

The History of Fires and Firefighting in Japan and Six of its Major Cities [#4]

The History of Firefighting (Osaka and Kobe)

“The History of Fires and Firefighting in Japan and Six of its Major Cities” is a compilation of the history of fires and firefighting in Japan and six of its major cities and related data from 1950 to 2020 intended to introduce the state of fires and firefighting in Japan to the rest of the world. The fourth installment of this series of special chapters will focus on Osaka and Kobe.

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5-5 Osaka

1) The history of Osaka

Osaka is located 400 km west of Tokyo, and forms part of the Kansai region along with Kyoto and Kobe. With a population of 2.7 million, Osaka is the third most populous city in Japan and is the administrative, economic, and transportation center of the Kansai region and western Japan as a whole.

Osaka has long flourished as a hub for sea, river, and land transportation, and until the 16th century was a gateway for trade and exchange with China, Korea, Spain, and other foreign countries.

Toward the end of the 16th century, Osaka temporarily became the political and economic center of Japan, but by the early 17th century it had lost its political core to Edo (now Tokyo) and was no longer able to trade with foreign countries. Nevertheless, for the next 250 years, Osaka continued to prosper as the commercial, economic, and financial center of Japan, and a unique popular culture emerged.

After the establishment of modern Japan in 1868, the new government adopted an economic policy centered on Tokyo. As a result, Osaka’s status as a commercial city declined, and it gradually became an industrial city with a focus on the textile industry.

In 1925, Osaka’s population grew to 2.11 million, making it at one time the largest city in Japan, surpassing Tokyo, whose population had declined after the Great Kanto Earthquake of 1923.

Toward the end of World War II, Osaka, like other major cities in Japan, was destroyed as a result of intense air raids by the U.S. military. In Osaka, eight air raids using napalm bombs destroyed a total of 310,955 houses, killed 10,383 people, injured 35,543, and sunk 3,162 ships.

After the war ended, an urban development plan was formulated as part of the Japanese government’s war reconstruction project, and Osaka rapidly rebuilt itself through the development of commerce, industry, and small and medium-sized enterprises. The city subsequently experienced rapid economic growth and developed into a metropolis slightly different from that of Tokyo, characterized by its reputation as a city of the common people.

Today, Osaka is a vibrant, cosmopolitan metropolis with an area of 225 km² and a population of 2.7 million.

(Reference materials: “The History of Osaka”, City of Osaka)

2) The history of firefighting in Osaka

In Osaka, the first fire defense organization was established in 1634. This firefighting organization consisted of five organizations, one of which was a public fire brigade, while the other four were volunteer fire brigades made up of ordinary citizens.

Until the mid-19th century, as in other large Japanese cities, all buildings in Osaka were made of wood, and the only fire pumps were manually powered and inadequate. Therefore, when a fire broke out, the fire brigade destroyed neighboring houses to create a firebreak zone to prevent the fire from spreading into a large-scale urban fire. For this reason, many members of the fire brigade were carpenters and construction workers who were familiar with the structure of houses.

In 1869, under the direction the new government, which had just been created following the establishment of modern Japan, 10 fire brigades with a total of 500 firefighters were formed.

In 1880, the decision was made for the police to take command of the fire department, with 7 fire brigades and 311 firefighters assigned to each of the 4 fire stations.

Subsequently, due to a series of large-scale urban fires that destroyed hundreds to thousands of houses, steam fire pumps were deployed at all four fire stations in 1888, followed by the first fire pumper in 1911.

After World War II, each municipality assumed responsibility for firefighting activities. The Osaka Municipal Fire Department was created in 1948, and initially consisted of 16 fire stations, 29 sub-branches, 1,089 full-time firefighters, 180 fire engines, and 1 ambulance. Osaka remained the only city in Japan without a volunteer fire corp until 2008, when a volunteer fire corp was formed, but it has still not taken the form of those in other cities.

Since then, the Osaka Municipal Fire Department has been strengthened as the city's size, population, and economy have grown. (Reference materials: "Firefighting in the 100 years since the Meiji Restoration", Osaka Municipal Fire Department)

3) Data on fires and fire service systems in Osaka

Table 10 Key firefighting-related data for Osaka (2020)

Population	2,705,995
Total Area	225km ²
Osaka City Expenditures (based on the 2018 settlement of accounts)	JPY 1,758.6B (USD 15,987M)*
Firefighting expenses (based on the 2018 settlement of accounts)	JPY 37.1B (USD 337M)*
No. of public firefighters	3,567
No. of volunteer firefighters	0
No. of fire department (public)	25
No. of Volunteer fire corps	0
Fire pumpers (including volunteer fire corps vehicles)	152
Ladder trucks	27
Fire and disaster prevention helicopters	2
Fire boats	2
Ambulances	87

Prepared based on the 2020 White Paper on Fire Service and the FY2018 Municipal Accounts Card.
*Converted at JPY 110 to USD 1 (exchange rate at the time of 2018)

Table 11 Major fires in Osaka (1868-2020)

Date	Buildings or districts where the fire occurred	No. of burned houses	Fatalities	Injuries	Overview
11/30/1875	Takeyamachi	300			Urban fire
2/20/1876	Dotonbori	300			Urban fire (broke out in a theatre)
12/24/1880	Kasayamachi, Minami-ku	2,989			Urban fire (broke out in Kasayamachi)
11/23/1881	From Horie to Kita	591			Urban fire (broke out in a brothel in Horie)
1/9/1884	From Hashidumecho to Uchihonmachi	957			A large-scale urban fire which broke out from a brothel in Horie. This fire led to the adoption of steam fire pumps and the reform of the fire service system in 1888.
9/5/1890	Nishi-ku	2,110	1	127(including 76 firefighters)	Urban fire (broke out in Shinmachi 1-chome)
12/20/1892	Spinning mill and surrounding private houses	270	100	88	A fire at a spinning mill spread to surrounding houses, and 100 female weavers burned to death.
7/31/1909	Kita-ku	11,365	6	69	A large-scale urban fire which broke out in Kushincho 2-chome. The northern part of Osaka was almost completely destroyed in the fire.
1/16/1912	Minami-ku	4,070	2	90	Urban fire (broke out from a brothel in Nambashinchi)
5/5/1917	Warehouse		43	82	A warehouse exploded, spreading fire to the surroundings.
1/29/1940	Freight train carrying gasoline		189	67	A freight train carrying gasoline derailed and overturned, then exploded.
4/8/1970	Subway construction site		79	406	A large amount of gas leaked due to a broken city gas pipe, accumulated at a subway construction site, and exploded. Many passersby and people who gathered after learning of the accident were killed or injured, and many surrounding houses were destroyed in the fire.

5/13/1972	Large-scale multi-purpose building		118	81	During the night, a fire broke out in a department store undergoing renovation, and smoke spread to the upper floors. Many customers and employees of a cabaret operating on the top floor were killed or injured. The death toll is the highest in postwar Japan.
6/24/1977	Dormitory		12	3	A fire broke out in a construction worker's dormitory, killing and injuring many construction workers who were sleeping.
5/18/1988	Vessel		11	35	A fire broke out near the cabin of a Soviet cruise ship anchored in Osaka Port, killing and injuring a number of passengers.
10/1/2008	Private video parlor (a series of very small private rooms used for watching videos that also serve as budget accommodations)		15	10	During the night, a guest set fire to his room in an attempt to commit suicide. Because the hallway was narrow and maze-like with only one entrance and exit, many of the other guests were unable to evacuate and died, but the culprit survived.

Urban fire: Fires that have destroyed approximately 300 or more houses, excluding wars.

Other fires: fires with 10 or more fatalities

(Prepared based on "The Encyclopedia of Environment, Disasters and Accidents (published by Maruzen)" and the White Papers on Fire Service)

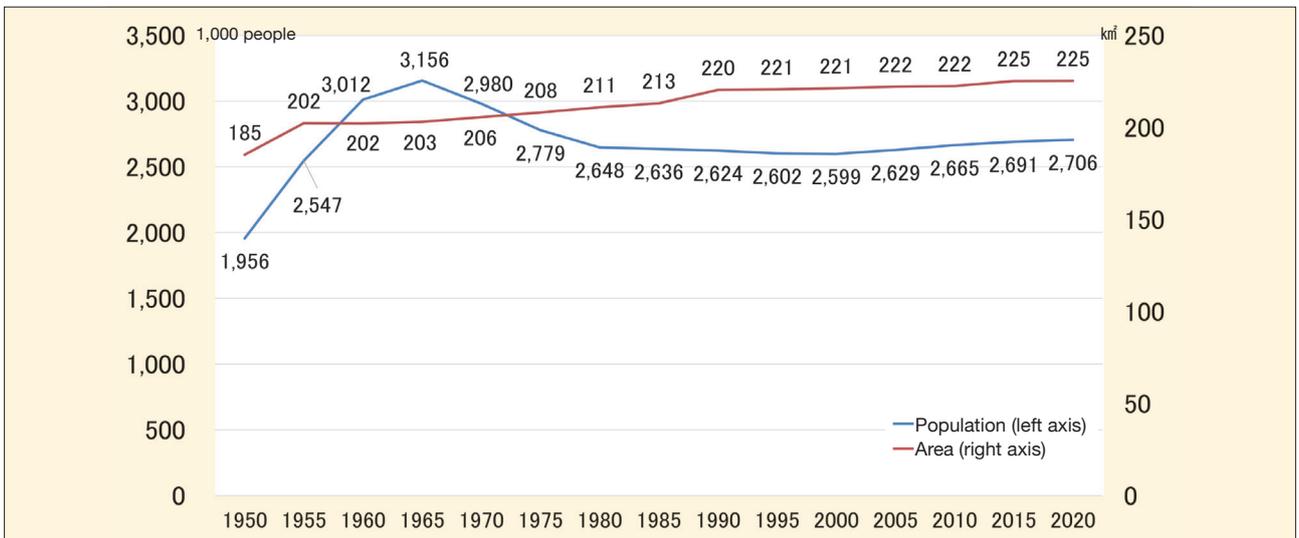


Figure 28 Population and area of Osaka (1950-2020)

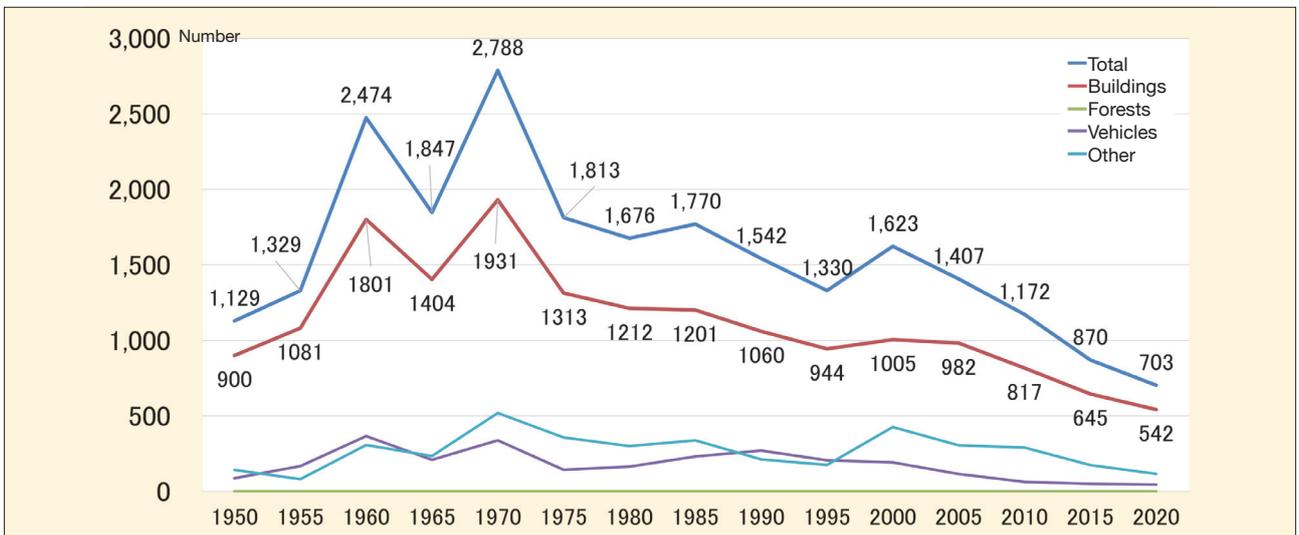


Figure 29 Number of fires in Osaka (1950-2020)
(Prepared based on "The Fire Annual Report", FDMA)

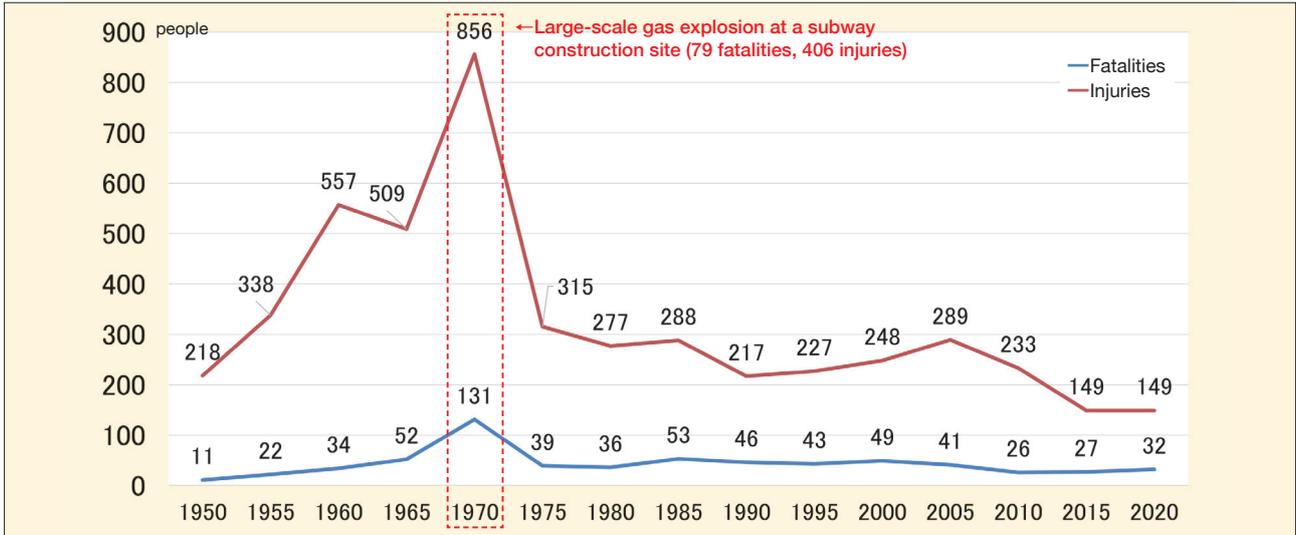


Figure 30 Fatalities and injuries from fires in Osaka (1950-2020)
(Prepared based on “The Fire Annual Report”, FDMA)

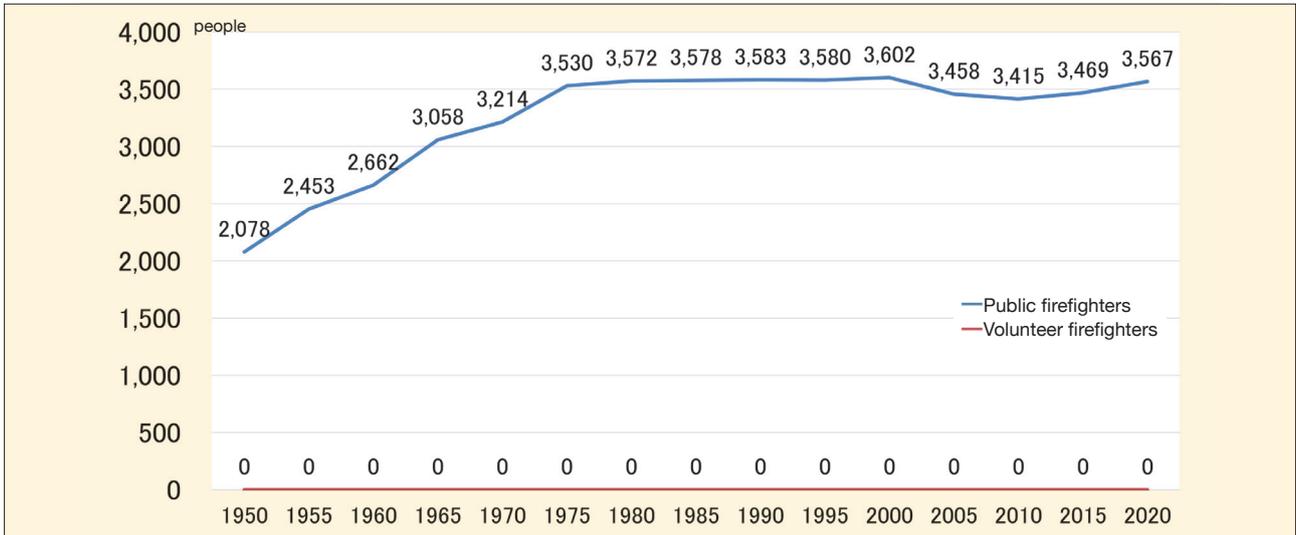


Figure 31 Number of firefighters and volunteer firefighters in Osaka (1950-2020)
(Prepared based on “The Fire Service Annual Report”, FDMA)

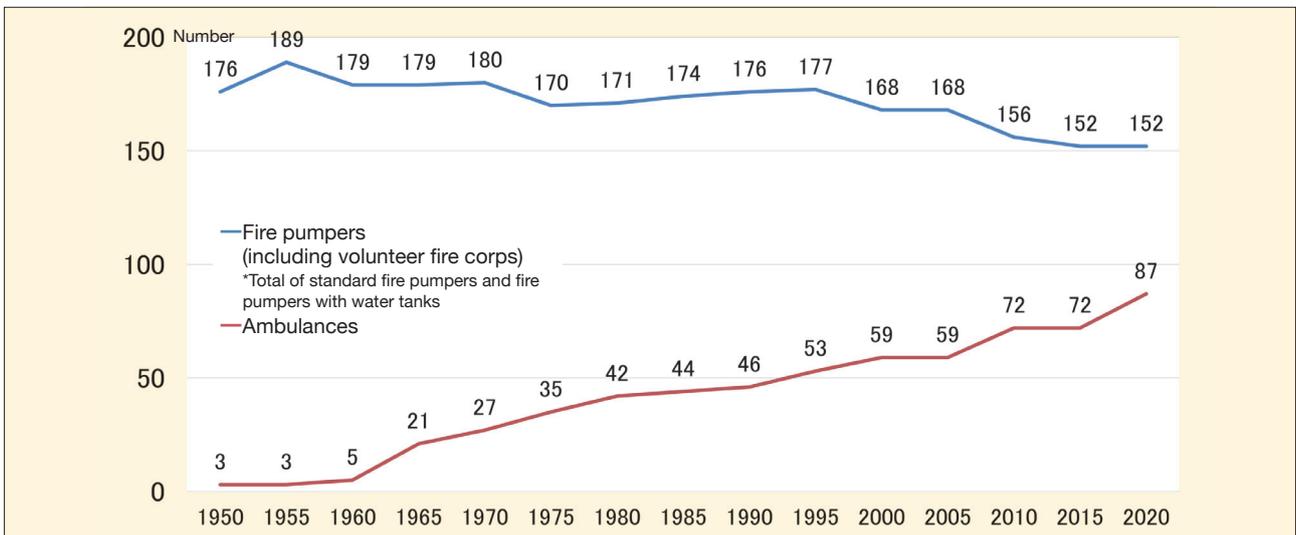


Figure 32 Number of fire pumps and ambulances in Osaka (1950-2020)
(Prepared based on “The Fire Service Annual Report”, FDMA)

5-6 Kobe

1) The history of Kobe

Kobe is located 430 km west of Tokyo, and forms part of the Kansai region along with Kyoto and Osaka. The port of Kobe has long flourished as an excellent natural port.

Around the 10th century, Kobe served as a hub for maritime traffic between the capital Kyoto and the Seto Inland Sea.

In the 12th century, Kobe became the center of trade with China and for a very short time was the capital of Japan.

From the early 17th century to the mid-19th century, Kobe flourished as the center of domestic shipping in the Kansai region as the Japanese government severely restricted foreign trade and exchange.

In 1858, the Japanese government accepted the U.S. government's demand to open the country for trade, which was backed by military force, and resumed exchanges and trade with foreign countries. At this time, the Japanese government decided that Kobe would be one of the ports to receive foreign ships, and in 1868, the port of Kobe was opened as an international trading port.

After the opening of the port, a foreign settlement was established in Kobe, and Western lifestyles were adopted in everything from food, clothing, and housing to entertainment and culture, and Kobe rapidly developed into an international trading city.

When Kobe was declared a city in 1889, it had a population of 135,000.

Later, Kobe continued to grow as a major Asian trading port along with Shanghai, Hong Kong, and Singapore. At the same time, industries centering on shipbuilding, steel, and machinery developed along with the port, making Kobe one of the leading heavy industrial cities in Japan.

Toward the end of World War II, Kobe became an important strategic target for the U.S. Military and was repeatedly bombed by B-29s. Most of the city's buildings, industrial facilities, and port facilities burned down, resulting in many casualties. The afflicted area accounted for 21% of the urban area around Kobe, with 141,983 houses destroyed, 7,491 people killed, and 17,002 people injured.

After the war ended, a plan for the reconstruction of Kobe, which had been destroyed by air raids, was formulated based on the Japanese government's master plan for afflicted areas, and a reconstruction project was initiated. In this plan, it was decided that Kobe would be positioned as an "international trading city" and that the city would be developed through a combination of commerce, industry, culture, and tourism. The current city of Kobe was built on the basis of this reconstruction project.

During the postwar period of rapid economic growth, the city of Kobe reclaimed coastal areas by using soil removed from the backside of the mountains behind the city to create artificial islands. These artificial islands were developed into port facilities, commercial facilities, industrial facilities, and residential areas, while the sites in the mountains where soil was removed for land reclamation were developed into residential areas and industrial parks.

On January 17, 1995, Kobe was hit by a magnitude 7.3 earthquake. This earthquake, whose epicenter was located underground in the immediate vicinity of Kobe, completely destroyed 105,000 buildings, killing 6.4 thousand people and injuring 40,000. It also caused a massive urban fire that destroyed 7,000 homes.

The Japanese government, Hyogo Prefecture, and Kobe City began a reconstruction project immediately after the earthquake, and Kobe was soon rebuilt. Today, Kobe is a beautiful international port city with an area of 557 km² and a population of 1.5 million.

(Reference: "The History of Kobe Exhibition Room", Kobe City Museum)

2) The history of firefighting in Kobe

The fire brigade that became the foundation for the Kobe City Fire Bureau was created at the beginning of the 18th century. About 200 citizens worked as a fire brigade to extinguish fires when they broke out, but firefighting was difficult because all of the buildings at that time were made from wood.

By the time the port of Kobe was opened as an international trading port in 1868, there were seven citizen-organized fire brigades, and in 1874, a modern fire defense organization was created with 10 fire brigades and 500 firefighters.

After World War II, firefighting activities became the responsibility of each municipality. The Kobe City Fire Bureau was created in 1948, and initially consisted of 6 fire stations, 748 full-time firefighters, 39 fire engines, 1 ambulance, and 5,425 volunteer firefighters.

Since then, the Kobe City Fire Bureau has been strengthened as the city's size, population, and economy have grown.

(Reference materials: "Firefighting in Kobe", Kobe City Fire Bureau)

3) Data on fires and fire service systems in Kobe

Table 12 Key firefighting-related data for Kobe (2020)

Population	1,515,821
Total Area	557km ²
Kobe City Expenditures (based on the 2018 settlement of accounts)	JPY 801.1B (USD 7,283M)*
Firefighting expenses (based on the 2018 settlement of accounts)	JPY 18.8B (USD 171M)*
No. of public firefighters	1,580
No. of volunteer firefighters	3,740
No. of fire department (public)	10
No. of Volunteer fire corps	10
Fire pumpers (including volunteer fire corps vehicles)	49
Ladder trucks	11
Fire and disaster prevention helicopters	2 (in operation: 3 helicopters)
Fire boats	2
Ambulances	41

Prepared based on the 2020 White Paper on Fire Service and the FY2018 Municipal Accounts Card.

*Converted at JPY 110 to USD 1(exchange rate at the time of 2018)

Table 13 Major fires in Kobe (1868-2020)

Date	Buildings or districts where the fire occurred	No. of burned houses	Fatalities	Injuries	Overview
11/2/1968	Hot-spring hotel		30	44	Many fire prevention defects were found in violation of the law, and proper fire extinguishing and evacuation instructions were not provided, resulting in numerous casualties.
1/17/1995	Nagata-ku	441	8		Fire caused by Great Hanshin-Awaji Earthquake
1/17/1995	Nagata-ku	750	60		Fire caused by Great Hanshin-Awaji Earthquake
1/17/1995	Nagata-ku	996	73		Fire caused by Great Hanshin-Awaji Earthquake
1/17/1995	Nagata-ku	1,130	48		Fire caused by Great Hanshin-Awaji Earthquake
1/17/1995	Nagata-ku	404	5		Fire caused by Great Hanshin-Awaji Earthquake
1/17/1995	Nagata-ku	699	40		Fire caused by Great Hanshin-Awaji Earthquake

Urban fire: Fires that have destroyed approximately 300 or more houses, excluding wars.

Other fires: fires with 10 or more fatalities

(Prepared based on "The Encyclopedia of Environment, Disasters and Accidents (published by Maruzen)" and the White Papers on Fire Service)

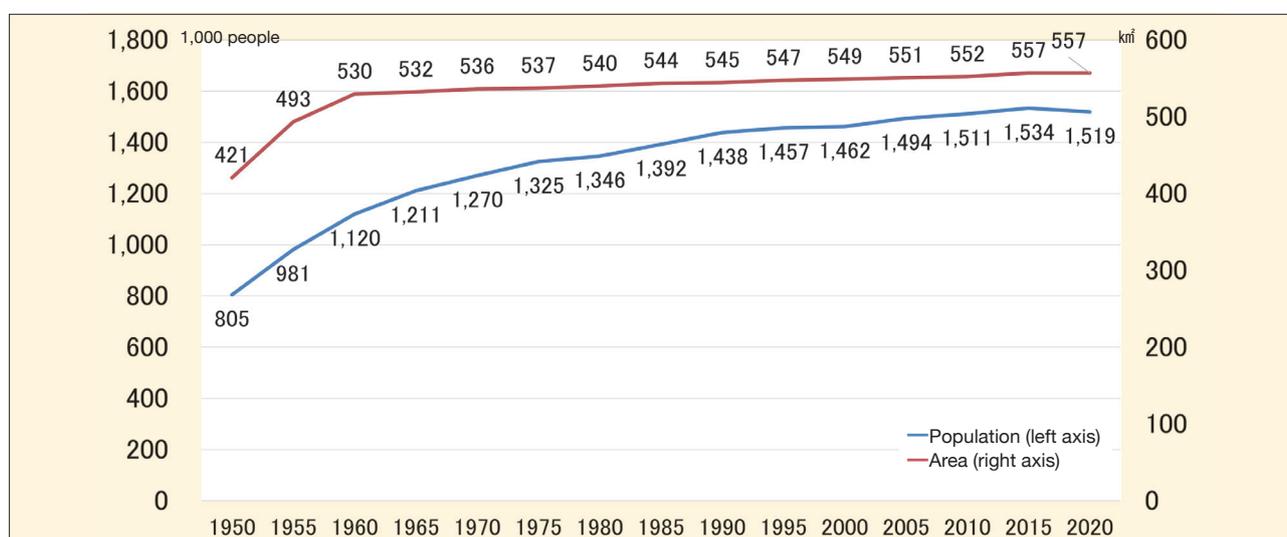


Figure 33 Population and area of Kobe (1950-2020)

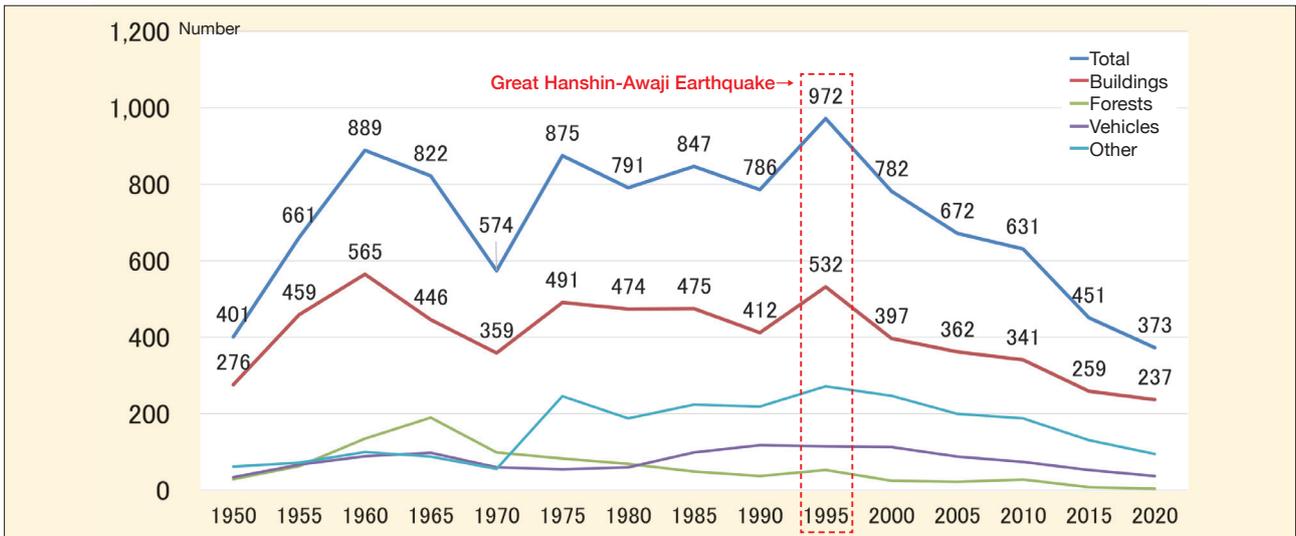


Figure 34 Number of fires in Kobe (1950-2020)
(Prepared based on "The Fire Annual Report", FDMA)

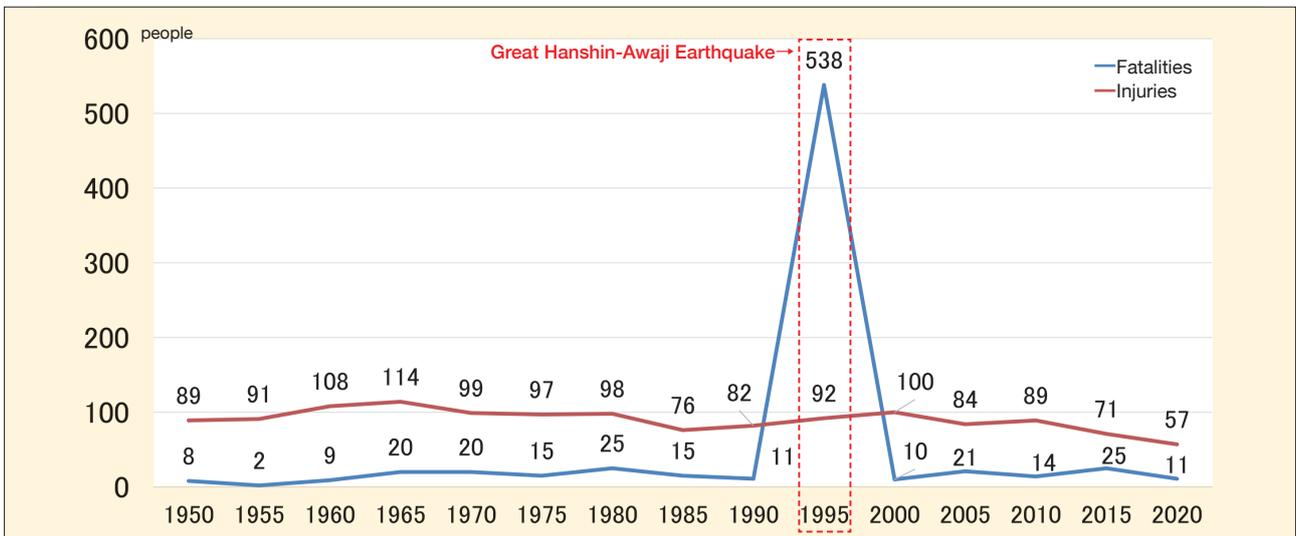


Figure 35 Fatalities and injuries from fires in Kobe (1950-2020)
(Prepared based on "The Fire Annual Report", FDMA)

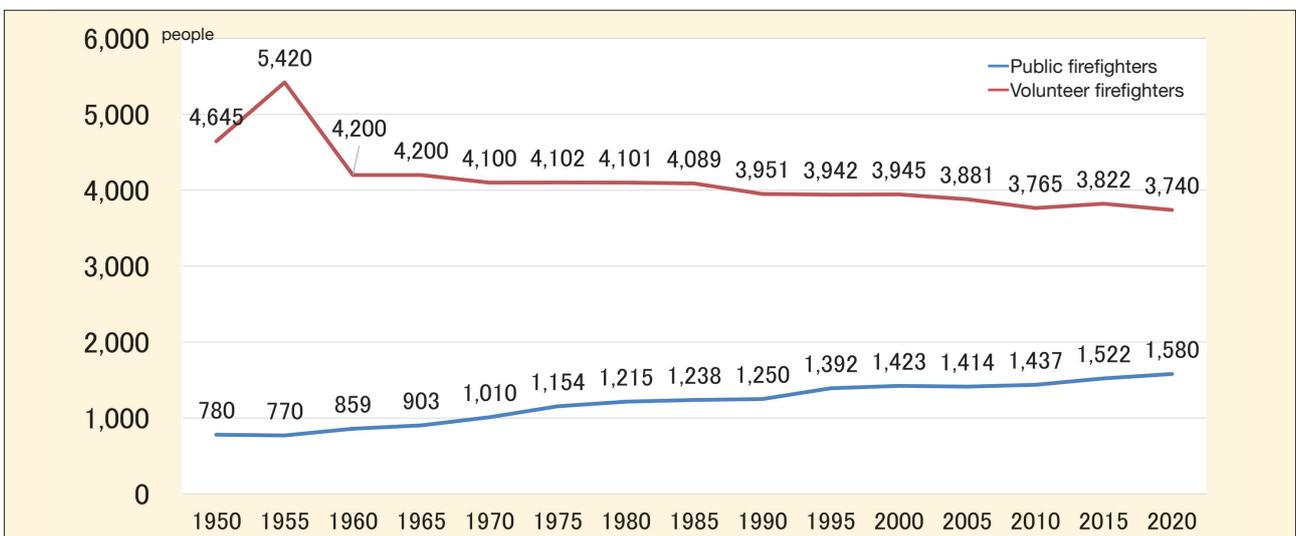


Figure 36 Number of firefighters and volunteer firefighters in Kobe (1950-2020)
(Prepared based on "The Fire Service Annual Report", FDMA)

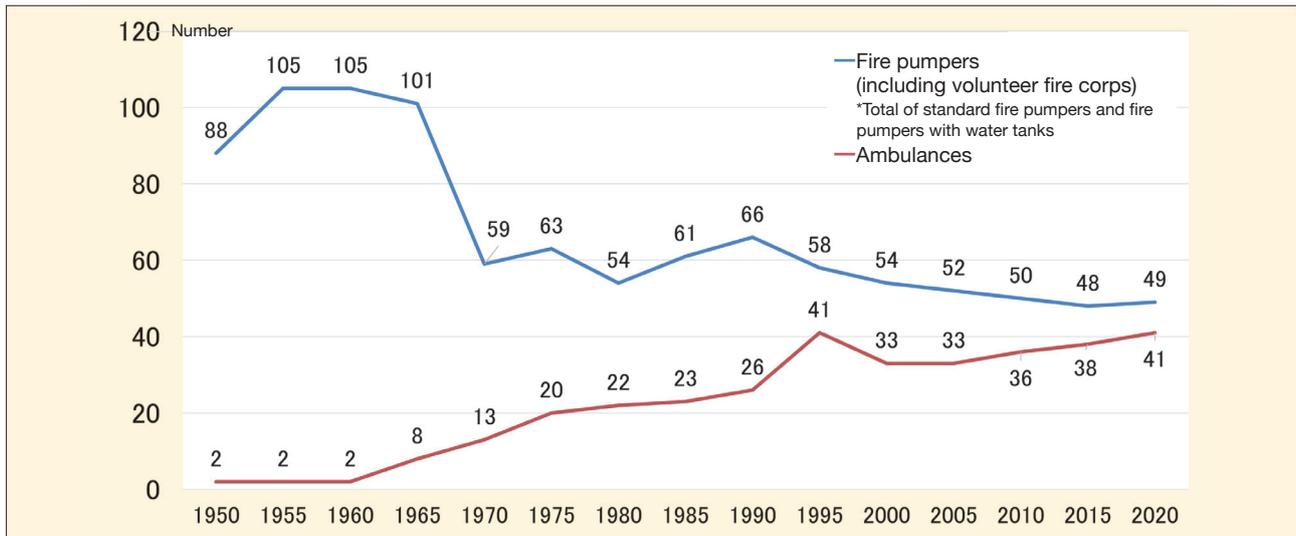


Figure 37 Number of fire pumps and ambulances in Kobe (1950-2020)
 (Prepared based on “The Fire Service Annual Report”, FDMA)

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