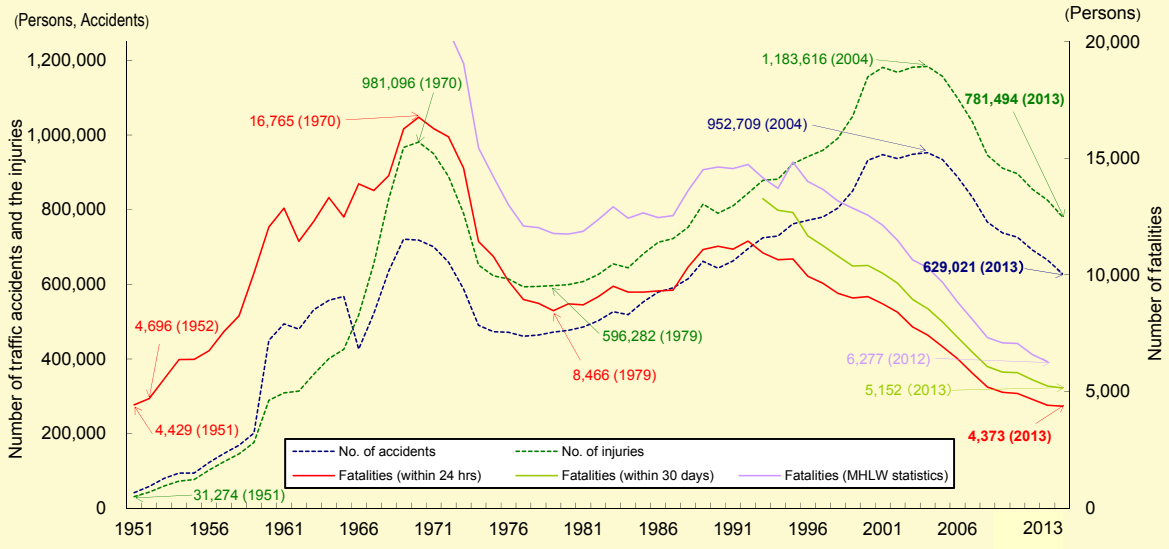
Part 1 Road Transport

Chapter 1 Road Traffic Accident Trends

1. Long-Term Change of Road Traffic Accidents

The number of fatalities in traffic accidents has fallen for the past 13 years in a row.



Note:
1. Source: National Police Agency
2. Figures in 1966 and after do not include any property damages. Figures before 1972 do not include Okinawa Prefecture.
3. "A fatality within 24 hours" is a person who died as a consequence of a car or railway accident occurred on a road stipulated in Article 2, Paragraph 1, Item 1 of the Road Traffic Act.
4. "A fatality within 30 days" is a person who died within 30 days in a traffic accident (including a person who died within 24 hours).
5. The "number of fatalities in MHLW statistics" is prepared by the National Police Agency based on the "Vital Statistics" of the Ministry of Health, Labour and Welfare and is the number of fatalities due to traffic accidents in each year (which excludes anyone who died later than a year after the accidents or due to an after-effect). Incidentally, the figures before 1995 represent those fatalities due to car accidents and the figures in 1995 and after represent those fatalities due to road accidents except those not due to them.

[Changes in the number of fatalities (fatalities within 24 hours), accidents and injuries in traffic accidents]

- The worst fatality record was registered in 1970 with 16,765 people.

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

- The number of fatalities fell to 8,466 in 1979 and started to increase again. Since 1992, however, the number started to decline again.
- The number of both traffic accidents and injuries registered the worst record of 952,709 and 1,183,616, respectively in 2004.
- The number of fatalities in traffic accidents was 4,373, a consecutive fall for 13 years.
  The number of both traffic accidents and injuries fell over 9 years in a row.

2. Road Traffic Accident Conditions during 2013

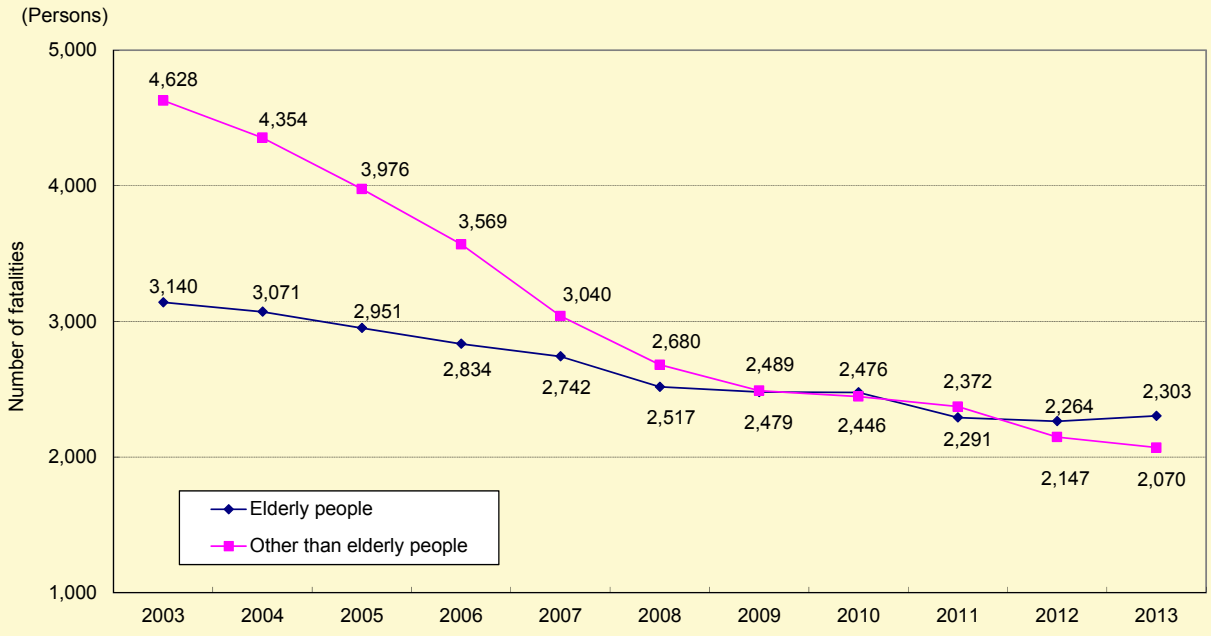
- Overall Conditions

○	Number of accidents:	629,021	(- 36,117, - 5.4 % over the previous year)
○	Number of casualties:	785,867	(- 43,940, - 5.3 % over the previous year)
○	Number of injuries:	781,494	(- 43,902, - 5.3 % over the previous year)
○	Number of fatalities (within 24 hours):	4,373	(- 38, - 0.9 % over the previous year)
	(within 30 days):	5,152	(- 85, - 1.6 % over the previous year)

The number of fatalities in traffic accidents in 2013 decreased only slightly in comparison with that of the previous year and the number of fatalities of the elderly increased for the first time in 12 years since 2001.
In addition, the fatality rate which is the barometer of the number of fatalities increased for the first time in 3 years since 2010. As the number of fatalities does not tend to decrease, the situations surrounding traffic accidents are in a difficult situation.
The drop in the rate of decrease in the number of fatalities can be attributed to “the increase in the number of the elderly,” “the leveling off in the attach rate of seat belts, airbags and the like,” and “the drop in the rate of decrease in the number of traffic accidents due to driving while drunk.

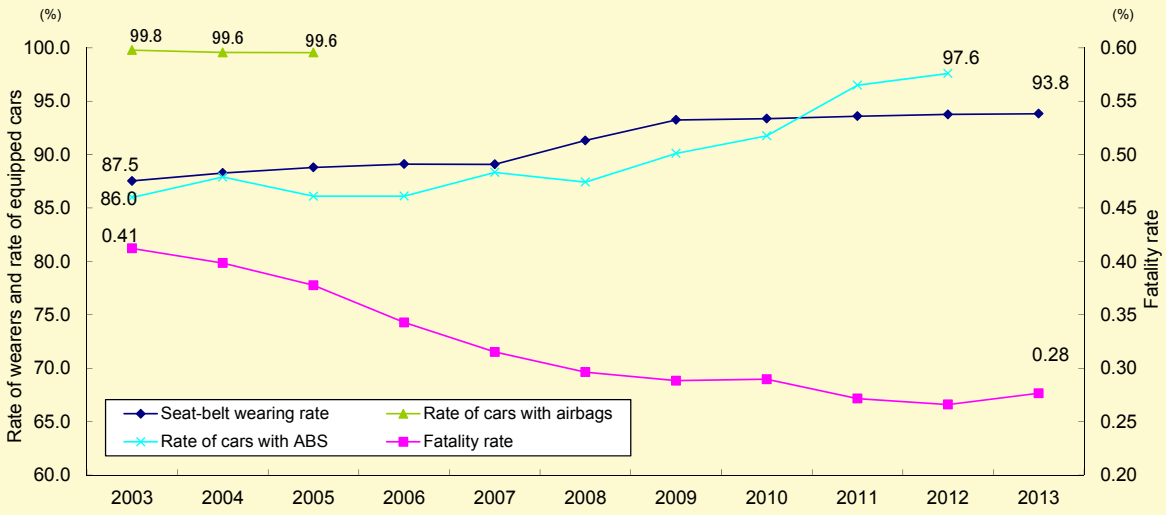
Background (1): Increase in the number of the elderly

Change in the number of fatalities of the elderly and others



Background (2): Leveling off in the attach rate of seat belts and the like

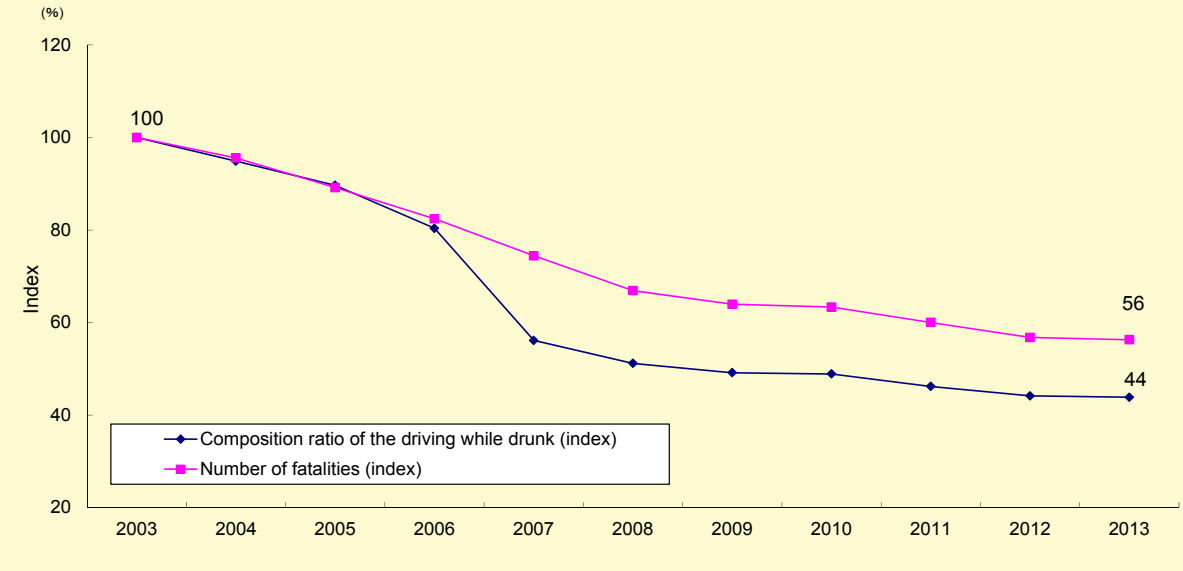
Change in the rate of seat-belt wearers



Note:
1. Source: National Police Agency
2. The rate of seat-belt wearers: The number of casualties with seat-belt (while driving) ÷ the number of casualties (while driving) x 100
3. Fatality rate (while driving): The number of fatalities (while driving) ÷ the number of casualties (while driving) x 100
4. The figures of cars equipped with airbags and ABS (one manufacturer) are from data of the Japan Automobile Manufacturers Association (The airbag statistics ceased to be published since 2006)

Background (3): Drop in the rate of decrease in the number of traffic accidents due to driving while drunk

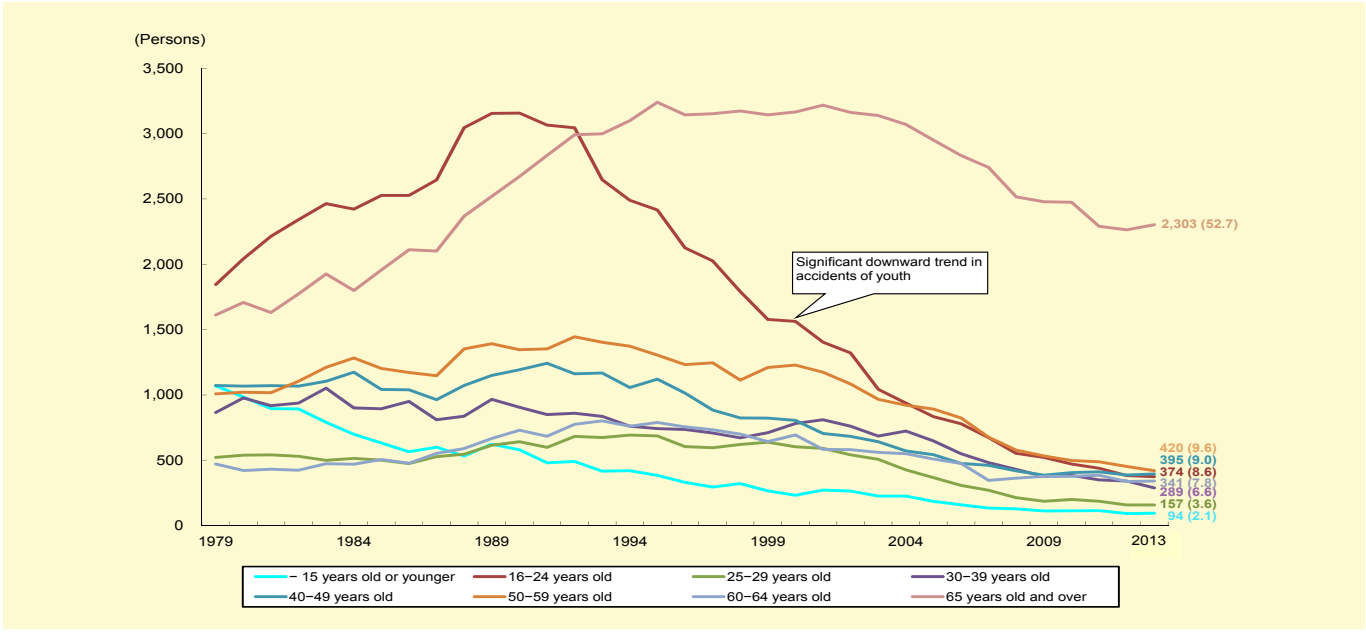
Changes in the composition ratio of the traffic accidents due to driving while drunk and the number of fatalities



Source:
1. National Police Agency
2. Composition ratio of the driving while drunk = the number of all casualties due to driving while drunk (accidents involving vehicles larger than a moped per accident) ÷ the number of all casualties (accidents involving vehicles larger than a moped per accident)
3. The composition ratio of the driving while drunk does not include cases in which the detection was not possible.

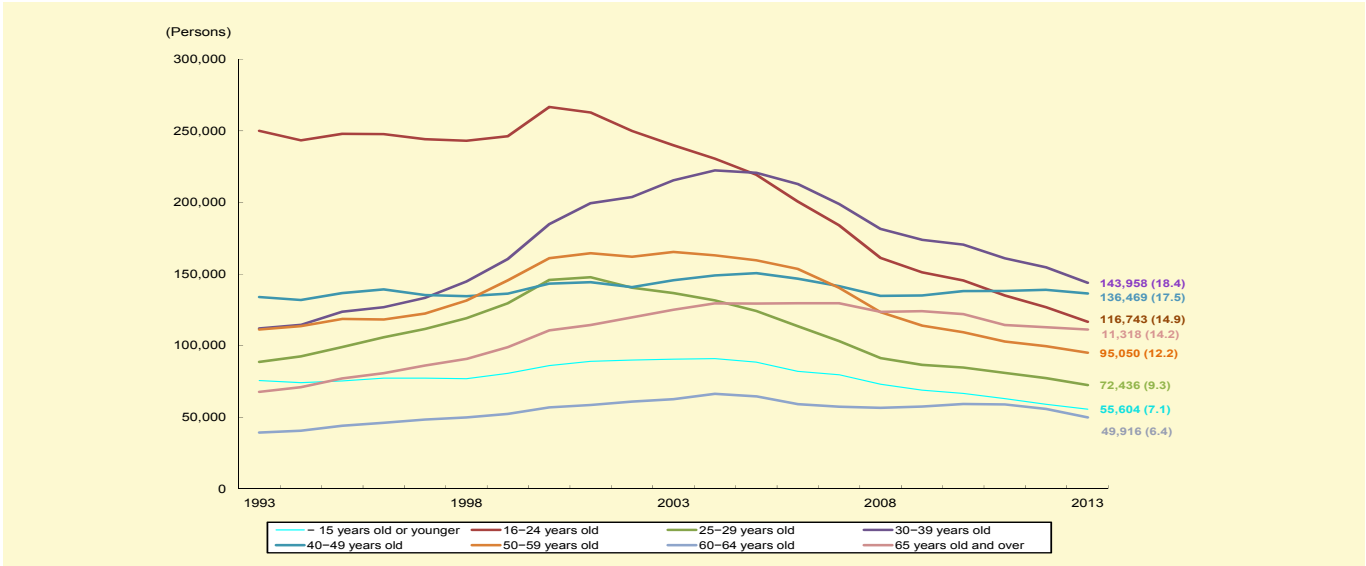
- Number of Fatalities and Injuries in Traffic Accidents by Age Group
  ① The number of fatalities is the highest in the elderly (2,303), followed by people aged 50 to 59 years (420) and aged 40 to 49 years (395).
  When compared to the previous year, not only that the number of fatalities of the elderly of more than 65 years old increased, but also that of people aged 40 to 49 years, 60 to 64 years and children of less than 15 years increased. The number of fatalities of the elderly of more than 65 years accounted for 52.7% of the number of all fatalities marking the highest number in the history.
  ② The number of injuries in the age of 30 to 39 years old (143,958) and 40 to 49 years old (136,469) is the highest accounting for 35.9% of the total.
  When compared to the previous year, the number of injuries decreased in all age groups and in particular, the decrease in the age groups of 16 to 24 years (decreased by 10,151 people) and of 30 to 39 years (decreased by 10,792 people) was remarkable.

Changes in the number of injuries in traffic accidents by age group



Note:
1. Source: National Police Agency
2. The figure in brackets indicates the percentage (%) of the number of fatalities by age group

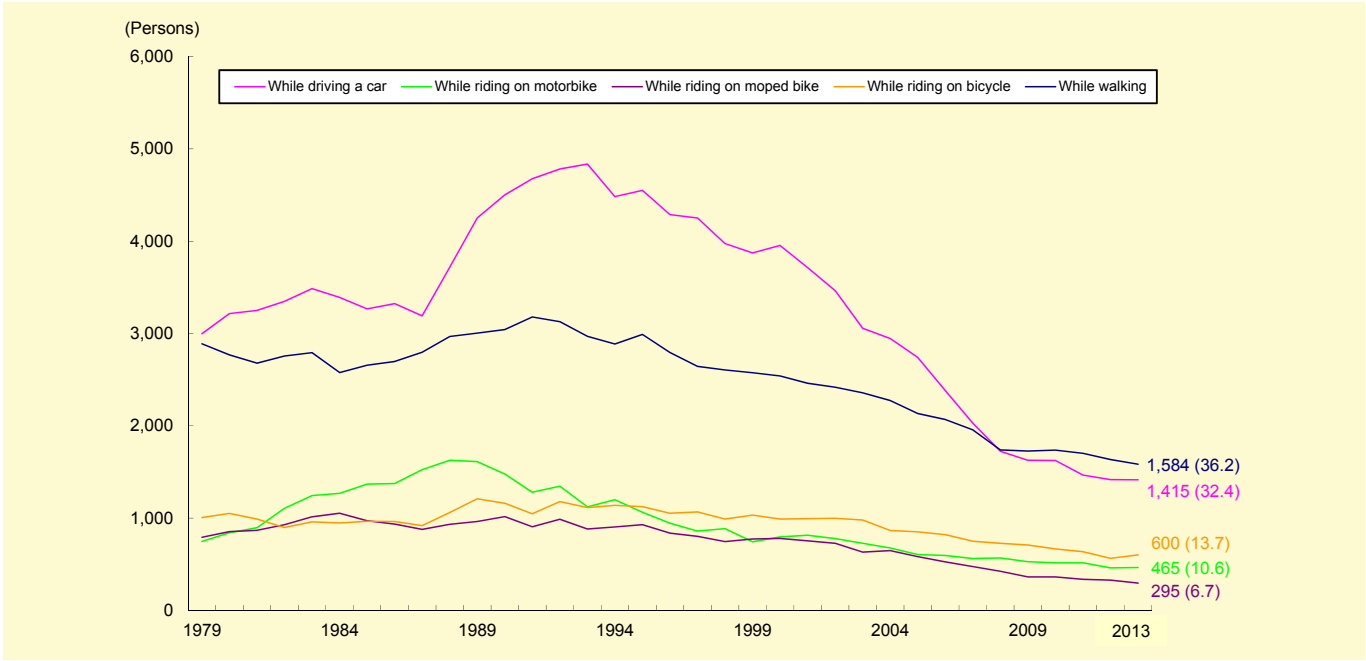
Changes in the number of injuries in traffic accidents by age group



Note:
1. Source: National Police Agency
2. The figure in brackets indicates the percentage (%) of the number of fatalities by age group

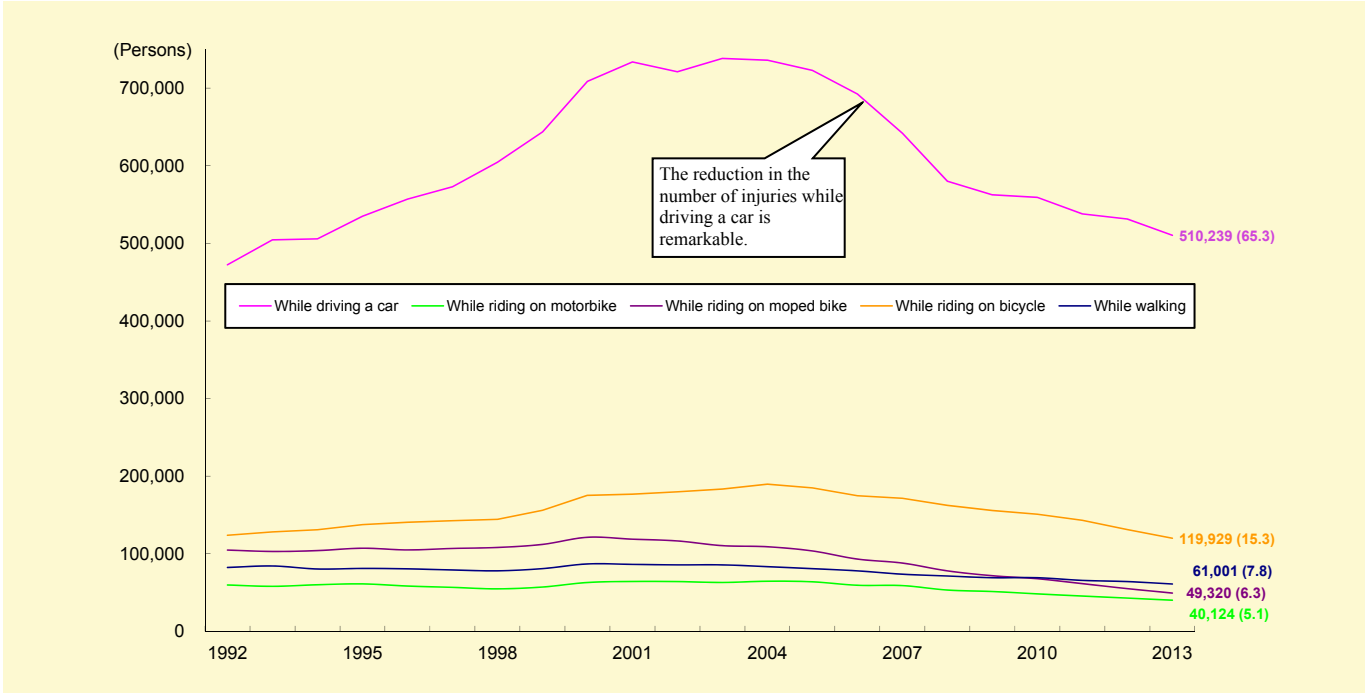
- Number of Fatalities and Injuries in Traffic Accidents by Condition
  ① The number of fatalities of pedestrians (1,584) is the highest followed by that of people while driving a car (1,415) and the sum of both accounts for 68.6% of the total.
  ② The number of injuries while driving a car is the highest with 510,239 accounting for 65.3% of the total followed by that while riding on bicycle with 119,929 which accounts for 15.3 % of the total.

Changes in the number of fatalities in traffic accidents by status



Note:
1. Source: National Police Agency except that "others" is omitted.

Changes in the number of injuries in traffic accidents by status



Note:
1. Source: National Police Agency except that "others" is omitted.
2. The figure in brackets indicates the percentage (%) of the number of injuries by status

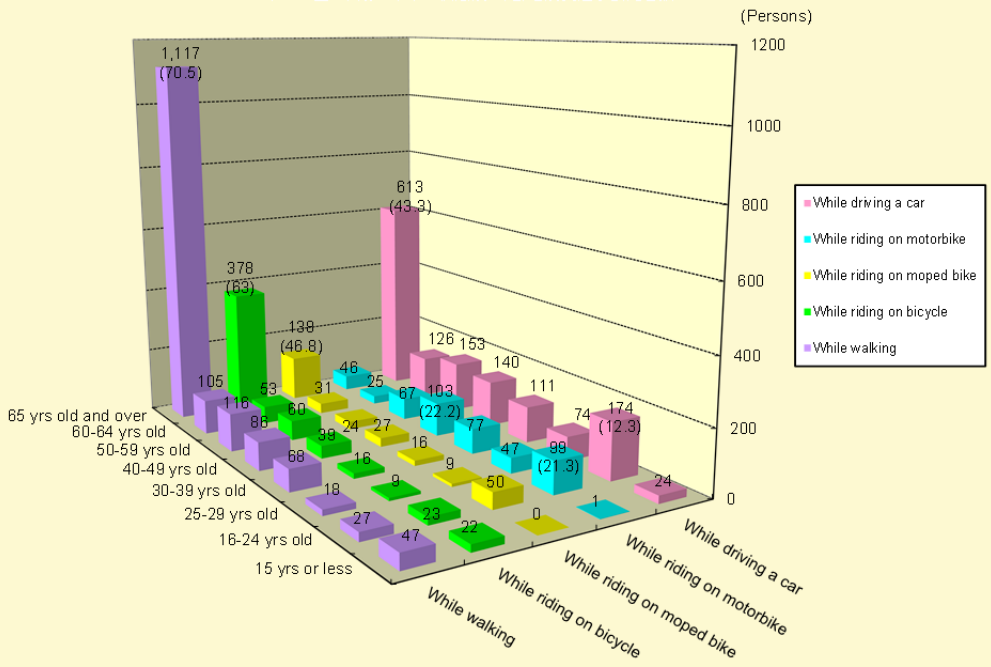
- Number of Fatalities in Traffic Accidents by Condition and by Age Group

  The number of fatalities in traffic accidents by age group and by status in 2013 shows the following characteristics:

  ① The number of fatalities of the elderly over 65 years old is the highest in the 4 categories by status, while walking (70.5%), while riding on bicycles (63.0%), while riding on moped bikes (46.8%) and while driving a car (43.3%), and the ratio is particularly high in both while walking and while riding on bicycles.

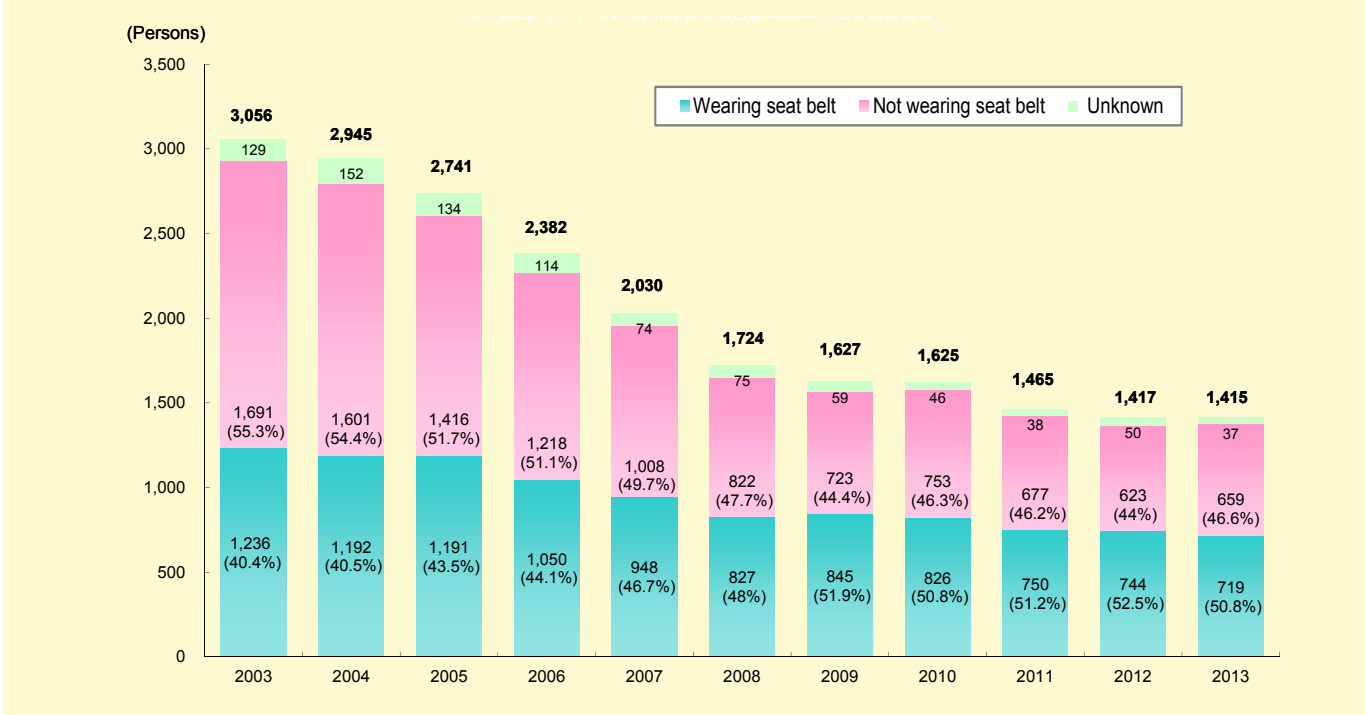
  ② The number of fatalities of people while riding on motorbikes is the highest in the age group of 40 to 49 years accounting for 22.2 %.

Number of fatalities in traffic accidents by status and by age group in 2013



- Number of Fatalities with or without the Use of Seat-belts
  ① In terms of the number of fatalities while riding in a car with or without the use of a seat-belt in 2013, that without the use was 659 people, which was an increase by 36 people (5.8%).
  ② The fatality rate of people not wearing seat belts (percentage of fatalities over the number of casualties) is 15.2 times as high as that wearing them.

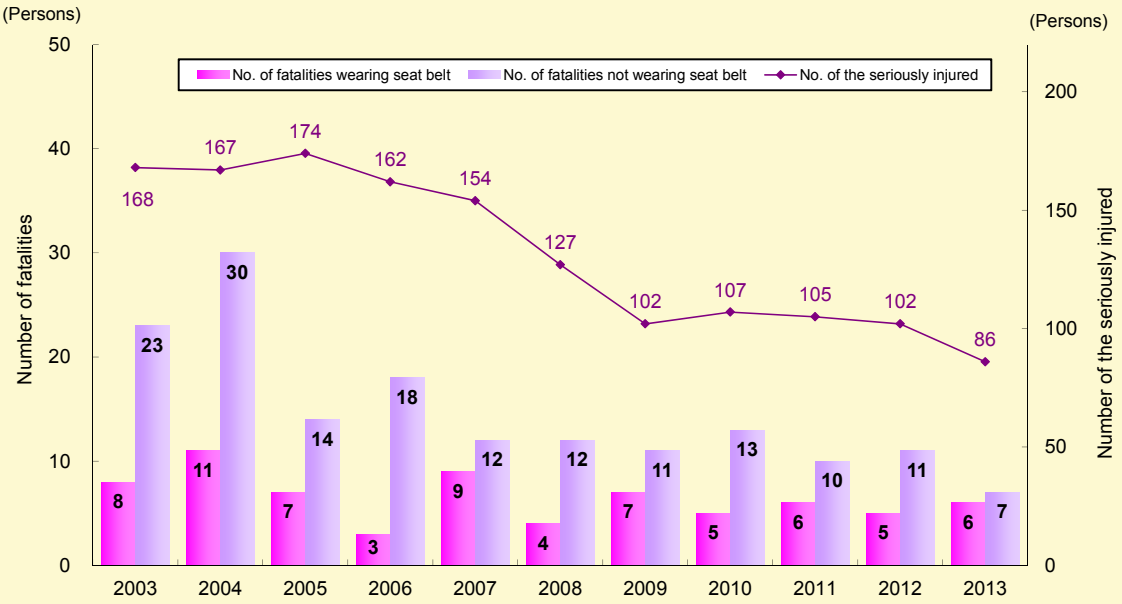
Changes in the number of fatalities with or without the use of seat-belts while riding in a car



Source: National Police Agency

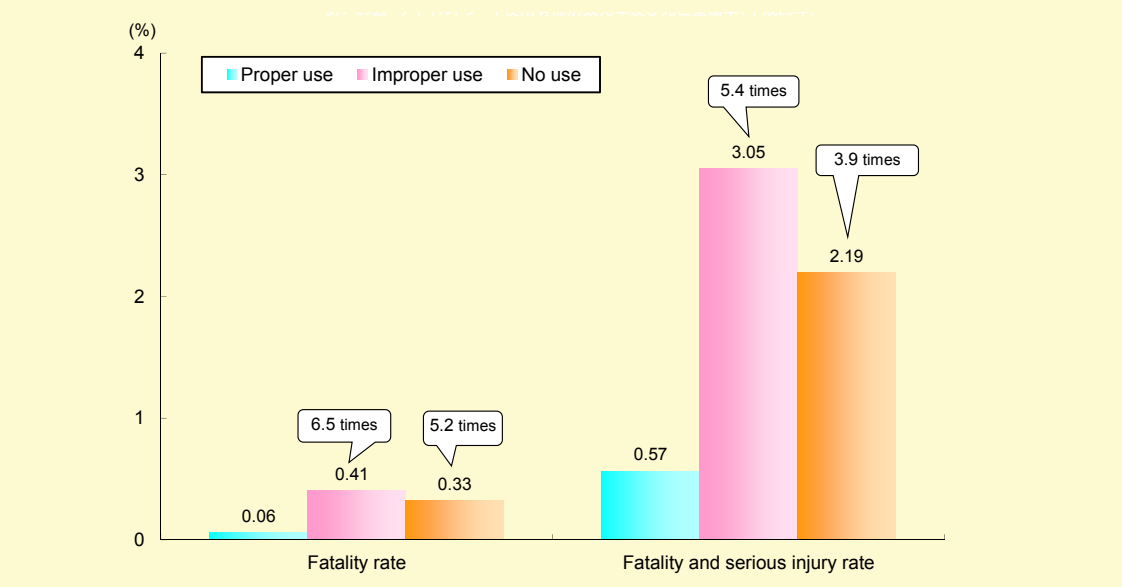
- Number of Fatalities with or without the Use of Child-seats
  ① The number of fatalities of children under 6 years old while driven in a car was 13 (6 used child seats) and the number of serious injuries was 86.
  ② The fatality and serious injury rate of children under 6 years old not using a child-seat is 3.9 times and using it improperly is 5.4 times as high as those who use it properly.

Changes in the number of fatalities and serious injuries with or without the use of child-seats



Source: National Police Agency except that "Unknown" is omitted.

Fatality rate and fatality and serious injury rate of children with or without the use of child-seats (2013)



Source: National Police Agency

Chapter 2 Overview of Current Road Traffic Safety Measures

1. Improvement of Road Traffic Environment

- Development of People-First Walking Spaces Offering Safety and Security on Community Roads
  With support from communities, traffic safety measures focused on people, including the improvement of sidewalks that were implemented along roads used to commute to and from school, community roads, arterial roads in urban areas and other areas.
  ① Prefectural Public Safety Commissions and road administrators collaborated on implementing area-wide and comprehensive traffic safety measures, including the improvement of sidewalks in "Safe Pedestrian Areas" (582 zones) that are designated as residential or commercial areas with high rates of fatal accidents involving pedestrians and bicycles.
  In addition, sidewalks were improved along community roads in areas other than the "Safe Pedestrian Areas" and "Zone 30*".Furthermore, Prefectural Public Safety Commissions and road administrators collaborated on taking traffic accident preventions measures including efforts to control the speed of vehicles, indication of the shapes of roads and the presence of intersections to the drivers, and promotion of traffic separation schemes to develop safe and secure traffic environment for pedestrians and vehicles.
  ② Based on the results of the urgent joint inspections implemented in FY2012, the schools, education boards, road administrators and the police collaborated on promoting measures to ensure traffic safety in school roads.
  Also, besides the places where traffic accident prevention measures were designated as necessary according to the urgent joint inspections, measures were implemented to ensure the safety of school roads and other roads by improving sidewalks along school roads, paving road shoulders in colors and setting up guard rails, push-button traffic lights and signal lights for pedestrians in order to ensure the safety of transit for infants and children who commute to and from elementary schools, kindergartens, nurseries and children's homes.
  ③ In accordance with the Barrier-free Act, roads leading or connecting to stations, governmental facilities, hospitals and other public facilities were proactively provided with wide and level sidewalks in order to ensure an independent and self-sufficient daily life and social activities for the elderly, disabled persons and others.
  In addition, barrier-free traffic lights, separate and independent traffic lights for vehicles and pedestrians, Escort Zones, pedestrian overpasses with lifting and lowering devices, resting facilities for pedestrians, parking areas for bicycles and car parking facilities with markings for disabled persons were provided, elimination of utility poles was promoted, and the use of LED lights in traffic lights and the adoption of more intensely illuminated roadway signs were promoted, in response to an increase in elderly drivers and to ensure the safe and smooth transit of the elderly and disabled.

- Promotion of Traffic Safety Measures on Arterial Roads
  ① In implementing road development projects with the aim to improve traffic safety, the "Traffic Accident Zero Plan" (a strategy for concentrated relief of accident prone sections) aimed at the eradication of traffic accidents was promoted on arterial roads in a focused and intensive manner based on the principles of "selection and focus" and "community participation and community engagement" by scientifically checking the effectiveness of various measures and applying management cycles in an efficient and cost-effective manner.
  ② In July 2013, prefectural public safety commissions and road administrators intensively implemented road traffic accident prevention measures in a joint and coordinated manner in the 3,490 places designated as "Black Spots" on arterial roads with high accident rates, through measures which included the installation of new traffic lights, improvement of existing traffic lights, operation of separate traffic lights for pedestrians and cars, improvement of sidewalks, improvement of intersections, improvement of visibility distance, addition of additional lanes, installation of central islands, installation of bus parking zones and guard rails along bus routes, addition of dividing lines and installation of road illumination and visual guidance signs.

* Zone 30
Implementation of traffic control measures such as one-way roads and road improvements with physical devices based on each community's situation while taking measures including the establishment of dedicated zones with a speed limit of 30 km per hour and the construction and expansion of sidewalks where passing traffic needs to be controlled in order to secure the safety of community roads in urban areas and other places.

- Comprehensive Development of Bicycle Usage Environment
  In order to develop a sustainable urban transport system with highly efficient clean energy, it is necessary to create an environment which allows safe and comfortable use of bicycles by clarifying the role played by the bicycles in the society, dividing conveniently pedestrians, bicycles and cars depending on the traffic situation, and by providing measures to prevent accidents between pedestrians and cyclists. To this end, the Ministry of Land, Infrastructure, Transport and Tourism and the National Police Agency jointly held the "committee meeting to study the development of an environment which allows safe and comfortable use of bicycles" and developed the "guidelines for the development of an environment which allows safe and comfortable use of bicycles" in November 2012 following the recommendations of the committee so that road administrators and the prefectural police can develop a bicycle network plan, promote full compliance, among other programs. In addition, road administrators, the police and other relevant organizations promoted the development of a bicycle network including roads for bicycles, bicycle-specific lanes based on the guidelines in a coordinated manner.

- Use of Intelligent Transport Systems
  Introduction and use of intelligent transport system (ITS) is being promoted continuously in order to improve safety, transport efficiency and comfort by building a system to integrate people, roads and vehicles using latest information and communication technologies and contribute to the conservation of the environment through smoother traffic including the reduction of traffic jams. To this end, based on the overall ITS program and the "New Information and Communication Technology Strategy" formulated in May 2010, and coordination amongst a broad range of stakeholder groups from industry, academia, and government, a diverse range of issues including research and development, field tests*, development, dissemination and standardization of infrastructures was reviewed in an accelerating manner and cooperation in the international arena including information exchange and standardization in the ITS World Congress was proactively promoted.
  ① The concept of Universal Traffic Management System (UTMS) is designed to provide sophisticated traffic information, conduct traffic control operations, give priority to the transit of public vehicles, reduce traffic-derived pollution, support safety driving and ensure safety of pedestrians in order to secure traffic safety and comfort by controlling the flow and volume of traffic in an active and comprehensive manner by means of optical beacons* capable of providing bidirectional communication with each vehicle through sophisticated traffic control centers. Based on such concept, a range of measures was implemented to enhance the system and develop optical beacons among others.
  ② Smartways which are public and private collaboration, were promoted using ITS Spots based on the communication technology of Electronic Toll Collection (ETC) system.
  The use of ITS Spots enabled the implementation of a variety of services including ETC, dynamic route guidance which enables vehicles to select routes appropriately based on a wide range of traffic congestion data, including safe driving support which reminds drivers of any situation that make one's blood freeze.

2. Dissemination and Reinforcement of Traffic Safety

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

- Promotion of the Safe Usage of Bicycles
  Public awareness-raising activities addressed to cyclists were promoted making use of the "5 Rules for Bicycle Safety Usage" shown in the Central Traffic Safety Policy Council Decision, in order to demonstrate that the bicycle is a vehicle, thus its user need to respect the rules as vehicles and practice traffic manners when passing through a road. In addition, in view of the fact that bicycles are allowed to transit only on the side strips provided on the left side of the road by the Amended Road Traffic Act in 2013, enlightenment activities were developed to improve the understanding from citizens that cyclists should ride on the left side of the road. Furthermore, educational activities on traffic safety were promoted along with bicycle safety class based on participation, experiment and practice that target

* Field tests
  Practical tests, outdoor tests and others
* Optical beacons
  Infrared communication device installed on the road which measures traffic volume and others by sensing passing vehicles, and allows communication between car navigation devices and the traffic control centers.

wide variety of bicycle users regarding the correct way to ride a bicycle taking into account pedestrians and other vehicles. Such education applies automobile area training courses, audiovisual aids, simulators, and the 'scared straight method' (an experiential educational method that makes participants face fear by producing opportunities for them to see accidents being reproduced by stuntmen, and so on).

3. Ensuring Safe Driving

- Improvement of Measures for Elderly Drivers

  The compulsory training courses for elderly drivers aged 70 and over are aimed at checking their driving aptitude, by asking them to drive by themselves, using equipment to test driving aptitude etc. so that they become conscious of changes in their physical functions, and proper advice and guidance are provided based on the checking results. It is provided that those who have attended these courses are not required to take other courses when renewing their driving licenses. A total of 2,012,134 people took these courses in 2013.

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

- Augmentation of Supervision for Road Transport Operators

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

  In addition, in the wake of the highway passenger bus accident on the Hokuriku Expressway occurred in March this year, further instructions were provided to road transport operators across the country to spare no pains in ensuring safety by preventing overwork of drivers and checking their health conditions and, currently, investigation and analysis are underway to elucidate the cause of the accident.

- Enhancement of Transport Safety Management System

  In accordance with the "transport safety management system" introduced in October of 2006, all personnel in road transport operations were obligated to get compulsorily involved in the building of safety management system under the proactive guidance of the administration. In the circumstance, the government conducted evaluation of transport safety management system on a total of 747 companies as of the end of December 2013, which was an increase of 81 companies.

  In addition, on a basis of the aforementioned plan, all chartered bus operators (about 4,500 companies) have become obliged to conduct transport safety management.

4. Ensuring Vehicle Safety Measures

- Promotion of Vehicle Safety Measures

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

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

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

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

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

  Furthermore, in addition to publishing information on defective vehicles and accidents as well as fires received by the

Ministry, information was provided to users on a range of issues including all matters which are required for use, maintenance, and matters to deal with defects in an appropriate manner.

5. Development of Rescue and Emergency Medical Systems

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

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

Part 2 Railway Transport

Chapter 1 Railway Traffic Accident Trends

1. Operational Accidents over Recent Years

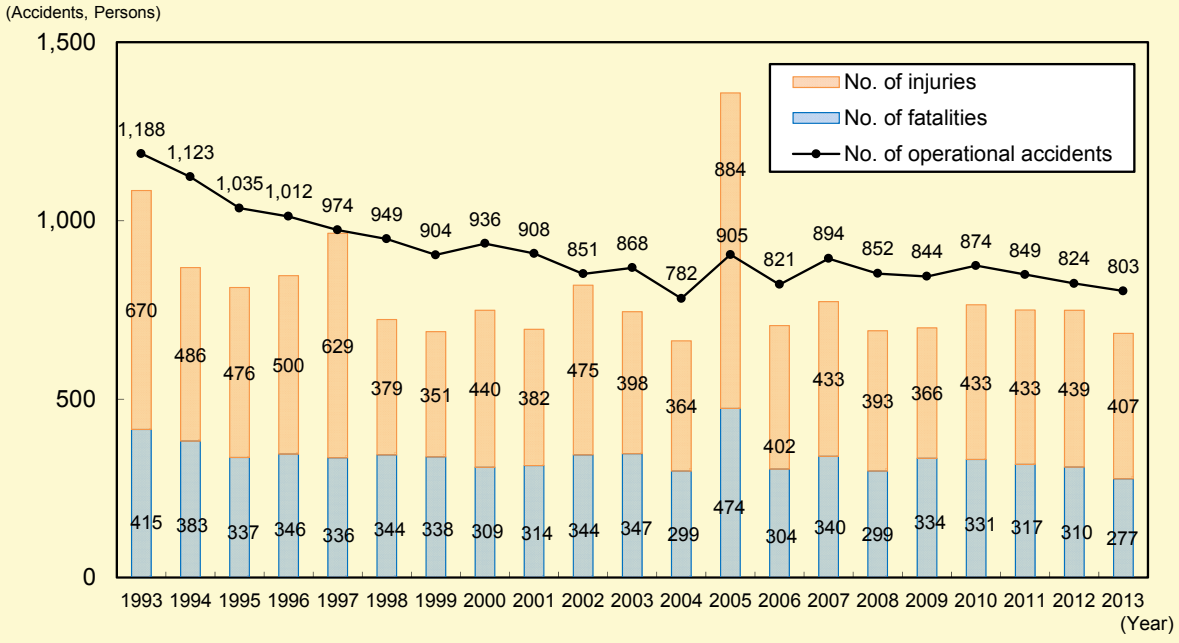
① The number of operational railway accidents* has been in a long-term decline. There were 1,188 accidents in 1992 and the number fell to 868 in 2003, 803 in 2013 decreasing by 2.5%.

② The number of fatalities in operational accidents was 277, which was as targeted in the Ninth Traffic Safety Basic Plan (a decrease of 10.6%) and no casualty was registered among passengers.

③ The number of accidents at railway crossings is in a decreasing tendency. There were a total of 295 accidents in 2013, a 3.3% decrease of over the previous year and the number of fatalities at railway crossing was 94, a 26.6% decrease over the previous year.

④ A total of three grave accidents (where there are more than 10 casualties or there occurs a derailment of more than 10 cars) occurred in 2013, including the derailment accident that occurred at the Arai station of the Sanyo Electric Railway in which 18 people got injured on February 12, 2013.

Changes in the number of operational accidents and casualties



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

* Operational accidents
Operational accidents include accidents caused by collision, derailment, fire, crossing obstruction, road obstruction, accidents causing injury or fatality and property damage. Incidentally, operational accidents on railway tracks are treated as operational railway accidents.

Chapter 2 Overview of Current Railway Traffic Safety Measures

1. Improvement of Railway Environment

- Improving Operational Safety Devices
  Based on the technical standards revised in the wake of JR Fukuchiyama Line Train Derailment Accident, installation of automatic train stop devices (ATS) and other measures were facilitated and promoted to the places such as curves, turnouts, track ends, and so on where serious accidents are likely to occur.

- Strengthening of the Earthquake Resistance of Railway Structure
  In light of the Hanshin-Awaji Earthquake and the Great East Japan Earthquake and in preparation for capital epicentral earthquake and Nankai Trough Earthquake which are the immediate problems in the strengthening of disaster prevention and disaster mitigation, aseismic measures were promoted in the main railway stations and viaducts in order to ensure the safety of railway users and in consideration of public function as temporary shelters and securing of emergency transport ways.

2. 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 railroad crossings and on the prevention of railway accidents were conducted for schools, residents along the railway tracks and road transport operators among others.
Furthermore, it was recommended to railway operators and others to take measures for accident prevention making use of the railway safety guidebook and the educational materials designed to promote safety education on the use of railways for children.

3. Ensuring the Safe Operation of Railways

- Retaining the Quality of Train Operators
  To ensure the qualifications of train drivers, driving license tests were conducted in an appropriate manner. It was also instructed to operation administrators to adopt adequate measures for education to ensure the qualification of the crew.

- Analysis and Utilization of Risk Information
  In order to prevent serious railway accidents, information on the past incidents and accidents is collected to be shared among interested people. In addition, it is intended to share risk information which is not a compulsory report to the government among railway operators.

- Enhancement of Transportation Safety Management System
  The “Transport Safety Management System” was introduced in October 2006. Under the system, business operators were encouraged to make a concerted effort among all personnel in building safety management system under the leadership of top management and the government conducted the evaluation of the status of its implementation on a total of 930 companies by the end of December 2012, an increase by 116 in implementation over the last year.

- 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 appropriate information 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.
  Moreover, in addition to looking at the state at the time of the occurrence of tsunamis in the Great East Japan Earthquake, measures designed to secure the safety of railway passengers at the time of the occurrence of tsunamis based on basic principles (it is the most effective and important way to flee for refuge as quickly as possible) to escape from a large earthquake such as Nankai Trough Earthquake as well as specific examples were compiled. Currently, efforts based on the study are being promoted by railway operators.