

Volunteer Firefighters in Japan

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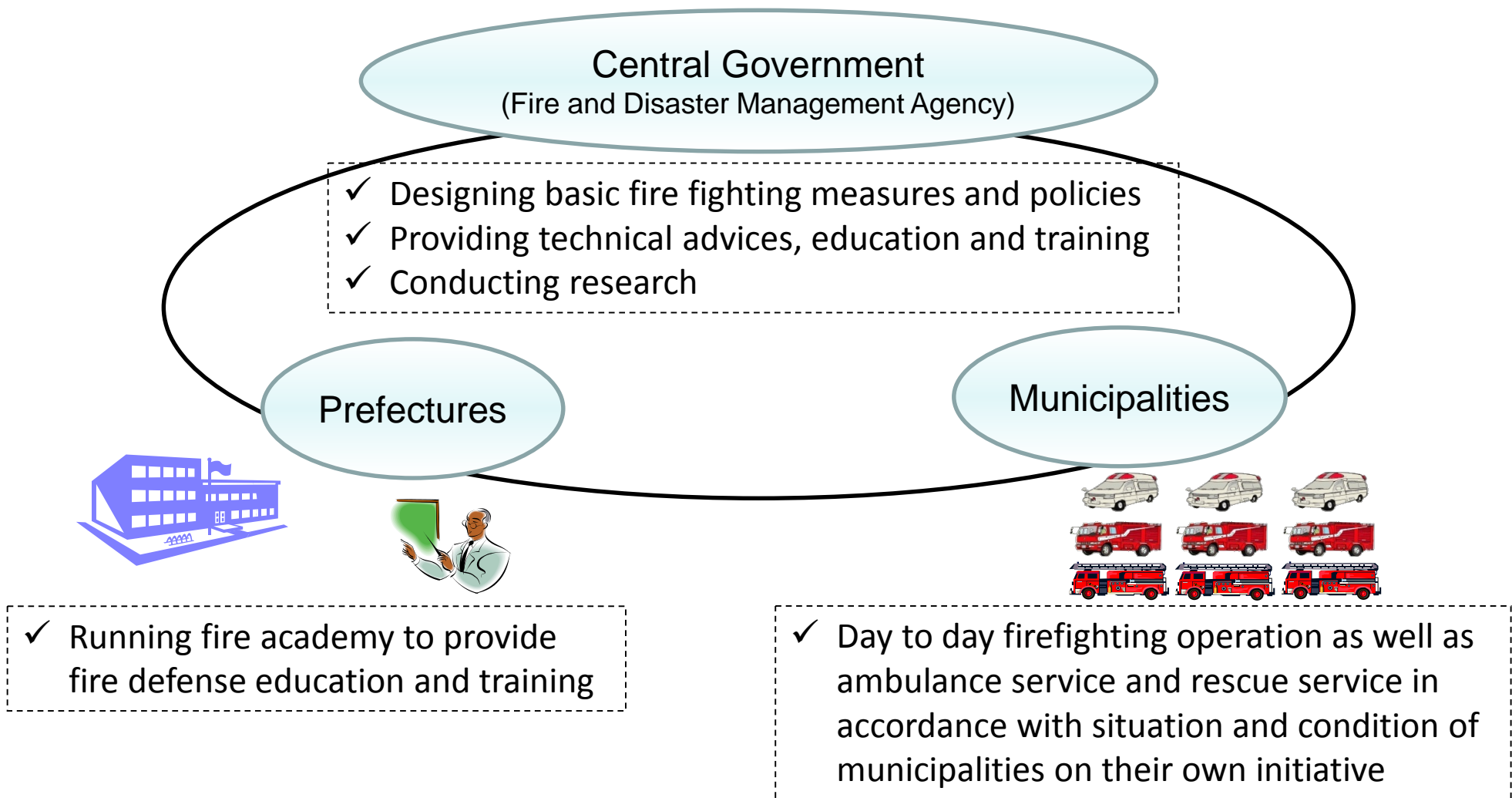


1. How Volunteer Firefighters Function

Institutional Arrangement in Fire Service

– Central Gov., Prefecture and Municipality

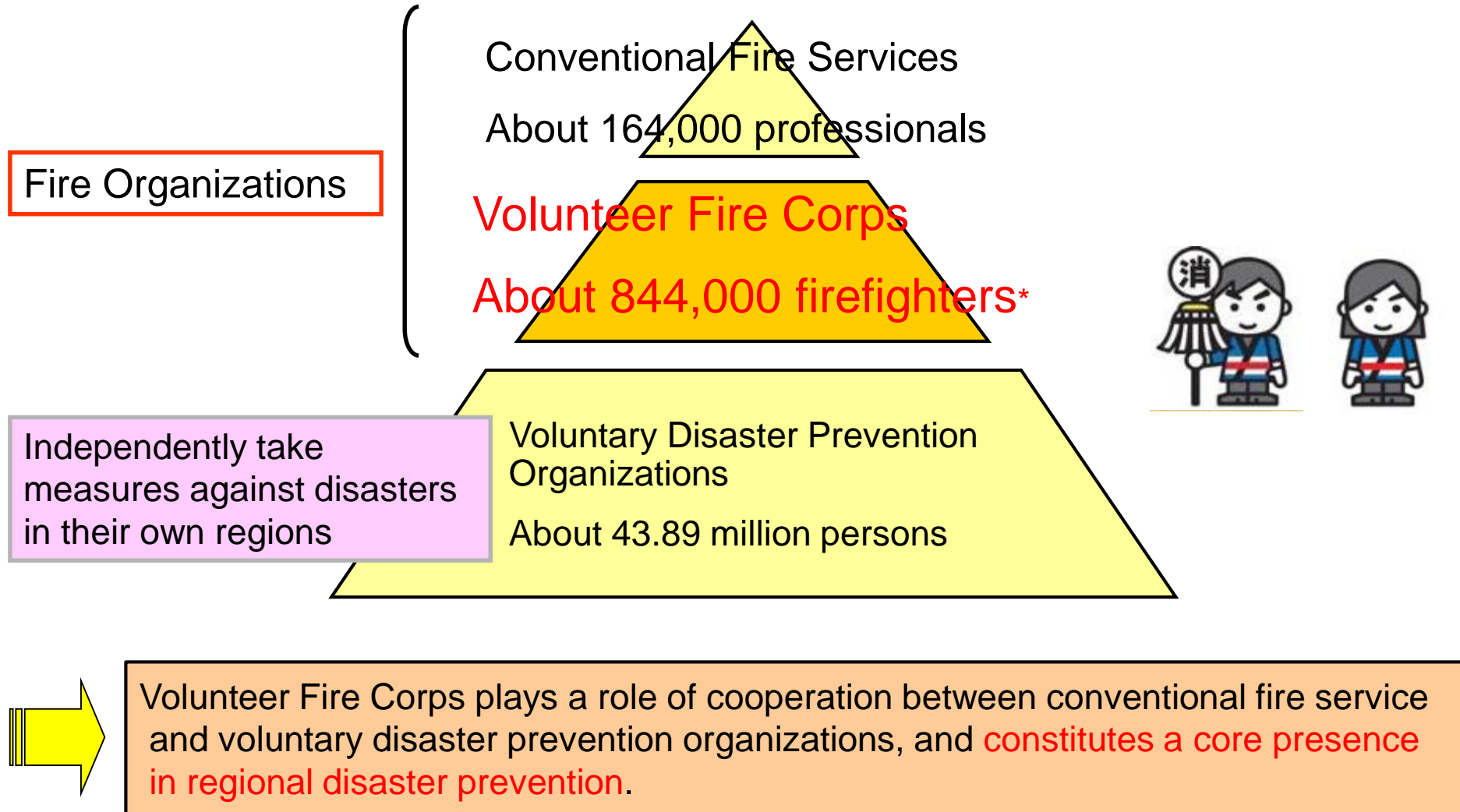
Mission: Firefighting, Ambulance Service and Rescue Activity



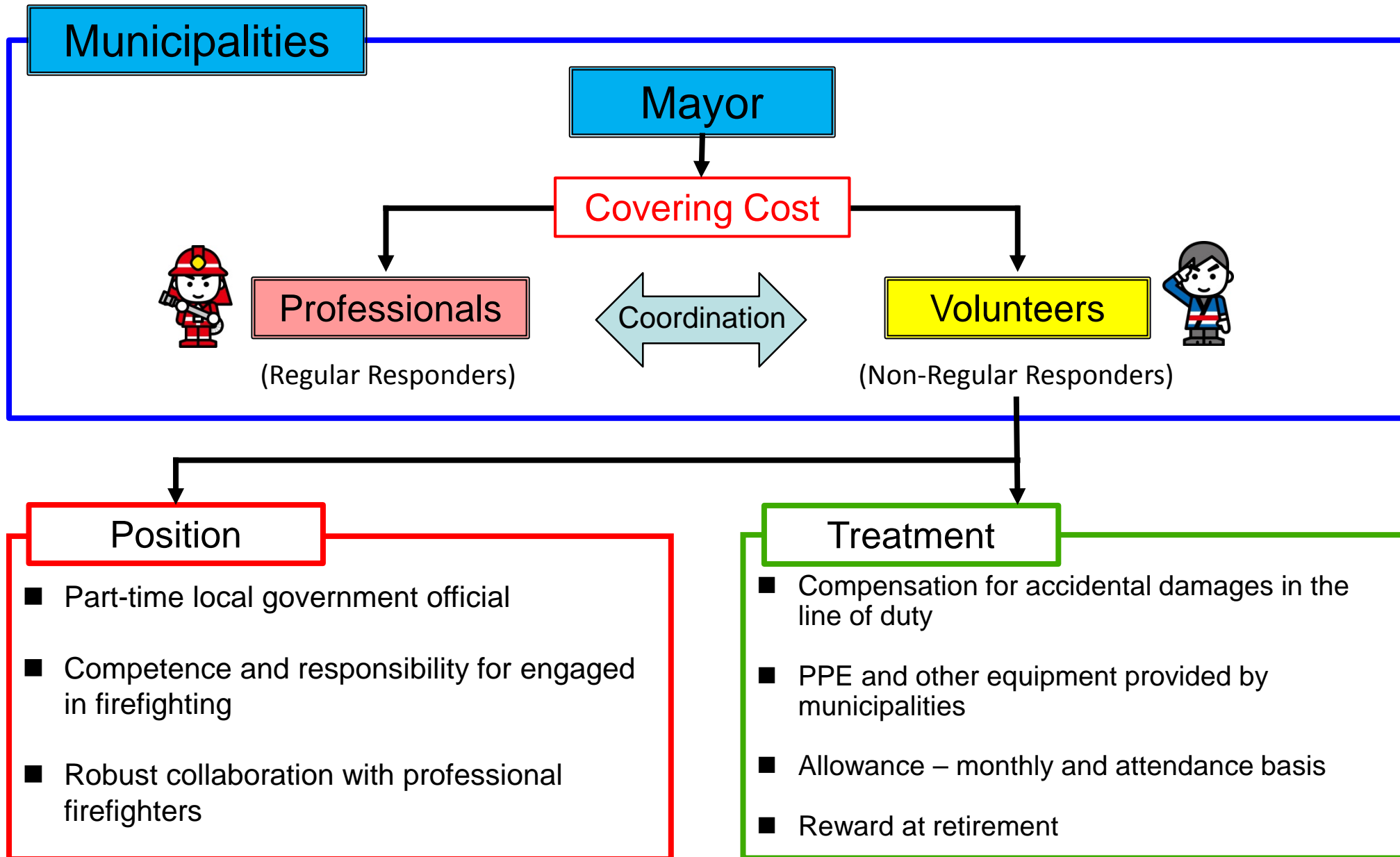
Japan's Volunteer Fire Corps and Regional Disaster Prevention System

As of April 1, 2017

*As of April 1, 2018



Position and Treatment



Equipment

Fire Engine



Flood Light



Transvers



Engine Cutter



Chain Saw



Rescue Tools



Hydraulic Cutter



Firefighting Equipment



Rescue Boat



Advantageous Aspects

1. Close to Community

Have known their own communities and its situations better than professional firefighters

2. Robust Mobilization

Have five times more members than professionals
(Volunteers: 840k > Professionals: 160k)

3. Rapid Response

Can start firefighting/rescue activities even before professionals attend the incident scene, because of undergoing high-level trainings

Main Tasks in Disaster Response



Fire Fighting

- ◆ Close collaboration with professionals for effective firefighting
- ◆ Patrolling on incident site after putting fire under control to check if the fire occurs again



Rescue

- ◆ Search and rescue, in cooperation with professionals



Flood Fighting

- ◆ Preventing river flood from happening with flood fighting method
- ◆ Instruction/assistance for residents evacuation

Main Tasks in Normal Times



Courtesy of Miyazaki Fire Department

Exercises

- ◆ Regularly doing exercises
 - Hose handling technique
 - Handling equipment



Courtesy of Miyazaki Fire Department

Lectures

- ◆ Lectures to residents regarding first aid including AED



Courtesy of Miyazaki Fire Department

Public Awareness

- ◆ Raising public awareness for fire prevention and disaster risk reduction

2. Case Studies

Great East Japan Earthquake

Tsunami

- ◆ Instruction for resident evacuation, stopping at every houses in the community
- ◆ Closing water gates at shore immediately after tsunami warning issued

➡ **The disaster was too large for professionals to handle these missions – then covered by volunteers.**

Firefighting

- ◆ Water recourses lacked due to the earthquake, which required long distance pumping from rivers to disaster affected communities
- ◆ Fire scale was so large and continued for many days

➡ **Only professionals were not enough to combat the disaster – volunteers' support proved vital.**

Rescue

- ◆ Rescued isolated people and guided to emergency shelters

➡ **Volunteers' detail knowledge on community helped make the rescue and the guidance efficient.**



firefighting by volunteers



Courtesy of Tokyo Fire Department

Professionals and volunteers working together



Courtesy of Tokyo Fire Department

Evacuation guide by volunteers

Nagano Quake in 2014

In Nov 2014, a magnitude 6.7 earthquake stroke northern part of Nagano prefecture, where more than 200 houses in communities collapsed.

Volunteer Firefighters Involvement

- ◆ A volunteer group, led by a former volunteer fire corps, has created an original map for emergency operation where the location of people in need of assistance for evacuation was plotted – quite useful to rescue the people and guide to evacuation instantly. ↓
- ◆ Safety confirmation process was completed just for 90 mins. ↓
- ◆ **Even with a magnitude - 6.7 earthquake in mid-night winter, all of the residents in disaster hit communities survived.** ↓

Proved the significance of volunteers' activity



Northern Kyushu Flooding and Landslides

Northern Kyushu region was hit by a wall of water due to river floods and landslides caused by the unprecedented heavy rainfall.

Volunteer Firefighters Involvement

The disaster affected areas were too wide for professionals to carry out search and rescue.



“Robust Mobilization” – one of the volunteers advantageous aspect, functioned well. Max 4,000 volunteers engaged in search and rescue in wide areas.



Other tasks the volunteers have taken were;

- evacuation instruction and safety confirmation
- removal of drifted timbers and shoveling of mud and
- emergency water supply and carriage of food to isolated areas.



Volunteers on searching (Asakura City)

Itoigawa City Great Fire

- ◆ The fire occurred at a built-up area in Itoigawa City in 2016 and flying sparks in multiple locations were simultaneously created, leading to the spread of fire. The incident happened as a small-sized restaurant chef forgot to turn off large stoves before leaving there.
- ◆ Strong southerly wind was another factor to hugely spread the fire.

Firefighting

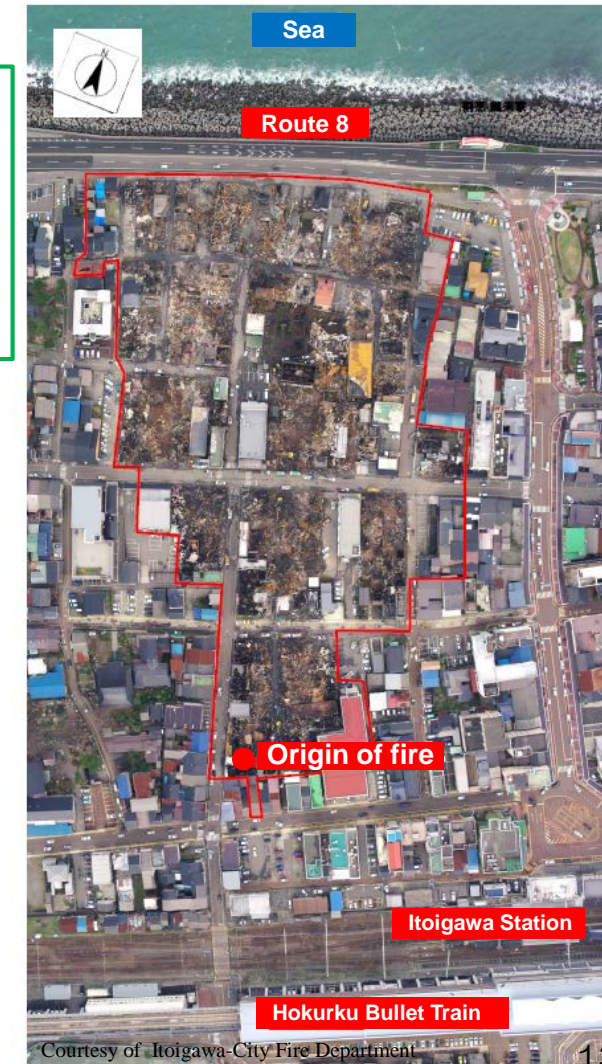
Necessary to combat fires spreading in about 40,000m². Volunteers secured water resource by pumping water from river with portable pumpers, which helped professionals keep on firefighting for many hours

➡ Volunteer Firefighters proved their ability to back up the professionals long-period firefighting.

Rescue

Evacuation Instruction

➡ Volunteers firefighters, who were familiar with fire incident areas, underpinned prompt instruction of evacuation.



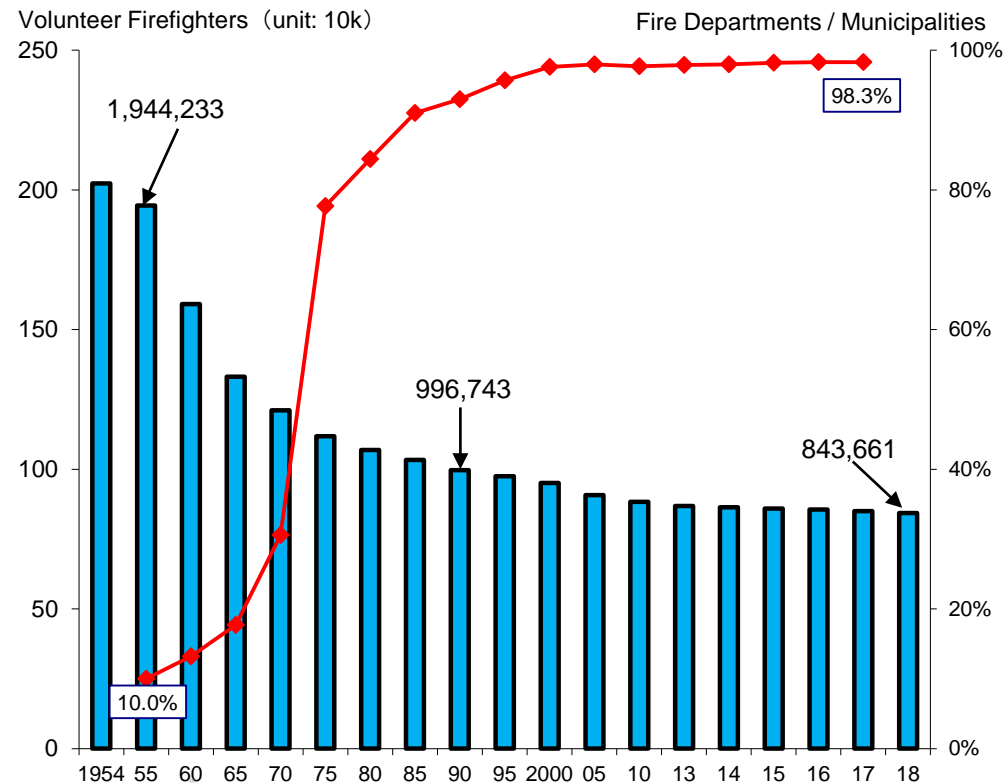
3. Current Status

Current Status on Volunteer Firefighters

1. Number (as of April 1st, 2018)

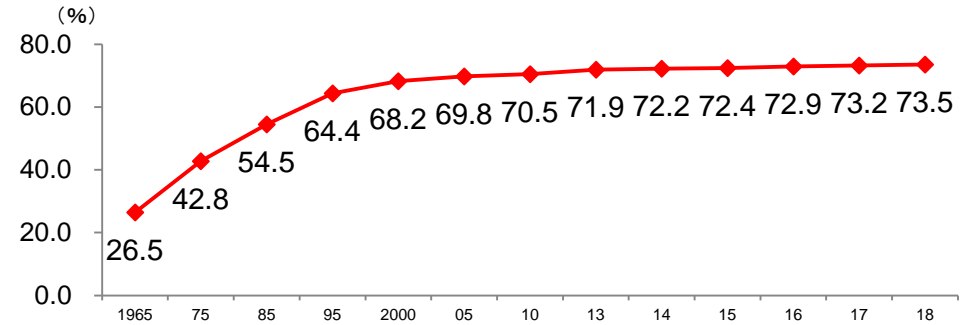
- ◆ Corps: 2,209 (organized in all of the municipalities)
- ◆ Sub-Corps: 22,314
- ◆ Member: 843,661 (decrease 6,670 year on year)

2. History of Volunteer Firefighter Number



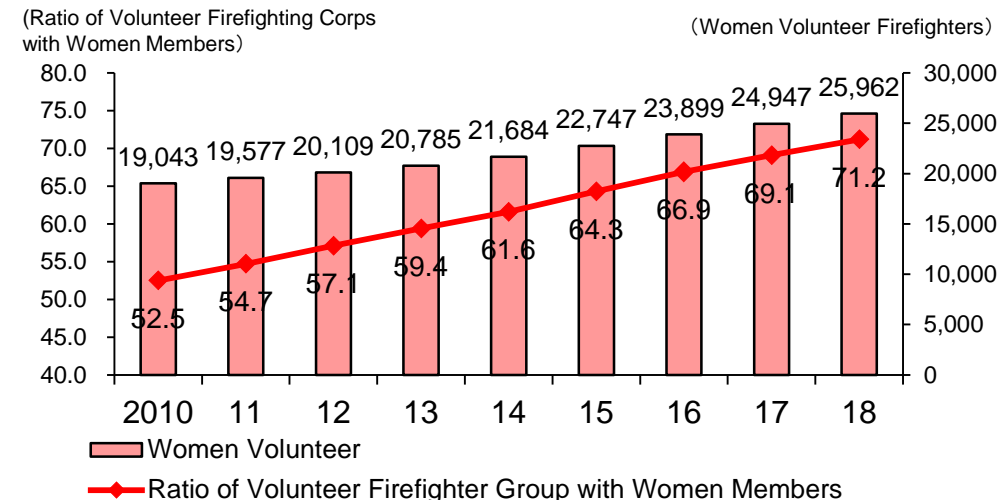
1955-90 has seen sharp drop of volunteers as the establishment of fire departments progressed in the period. Since then, the trend turned flat – around 844,000 as of April 2018.

3. Employed People in Volunteer Fire Corps



With change in structure of occupation, employed people are now major part of volunteer firefighting groups – taking 73.5% of all

4. Women Volunteer Firefighters



Women volunteer firefighters are 25,962 - around 3.1% of all and increase 1,015 for the last year, showing an increase trend.

4. Conclusion

Conclusion

- What are the volunteer firefighter advantages?

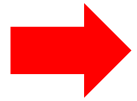
1. Close to Community
2. Robust Mobilization
3. Rapid Response



The volunteer firefighters in Japan functions well in disaster management, making most of the three advantageous characters.

- Position and treatment of the volunteer firefighters

- Part-time local government official
- Their activities financed by municipalities
e.g. PPE & other equipment, allowance and compensation



These functional systems/environment energize Japanese volunteer firefighters' activities.