started to fall into decline, set “people first” as the goal of road safety, which has been defined as well in the succeeding 9th and 10th programs. The subtitle of “achieving a society with no traffic accidents” has been shared within the recent three programs. The 10th Program (covering 2016 to 2020) identifies “promoting the use of advanced technologies” as one of its three basic principles.

## Chapter 2 Traffic Safety from the Perspectives of Population, Vehicles and Roads

### 1. Changes in population and society

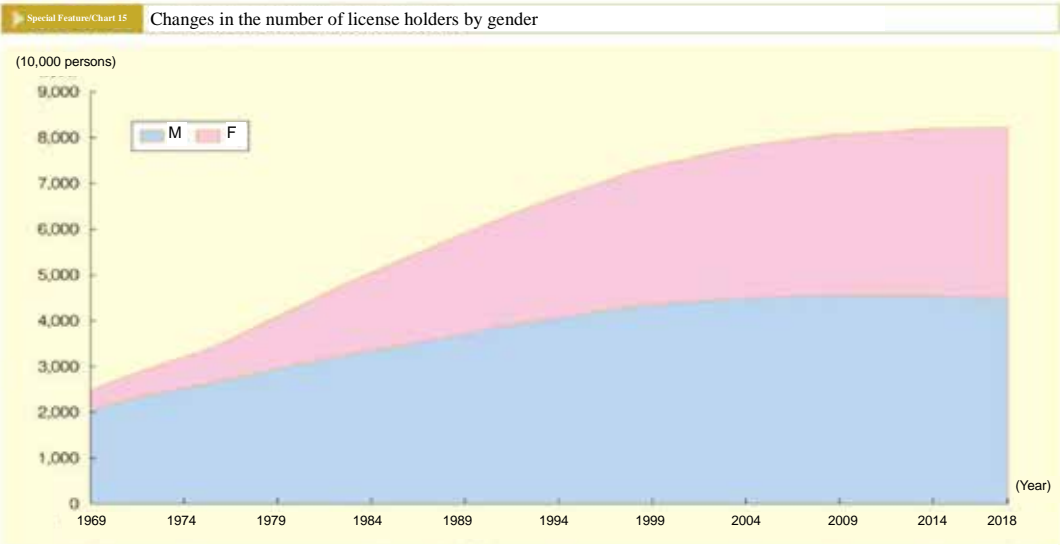
#### 1 Changes in the number of driver’s license holders

Over the past 30 years, the number of population holding driver’s licenses increased by over 20 million. The number of young drivers declined to one third of that of 30 years ago, while that of elderly drivers increased by ten times.



**I Increasing number of female drivers**

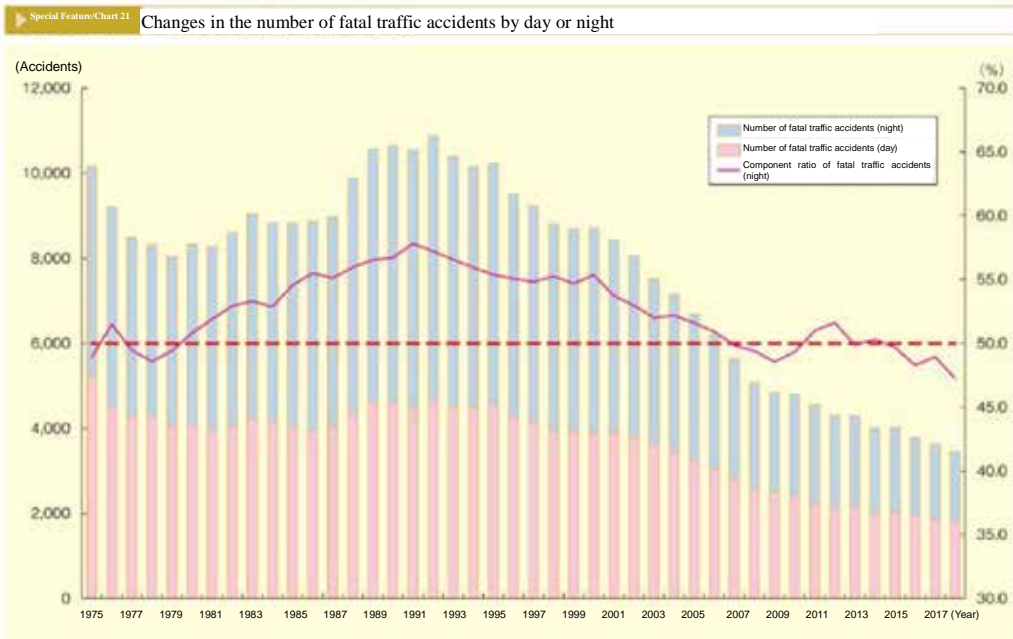
Looking at the changes in the number of driver's license holders by gender, over the 30 years, male drivers increased by 7.75 million and female drivers by 15.40 million. The proportion of female drivers in 1988 was 37.0%, reaching 45.3% in 2018. Regarding the numbers of professional drivers, the number of female bus drivers rose by 8.3 times from 186 in 1995 to 1,549 in 2017. The number of female taxi drivers increased from 6,474 in 1995 to 8,754 in 2000, and then gently declined, reaching 7,292 in 2017.



**I The change towards lifestyles with increasing activity in the evening and nighttime**

During the Heisei era, people's lifestyles changed dramatically with increasing suburbanization and round-the-clock lifestyles.

This led to nighttime traffic fatalities accounting for more than half of fatalities around the year 2003.

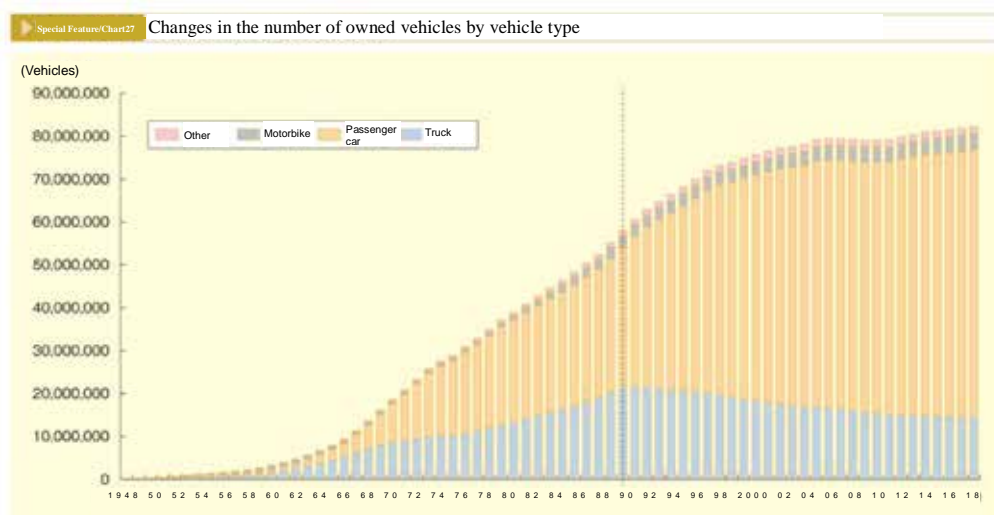


Note:  
Source: National Police Agency

## 2. Changes from the aspect of “vehicles” and society

1 For the three decades of the Heisei era, passenger car ownership more or less doubled, and cars accounted for 70% or more of the vehicles on the roads in Japan.

Looking at the changes in ownership by type of vehicle, in 1955 around 45% of vehicles were trucks and around 40% motorbikes. By the year 1975, trucks had declined to 35% and passenger cars risen to 60%. The proportion of passenger cars grew in the years from 1989 to 2018 to 76%, accounting for by far the largest proportion of vehicles now on the roads, and the number of passenger car ownership doubled.



Note:  
1. Source: National Police Agency  
2. Data as of the end of December each year. The number of owned vehicles does not include class-1 and class-2 moped bikes with engines no larger than 50cc or 125cc respectively, or small-sized special motor vehicles (forklift trucks etc.).  
3. Data for 1971 and all preceding years do not cover Okinawa Prefecture.

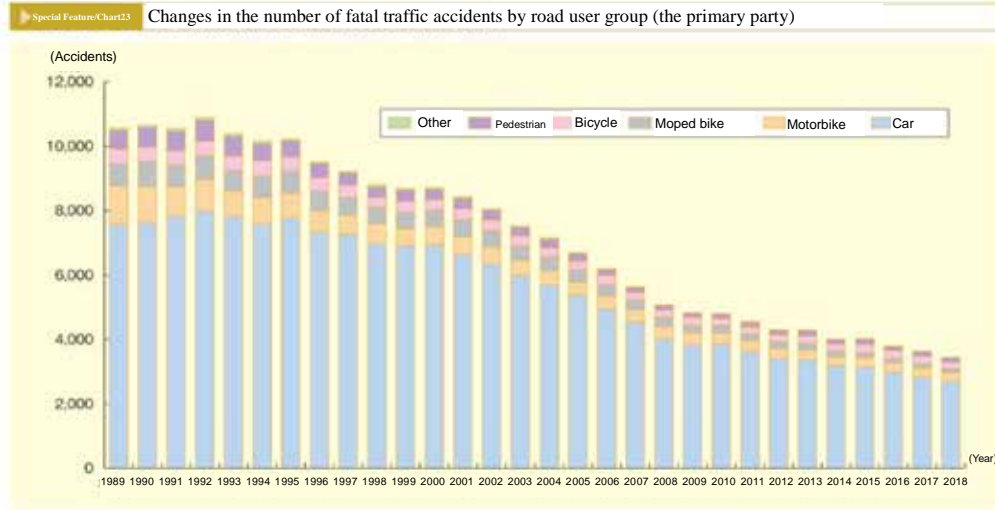
1 Among all types of vehicles, cars accounted for approximately 70 % of the primary parties for traffic fatalities

Throughout the Heisei era, traffic fatalities, in which the primary party, the most at fault among those



involved in the accident including driver, fellow traveler, or pedestrian, or, the least injured in the event that fault is equally shared, was a car, accounted for more than 70% of fatal accidents (and around 80% to 90% of the number of all traffic accidents including non-fatal ones), followed by motorbikes.

With regard to the types of car (the vehicle) in well over half of the fatal accidents involved in traffic fatalities as the primary party, passenger cars for private use were top, followed by trucks for private use, trucks for business use, and passenger cars for business use, throughout the three decades. Passenger cars including both for private and business use, accounted for around 90% of all traffic accident fatalities.



Note:  
Source: National Police Agency

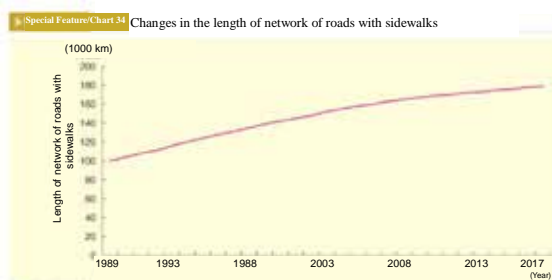
### Main contributions from the aspect of vehicle to road safety during 30 years of the Heisei era

During the Heisei era, major progress was also made in the technical aspects of vehicles, contributing to traffic safety including: progress in the plan for promotion of advanced safety vehicles (ASV), mandatory installation of airbags, child seats and anti-lock brake systems (ABS), as well as collision avoidance systems, and so on.

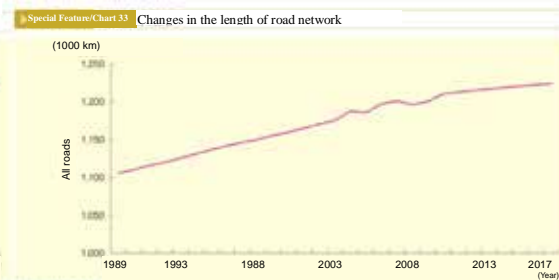
### 3. Changes surrounding “roads” and society

#### 1 The road traffic infrastructure has significantly improved in terms of quality and scale during the three decades of the Heisei era.

Over these 30 years, the length of the road network was extended by 1.1 times, arterial high-standard highways by 2.5 times, and large-scale bridges, expressways and other road infrastructure were completed in rapid succession: (the Rainbow Bridge in 1993, the Tokyo Bay Aqua Line in 1997; the Honshu-Shikoku bridges in 1998, the Nishi-Seto Expressway (Setouchi Shimanami Expressway) in 1999, and the Central Circular Route in 2015). These 30 years saw great progress in the development of traffic safety facilities (the total length of sidewalk/pavements increased by 1.8 times) as well as road networks.



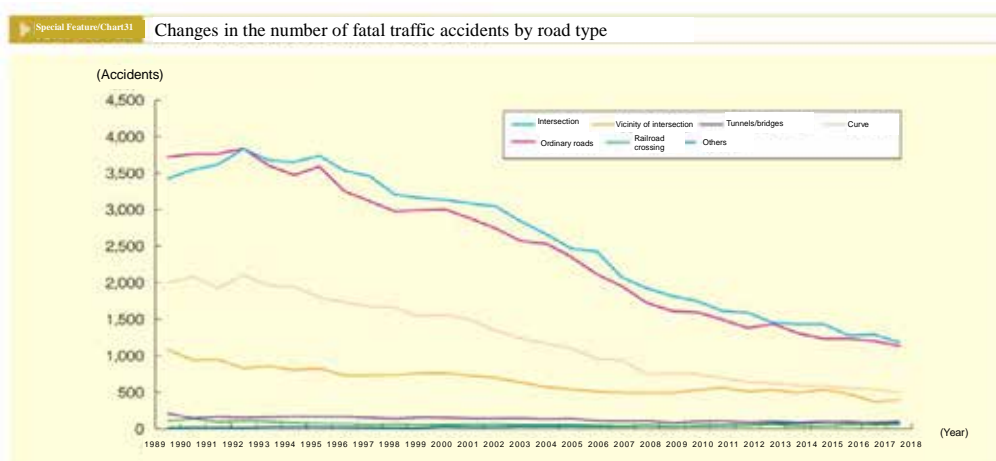
Note:  
1. Source: Ministry of Land, Infrastructure, Transport and Tourism.  
2. Length of network of roads with sidewalks (length of center line of roads).



Note:  
1. Source: Ministry of Land, Infrastructure, Transport and Tourism.  
2. “All roads” is the grand total of national expressways, national roads, principal local roads, prefectural roads, and municipal roads.

**I Large number of accidents at intersections during the Heisei era: The state of traffic accidents from the aspect of “roads”**

Regarding the locations of accidents, for these 30 years, from 1993, the number of fatal accidents at “intersections” surpassed that at “straight parts of roads other than crossing, tunnels, bridges, curves and railroad crossings, and these two locations accounted for around 70% of all accidents. Amongst all the traffic accidents, those at intersections were top over the same period, followed by “straight parts of roads,” “vicinity of intersections,” and bends in roads. The proportion of accidents occurring on bends was reduced to one third over the period.



Note:  
Source: National Police Agency

**Main policy measures contributing to the reduction in traffic accidents**

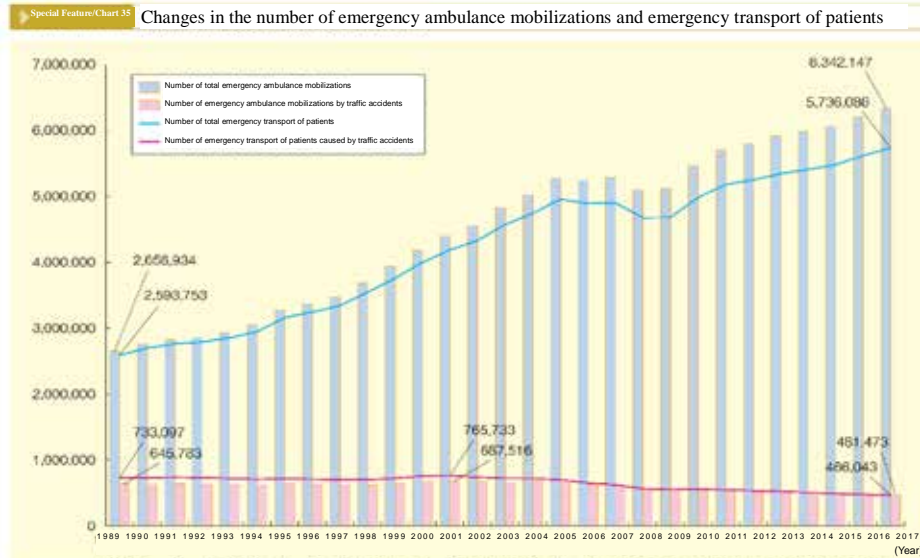
During the 30 years of the Heisei era, particularly the second half from 2004 to 2018, a variety of measures were undertaken for road traffic safety at the city and town level.

Examples:

- × Promotion of the development of pedestrian-vehicle separation signals
- × Promotion of the development of “Zone 30”
- × Utilization of big data by ETC 2.0, lending portable humps to local public entities to help them implement their community road safety measures

#### 4. Rescue and first-aid activities

- From 1989 to 2017 the proportion of emergency ambulance mobilizations and emergency transport of patients caused by traffic accidents among the total number consistently declined.



Note:  
Source: Fire and Disaster Management Agency

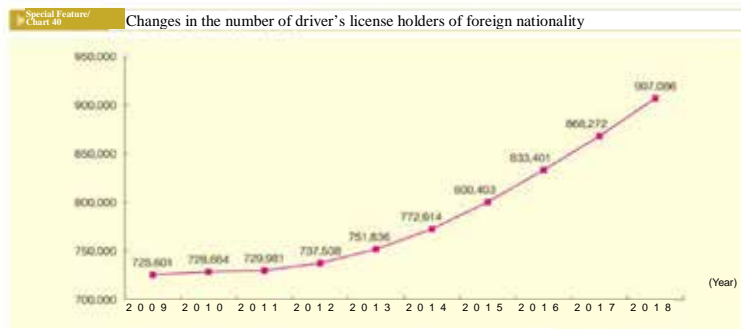
### Chapter 3 Conclusion

The three decades of the Heisei era, characterized by population ageing, a rise in the number of female drivers and significant changes in lifestyles, saw the progress of policies and measures from the perspective of people, vehicles, roads and emergency aid, and in day-to-day activities towards traffic safety at schools and in the community.

The number of traffic accident fatalities dropped from over 10,000 people in the period immediately after the year 1989 to 3,532, and the number of injured fell dramatically from over one million around the years 1999 to 2009 to 525,846. However, several thousand people are still killed and more than 500,000 are injured in traffic accidents every year.

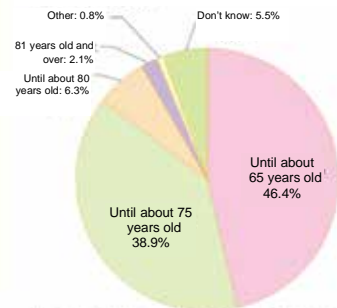
*In order to achieve the safest road traffic in the world, it is fundamental that the “people first” philosophy of traffic safety nurtured throughout the Heisei era is handed down to the next generation, which stresses that, in a society without traffic accidents, vulnerable road users can be socially independent.*

- Challenges towards the future include: **Increase in the number of inbound visitors to Japan:** The number of driver’s license holders of foreign nationality increased by 25% over the past decade. Since the number of permanent residents and inbound tourists is expected to increase further, policy measures targeting non-Japanese people will also become important.
- Progressively ageing society and traffic safety:** People aged 65 years old and over account for 25% of the traffic accident fatalities, and a continuous rise in the number of elderly license holders is expected. The average longevity of the Japanese population increased by five years in between 1988 and 2018.
- Low fertility and the traffic safety of children:** In order to achieve a society in which mothers can give birth and parents can bring up children with no worries, it is essential that society as a whole always stays friendly toward young children and the child-rearing generation for the purpose of traffic safety as well, considering recent changes in families and lifestyles.



Note:  
Source: National Police Agency

Until what age do you think you can drive a car?

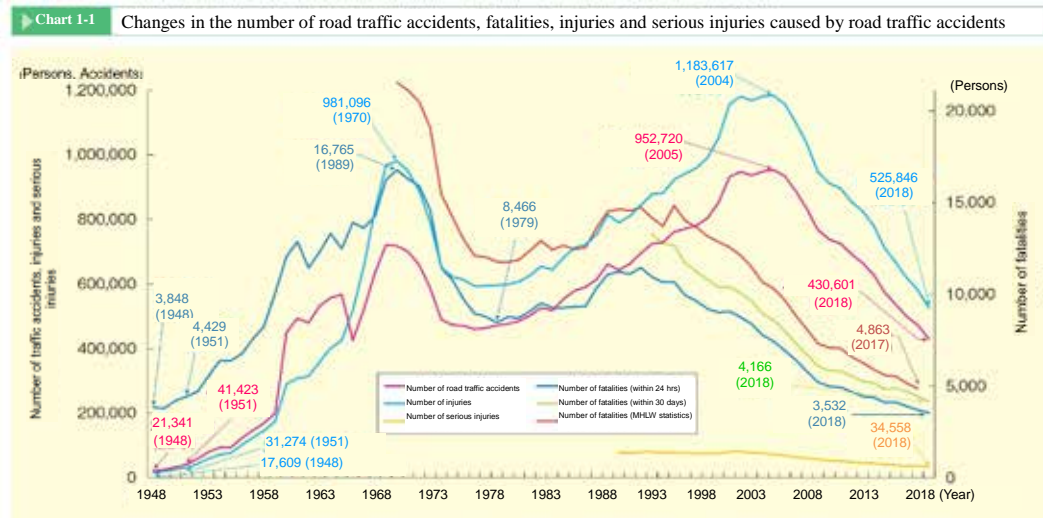


Note:  
Source: Prime Minister's Office "Survey on Traffic Safety" (1992)

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

### Long-Term Change of Road Traffic Accidents

The number of traffic accident fatalities, which had fallen to their lowest level since 1948, when the current traffic accident statistics were adopted, decreased even further.



Note:

1. Source: National Police Agency
2. "Number of fatalities (within 24 hrs)" means the number of persons who died due to a traffic accident within 24 hours after its occurrence.
3. "Number of fatalities (within 30 days)" means the number of persons who died due to a traffic accident within 30 days after its occurrence (counting the day of the traffic accident as the first day).
4. "Number of fatalities (MHLW statistics)" is prepared by the National Police Agency based on "Vital Statistics" by the Ministry of Health, Labour and Welfare and is the number of fatalities whose cause of death is traffic accident among the fatalities in the year (which excludes anyone who died later than a year after the accidents or due to an after-effect). Data for 1994 and all preceding years indicate the number of automobile fatalities, and data for 1995 and all following years indicate the number of traffic fatalities except those not to be considered due to traffic accidents on roads.
5. Data on road traffic accidents for 1966 and all following years do not include property damage-only accidents.
6. Data on fatalities (within 24hrs), injuries and road traffic accidents for 1971 and all preceding years do not cover Okinawa Prefecture.

#### [Changes in the number of traffic accident fatalities, accidents and injuries in traffic accidents]

- l The worst traffic accident fatality record was registered in 1970 with 16,765.
- ↓
- l The number of traffic accident fatalities fell to 8,466 in 1979 and started to increase again. Since 1992, however, the number started to decline again.
- ↓
- l The number of both traffic accidents and injuries registered the worst record of 952,720 and 1,183,617, respectively in 2004.
- ↓
- l The number of traffic accident fatalities in 2018 (3,532 people) was even lower to the previous year in which had the fell to their lowest level since 1948, when the current traffic accident statistics were adopted. Both the number of traffic accidents and the number of injuries has decreased for 14 years in a row.

### Road Traffic Accident Conditions during 2018

I	Overall Condition	
o	Number of accidents:	430,601 (- 41,564, - 8.8 % over the previous year)
o	Number of casualties:	529,378 (- 55,166, - 9.4 % over the previous year)
o	Number of injuries:	525,846 (- 55,004, - 9.5 % over the previous year)
o	Number of fatalities (within 24 hours):	3,532 (- 162, - 4.4 % over the previous year)
	(within 30 days):	4,166 (- 265, - 6.0 % over the previous year)

Targets in the 10<sup>th</sup> Fundamental Traffic Safety Program (covering 2016 to 2020)

Reduce the number of fatalities within 24 hours to 2,500 or less a year by 2020.

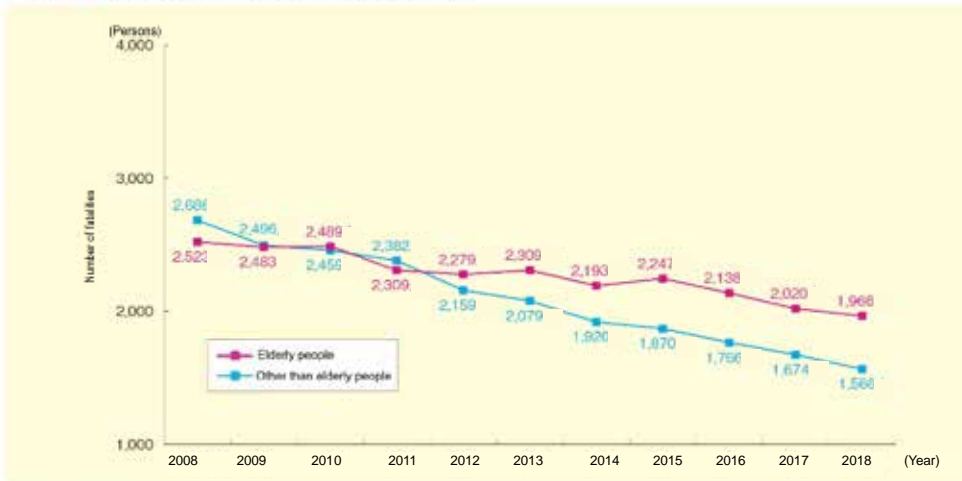
Reduce the number of the casualties to 500,000 or less per year by 2020.

The Traffic Safety Measures Basic Acts was established in 1970 and since then the Fundamental Traffic Safety Program was formulated every 5 years based on the Act.

### Number of traffic accident fatalities of elderly people

Although the number of traffic accident fatalities of elderly people per a population of 100,000 has continued to decrease, the number of elderly people among people killed in traffic accidents was 1,966 accounting for 55.7%, the largest proportion of the total traffic accident fatalities.

Chart 1-4 Changes in the number of traffic accident fatalities of elderly people and others



Note  
Source: National Police Agency

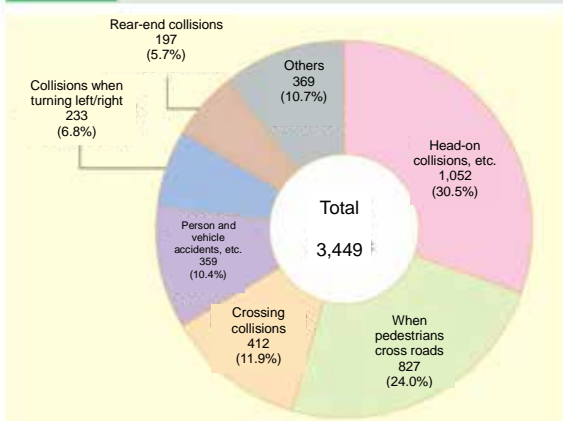
### Occurrence of traffic accident fatalities by type of accident.

Looked by type of accident in 2018 the most common type of accidents was “head-on collisions, etc.” (1052, with the component ratio of 30.5%), followed by “when pedestrians cross roads” (827, with the component ratio of 24.0%), “crossing collisions” (412, with the component ratio of 11.9%). These three types accounted for 66.4% of fatal accidents.

\* Head-on collisions, etc.

Includes accidents of a similar cause such as leaving the road and driving into objects.

Chart 1-7 Changes in the number of fatal traffic accidents by accident type (2018)

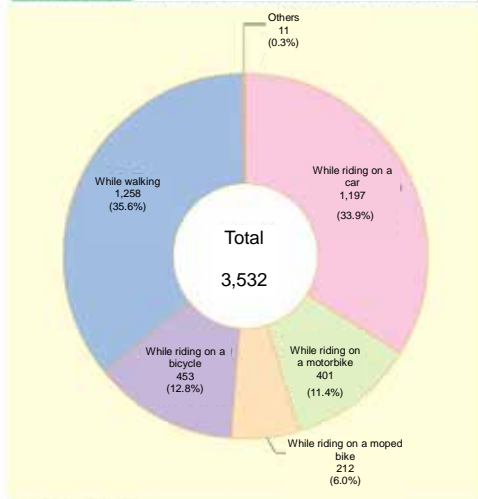


Note  
1. Source: National Police Agency  
2. “Person and vehicle accidents, etc.” means accidents between vehicle and person excluding “When pedestrians cross roads.”  
3. “Head-on collisions, etc.” means head-on collisions, road departure and hitting objects.  
4. The figure in the bracket ( ) shows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

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

The number of traffic accident fatalities is the highest while walking (1,258 with the component ratio of 35.6%) followed by while riding on a car (1,197 with the component ratio of 33.9%) and the sum of both accounts for 69.5% of the total.

Chart 1-11 Number of traffic accident fatalities in traffic accidents by road user group (2018)

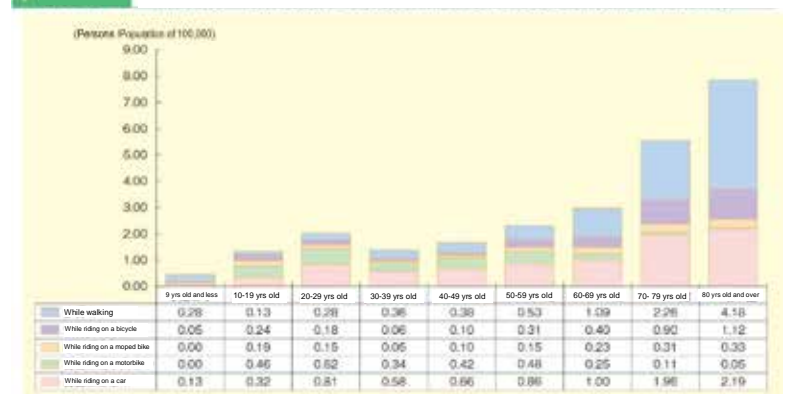


- Note:
1. Source: National Police Agency
  2. The figure in the bracket ( ) shows the component ratio.
  3. "Moped bike" means motorcycles with an engine no larger than 50cc.

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

The number of pedestrians killed while walking (per a population of 100,000) is numerous in elderly people, and, in particular, that of elderly people older than 80 years (4.18 people) is about four times higher than that of all age groups (0.99 people).

Chart 1-18 Number of traffic accident fatalities in traffic accidents by road user group / age group per a population of 100,000 (2018)



- Note:
1. Source: National Police Agency
  2. The population used for the calculation is based on statistical data "Population Estimate" (as of October 1st, 2017) by the Ministry of Internal Affairs and Communications.
  3. "Moped bike" means motorcycles with an engine no larger than 50cc.



## 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” (3,649 areas by the end of FY2018) 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 (3,105 areas) which had been developed by the end of FY2016, 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 23.8% and by 19.4%, 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 “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 technologies. 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 June, 2018, 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 the ITS World Congress, etc.

### 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 schools 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 years or over upon the date of expiration of their licenses to undergo elderly driver practice within six months of the date upon which their new license expires. A total of 2,690,867 elderly people attended the courses in 2018. In addition, it is mandatory for those who are aged 75 years or older upon the expiration of the period of validity of their driver’s license to undergo cognitive function tests within six months of the date upon which their new license expires. We set the duration of three hours for the course for people who were judged as the people who may have dementia or cognitive function impairment in cognitive function test, including individual guidance using images of their driving conditions recorded by the drive recorder, and the duration of two hours for other people. A total of 2,020,144 people older than 75 years took the cognitive function test in 2018.

### 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 examined strategies to fully diffuse the ASV technologies that have been put into practical application under a joint cooperation of industry, government and academia with respect to advanced safety technologies required for realizing automated driving , as well as technical requirements, etc. of Emergency Driving Stop System, such as evacuation of a vehicle to road shoulder,, etc., in the 6th ASV Promotion Project started from FY2016.

Furthermore, as safety measures for buses and trucks etc., assistance continue to be provided for the fitting of ASV equipment such as advanced emergency braking systems (AEBS), vehicular stability and control apparatus and lane deviation alarm devices. Simultaneously, in addition to the ongoing special taxation exemptions provided for vehicles equipped with AEBS and vehicular stability and control apparatus, from FY2017 the range of vehicles eligible for the special measures concerning lane deviation alarm devices was expanded under the FY2018 taxation reforms.

## 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 949 accidents in 1998 and the number fell to 852 in 2008, 676 in 2018, a decrease of 1.5% compared to the previous year.

The number of fatalities in operational railway accidents was 273, a decrease of 4.9% 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, level 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 1-43 Changes 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.

Level crossing accidents\* have been in a decreasing trend in the long run due to the development of safety facilities at level crossings, etc. There were 247 accidents in 2018, an increase of 4.2% compared to the previous year, while the number of fatalities due to level crossing accidents was 97, a decrease of 4.0% compared to the previous year.

### \* Level crossing accidents

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

▶ Chart 1-44 Changes in the number of level 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 2018 was 389, an increase of 2.1% compared to the previous year, while the number of fatalities was 176, a decrease of 5.4% compared to the previous year. The number of railway accidents causing injury or death by falling from the platform, or by being brought into contact with a train (platform accidents) was 191, an increase by 13 (7.3%) compared to the previous year, while the number of fatalities in platform accidents was 36, an increase by six people (20.0%) compared to the previous year.

Chart 1-46 Changes in the number of level 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.**

In order to deal with the torrential rain damage occurring in recent years with increased frequency and ferocity, torrential rain countermeasures have been promoted through the creation of a new support system regarding measures to prevent railway bridges over rivers from being washed away or tilting and landslides from slopes near railway lines.

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

We are promoting measures to prevent people from falling from a station platform in terms of both hardware and software in an integrated manner based on the interim report of “Review meeting for improvement of safety at station platforms” (December, 2016). Specifically, we plan to accelerate the development of studded paving blocks with an inner line and the platform doors as a hardware measure and to promote enhancement of guidance by station staff and alerting by passengers.

In December 2018, the Review Meeting held the 8th meeting to check the progress status of the railroad operators. In terms of hardware, the number of stations which have installed platform doors is 725 as of the end of FY2018 and a total of 908 stations are expected to be equipped with them by the end of FY2020. Therefore, it has been confirmed that the target of the Traffic Policy Basic Plan (about 800 stations in FY2020) will be achieved ahead of schedule. In terms of software, the number of measures to conduct training with the participation of visually impaired people has increased, and railroad operators are cooperating to implement the “greeting support movement.”

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

In addition to conducting campaigns to prevent accidents at level crossings using posters and others, dissemination of knowledge and awareness-raising on the manner to safely cross level 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 railroad 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**

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. In addition, in preparation for the approach of typhoons, with regard to the “planned cancellation” of service by rail operators, a “Review Meeting of Planned Rail Cancellations” has been held to share information among stakeholders and consider the ideal way for organizing planned cancellations, and has compiled a mid-term report.

#### ○ **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. Furthermore, in response to the Earthquake in Osaka-Fu Hokubu, measures for the swift rescue of passengers from trains between stations have been promoted.

### Measures for traffic safety in level crossings

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

In FY2018, we designated additional 176 level crossings to be improved based on the Act on Promotion of Level Crossings. With the existing 824 locations designated in FY2017, the total number of designated level crossing reached 1000. Regarding the designated level crossings, we held meetings to improve regional level crossings sequentially and road administrators and railroad operators agreed to promote further measures for level crossings in accordance with regional conditions.

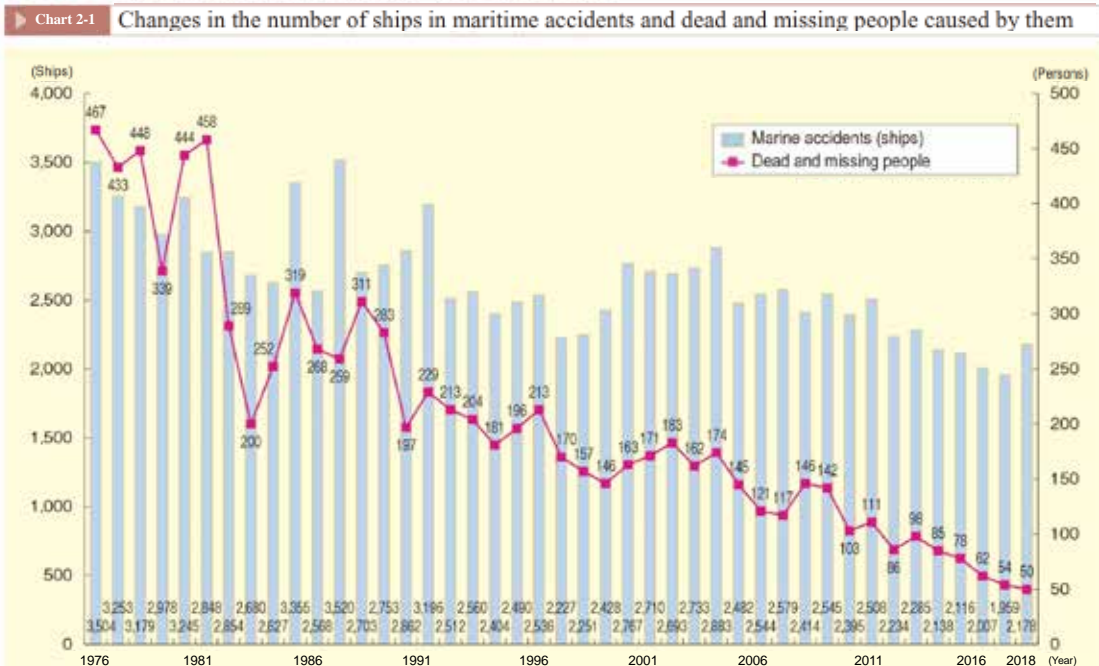
In addition, the number of level crossings which were improved in FY2017 including those designated in the past and those voluntarily improved by road administrators and railroad operators was 14 (grade separation), 211 (structural reform) and 23 (improvement in level crossing security facilities). Moreover, elimination and integration of level crossings were performed in conjunction with grade separation project, etc.

## Title 2, Chapter 1 Maritime Accident Trends

### Current status of maritime accidents

If we look at the changes in the number of ship accidents subject to the Fundamental Traffic Safety Program in the seas around Japan, there were a total of 3,232 ship accidents as an average during the 2nd Fundamental Traffic Safety Program (FY1976 to FY1980). However, the number of ship accidents was 2,178 in 2018, a decrease of about 30%.

The number of fatalities and missing people in maritime accidents was 426 people as an average during the 2nd Fundamental Traffic Safety Program. However, there were a total of 50 accidents in 2018, a decrease of over 80%.



Note:

1. Source: Japan Coast Guard
2. Dead and missing people include crew on board who lost their lives while going adrift because of illness and others.

### Maritime accidents and rescues during 2018

- (1) The number of ships which encountered maritime accidents in 2018 was 2,178, and of 1,488 ships, except 690 ships which could make port on their own, 1,245 ships were rescued, and the rescue rate (percentage of rescued ships over the number of ships which encountered maritime accidents except ships which could make port on their own) was 84%. The Japan Coast Guard rescued a total of 440 ships which encountered maritime accidents by sending out a total of 1,915 patrol boats, a total of 340 aircrafts and a total of 141 members of special rescue team.
- (2) Most of dead and missing people in maritime accidents and most of dead and missing people due to falling into the sea occurred in fishing boats, both of which accounted for 64% over the total number.
- (3) The number of accidents of small ships was 1,593, an increase by 74 ships compared to the previous year. The number of fatalities and missing people as a result of these accidents was 34 people, an increase by two people compared to the previous year.
- (4) The number of ships such as pleasure boats\* which encountered maritime accidents was 1,061 and of 888 ships, except 173 ships which could make port on their own, 765 ships were rescued, and the rescue rate was 86%.

\*Pleasure boats

Small boats used for personal leisure, such as motor boats, yachts, and wet bikes. A collective term for yachts and boats to be used for sports or recreation.

**Improvement of maritime traffic environment**

○ **Improvement of traffic safety facilities**

In order to secure safety of vessel traffic and improve the operational efficiency, the development of beacons was implemented in response to changes in maritime transport environment, such as the development and progress of ports and harbors as well as routes, and the increase in size of ships. A total of 5,213 units of beacons are under management as at the end of FY2018.

In addition, in order to prevent destruction and/or extinction of beacon lights caused by natural disasters such as earthquakes and typhoons and ensure maritime traffic safety of disaster stricken-areas even at the time of a disaster, we promoted disaster prevention measures, such as anti-earthquake reinforcement of beacons, reinforcement against high waves, provision of high-wave resistance of LED lights, etc.

**Dissemination of knowledge regarding maritime transport Safety**

○ **Raising awareness of the prevention of maritime accidents**

To prevent maritime accidents, it is important for each of us to raise our awareness of maritime accident prevention.

In particular, during the period from July 16 to 31, 2018, we conducted the “Campaign for Zero Sea Accident” across Japan with participation of the government and people as one focused on “thorough watch-keeping and promotion of inter-ship communication” and “securing own life-saving measures such as wearing a life-jacket at all times.” We also conducted local-level activities in consideration of regional characteristics including weather conditions, such as fogs, occurrence trend of maritime accidents, as well as characteristics of various ships.

**Ensuring safe operation of boats and ships**

○ **Thoroughness in measures to prevent reoccurrence of accidents**

In the event that a passenger ship is involved in an accident, appropriate measures to prevent its reoccurrence are formulated according to the causes of the accidents. On September 4, 2018 a tanker anchored offshore Kansai International Airport dragged its accident due to fierce winds from Typhoon Jebi, resulting in an accident in which the connection bridges from the airport were damaged. As a result of this incident calls were made through the business organizations for the accurate acquisition of meteorological and oceanographic information, and in response to forecast wind speeds, wind direction, meteorological, and oceanographic situations as well as sea area and bottom sediment, appropriate measures to be taken such as extending anchors.

**Enhancing safety measures for small boats**

○ **Promote safety measures for pleasure boats**

The Japan Coast Guard, in view of the importance of raising safety awareness of marine leisure enthusiasts, did not only promote and diffuse the concept of maritime accident prevention by taking every opportunity including marine accident prevention seminars, provision of guidance and counseling by visiting ships, etc., in cooperation with related organization, but also developed safety activities closely tied to local communities in cooperation with private organizations such as small ship safety associations, maritime safety instructors, volunteers such as local lifesavers.

In the meantime, the Ministry of Land, Infrastructure, Transport and Tourism, in coordination with the Japan Craft Inspection Organization, made known the need to undergo ship inspection at appropriate intervals to people concerned through leaflets, etc. The police ensured maritime traffic safety, not only by patrolling sea areas focused on harbors, other ship congestion areas, bathing beaches with many swimmers, water areas where water sports are actively practiced, etc., but also by providing safety guidance to people related to marine leisure sports in cooperation with related organizations and groups.



## Title 3, Chapter 1 Aircraft Accident Trends

### Aircraft accidents in recent years

The number of accidents of private aircrafts in Japan was 16 in 2018, in which 11 people were killed and 5 injured.

In recent years, only a few aircraft accidents of large airplane have occurred per year, most of which are caused by air turbulence, and most of the aircraft accidents are that of small airplane.

Table 3-1 Numbers of Aircraft Accidents and Casualties

Year	Number of accidents								Number of casualties	
	Large airplane	Small airplane	Ultralight aircraft	Helicopter	Gyro plane	Glider	Airship	Total	Fatality	Injury
2014	4	5	2	1	0	5	0	17	2	28
2015	3	9	3	3	1	8	0	27	10	42
2016	3	4	1	2	0	4	0	14	8	14
2017	3	8	3	5	1	2	0	22	22	6
2018	5	3	4	3	0	1	0	11	11	5

Note:

1. Source: Ministry of Land, Infrastructure, Transport and Tourism.
2. Data as of the end of December each year
3. Includes accidents involving Japanese aircraft that occurred outside of Japan.
4. Includes accidents involving foreign aircraft that occurred in Japan.
5. Accidents/casualties regarding such as natural deaths or deaths caused by violence are not included.
6. The number includes those who died within 30 days after the accident and missing persons.
7. A large airplane is an airplane with a maximum takeoff weight of over 5.7 tons and a small airplane with that equal to or less than 5.7 tons.

### Incidents related to air traffic safety during 2018

#### Safety issues involving air carriers

There were 16 cases of accidents and serious incidents\* which air carriers are obliged to report to Government in FY2018.

Furthermore aircraft accident involving passenger fatalities of specified domestic air carriers (domestic air carriers using aircraft with seats over 100 or the maximum takeoff weight exceeding 50,000kg for air transport services) has not occurred since the crash of Japan Airlines Flight 123 at the mountain Osutaka in 1985.

\* Serious incident: An incident which did not result in an accident, but could have resulted in an accident

## Title 3, Chapter 2 Overview of Current Air Traffic Safety Measures

### Further promotion of aviation safety program

#### ○ **Strengthening SMS (Safety Management System) in service providers**

Guidance was provided to improve the quality of SMS, which is a mechanism for risk management related to safety by promoting safety performance indicators and safety performance targets directly linked to the measures to improve safety for the business alliance such as domestic air carrier. Specifically, for business providers such as new entrants of the air carriers or new airport operators based on the Private Sector Resources Utilization Act who have very few experience about SMS measures, guidance, supervision and advice etc. were provided by maintaining close coordination so that the setting of safety performance indicators and safety performance targets can be implemented properly.

### Ensuring safe operation of aircraft

#### ○ **Strengthening measures to prevent flight crew members from performing duties under the influence of alcohol**

In response to a series of inappropriate events related to drinking alcohol that occurred on Japanese airlines from 2018 to 2019, the airlines were instructed to be thorough in compliance, and from November 2018 the Experts Panel to review what alcohol regulations should be in place regarding employees who perform safety-sensitive functions in aviation was convened. In January 2019, Standard levels for blood alcohol content for all pilots were set and the stringent alcohol standards were formulated; obligating operators of Japanese airlines to conduct tests using alcohol detection equipment before and after flights, banning from duty pilots from whom alcohol is detected, and obligating Japanese airlines to provide the exhaustive and regular education of employees including directors concerning alcohol.

### Ensuring aircraft safety

#### ○ **Improvement of technical standards of maintenance and inspection of aircraft**

To further improve the safety of aircrafts and its components, we did not only conducted necessary investigations, but also developed technical standards for the safety of aircraft and its components, in light of the development situation of latest technologies and trends in international standard formulation.

### Development of air traffic environment

#### ○ **Measures against runway incursion**

To prevent erroneous entries to runways due to human error, we are promoting various measures, including formulation of rules which oblige pilots to repeat controller's instructions, and by encouraging the sharing of safety information regarding events when runways have been erroneously entered, to avert communication discrepancies between air traffic controllers and pilots. We are also promoting the development of Runway Status Light system (RWSL) designed to visually display and convey the runway occupancy state to the air traffic controller and the pilot, etc.

## Topics

Road transport
Use of big data for traffic safety improvements on community roads
The traffic safety of the visually impaired using smart phones, etc.
Measures against driving in the wrong direction on expressways
Measures according to the Bicycle Use Promotion Plan
Measures for ensuring safety at pedestrian crossings without traffic signals
The prevention of traffic accidents at dusk
Efforts by volunteers for traffic safety
The hosting of the Traffic Safety Forum
Measures for the prevention of traffic accidents of elderly drivers
Measures to prevent traffic accidents involving motor transportation businesses
Advanced technologies
Measures against the use of mobile phone, etc. while driving (Including measures against “texting and looking at smartphone” while driving)
Measures against “Reckless Driving”
Holding of “Symposium for Supporting Children who lost their Families in Traffic Accidents”
Railway transport
Measures for the Prevention of Fall Accidents at Station Platforms
— A follow-up overview of the interim report (December 2016) of the “Review meeting for the improvement in safety performance at station platforms” —
Maritime transport
The 4th Traffic Vision
Measures for further improvement of maritime safety including shipping traffic
Reoccurrence prevention measures based on the tanker collision incident at the Kansai International Airport bridges
Safety measures for small ships
Response to water activities which are becoming diversified and popularized
Air transport
The state of permission and approval regarding Civil Aeronautics Act on Unmanned Aerial vehicles and future environmental developments