

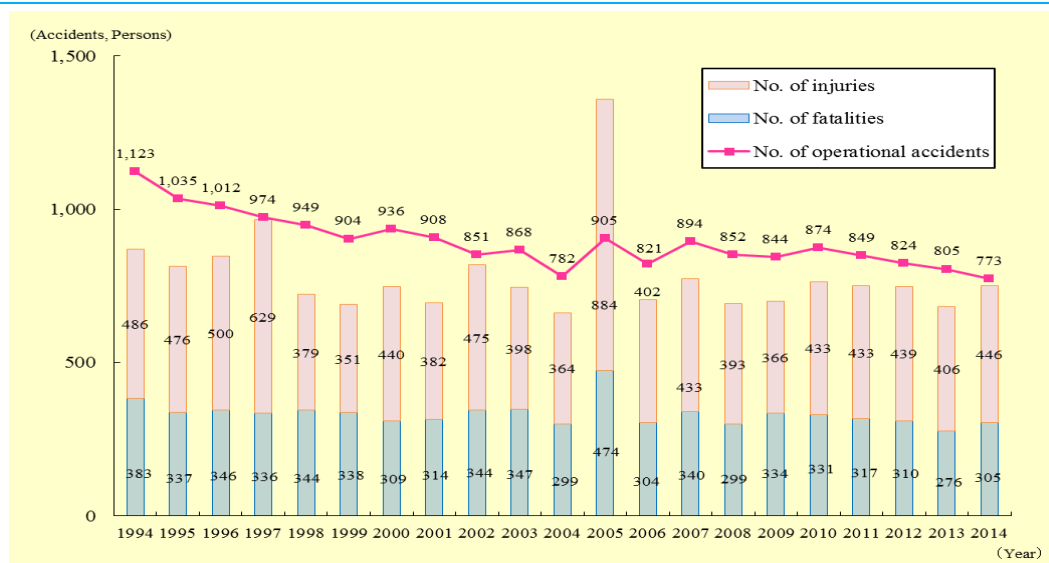
## Part 2 Railway Transport

### 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 1,123 accidents in 1994 and the number fell to 782 in 2004, 773 in 2014 decreasing by 4.0%.
- ② The number of fatalities in operational accidents was 305, which was as targeted in the Ninth Traffic Safety Basic Plan (an increase of 10.5%) 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 254 accidents in 2014, a 14.5% decrease of over the previous year and the number of fatalities at railway crossing was 95, a 1.1% increase over the previous year.
- ④ A total of two grave accidents (where there are 10 or more casualties or there occurs a derailment of 10 or more cars) occurred in 2014, including the train collision accident that occurred at the Motosumiyoshi station on the Toyoko line of Tokyu Corporation in which 72 people were injured on February 15, 2014.

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.

\* Accidents at railway crossings

Accidents at railway crossings refer to the train accidents where a train or vehicle collide or make contact with a pedestrian or another vehicle at railway crossings and the accidents involving injuries that occur at railway crossings.

## 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 Rail 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 Security Audit, etc.

To ensure safety operations of railways, security audit was conducted on railway operators and others pursuant to the Railway Business Act. In FY 2013, a total of 60 security audits were conducted on 45 railway operators and, according to the result, a total of 31 cases of written administrative guidance that demands improvement were given to 30 railway operators regarding the efforts for ensuring safety in transportation, maintenance management for facilities and rolling stock, operation handling, education and training of crew members, etc.

#### ● Enhancement of Transport 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 1,101 companies by the end of December 2014, an increase by 81 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.