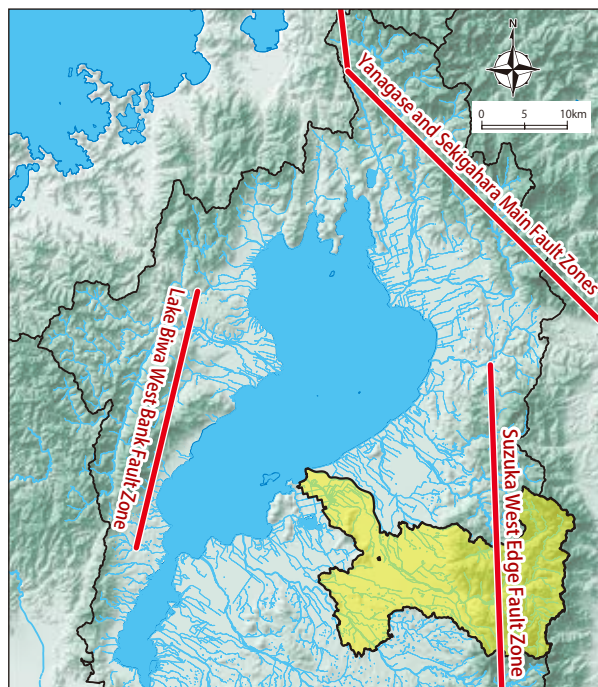


2-1 Earthquakes that Strike Higashiomi City

There are two types of earthquakes that affect our city. They are direct earthquakes that occur at live, inland faults, and trench-type earthquakes that occur at plate boundaries.

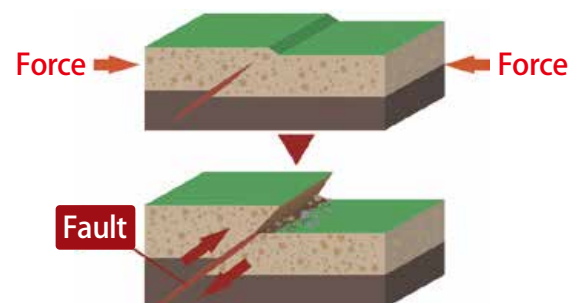
Direct Earthquakes



Source for active faults: National Research Institute for Earth Science and Disaster Prevention, Earthquake Hazard Station J-SHIS

Direct earthquakes occur when the ground shifts along a fault plane when strain energy accumulates and limits are reached when forces are reached that push and pull on the underground foundation.

How Shallow Earthquakes Occur on Land



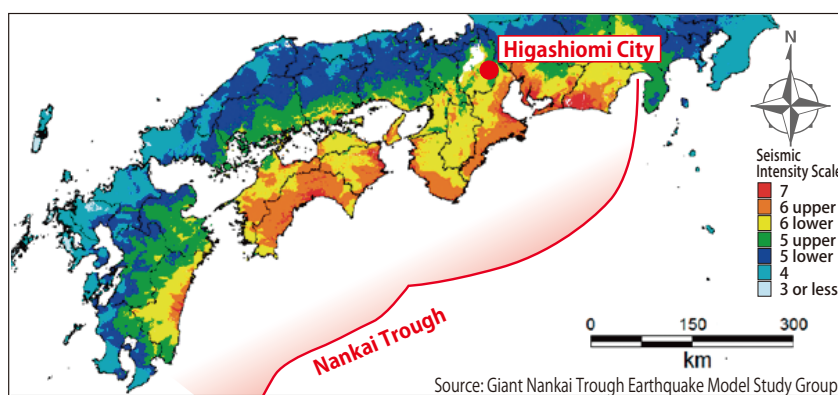
Forces are applied to the underground bedrock for many, many years until it reaches its limit and the bedrock moves suddenly along the fault boundary. This is what causes an earthquake.

Trench-type Earthquakes

Trench-type earthquakes occur when the planet's ocean-side plates slide underneath the land-side plates, accumulating great amounts of strain energy at the boundaries at the plates and then bounce back when limits are reached. When this occurs, a tsunami can also be generated along with the earthquake.

Trench-type earthquakes have been confirmed to be cyclical. The Giant Nankai Trough Earthquake is said to have a 70% -80% chance of occurring within the next 30 years.

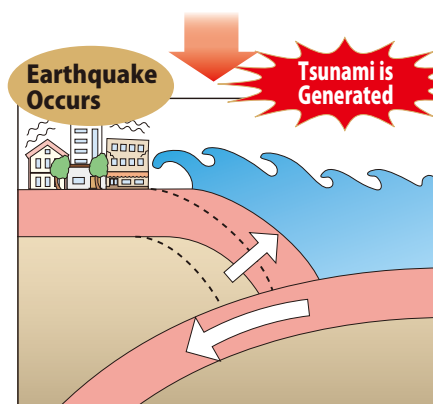
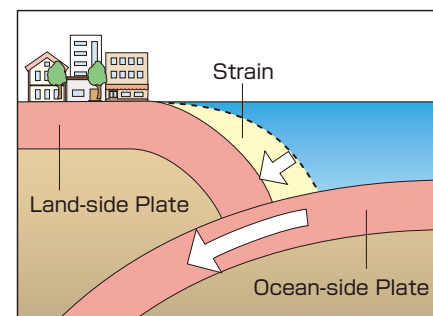
Seismic Intensity Distribution of the Giant Nankai Trough Earthquake



This figure shows the seismic intensity distribution when the Giant Nankai Trough Earthquake occurred at its largest scale. In addition to areas with seismic intensity of 7 from Shizuoka Prefecture to Miyazaki Prefecture, strong shaking with seismic intensity of 6 lower are assumed over a wide area.

Conceptual Views of Trench-type Earthquakes

The ocean-side plate slides underneath the land-side plate, thereby accumulating strain.



The ground is no longer able to withstand the strain, and the leading end of the land plate suddenly jumps back!

2-2 Damage Assumed From Seismic Intensity

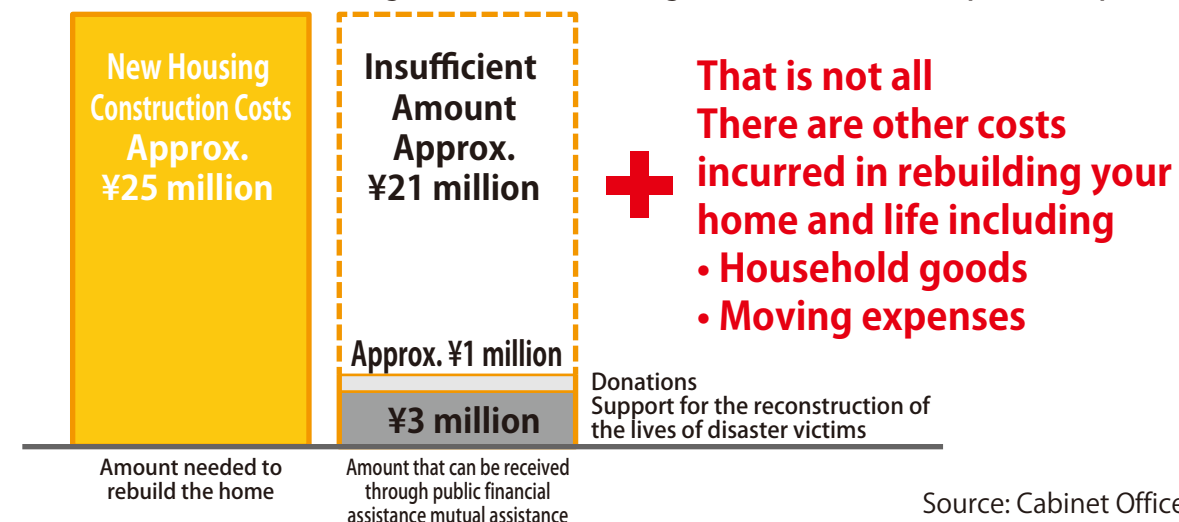
What Happens When an Earthquake Strikes? [Indoors]

<p>Seismic intensity 4</p> <ul style="list-style-type: none"> Most people are surprised. Hanging objects such as lamps shake wildly. Items that are not firmly seated can fall over. 	<p>Seismic intensity 5 lower</p> <ul style="list-style-type: none"> Most people become afraid and will reach out to hold onto something. Dishes and books sitting on the shelves may fall. Unsecured furniture and fixtures may move and unstable items may fall over. 	<p>Seismic intensity 5 upper</p> <ul style="list-style-type: none"> You will have difficulty walking without holding onto something. A lot of dishes and books on the shelves will fall to the ground. Unreinforced block walls may collapse.
<p>Seismic intensity 6 lower</p> <ul style="list-style-type: none"> You will have difficulty standing. Wooden buildings that are not earthquake-resistant may have roof tiles fall and such buildings may begin to tilt. Some items may fall. <p>Low seismic resistance High seismic resistance</p>	<p>Seismic intensity 6 upper</p> <ul style="list-style-type: none"> You cannot move unless you crawl. Wooden buildings that are not earthquake-resistant may incline or collapse. <p>Low seismic resistance High seismic resistance</p>	<p>Seismic intensity 7</p> <ul style="list-style-type: none"> Even wooden buildings that are earthquake-resistant may incline in rare instances. Many buildings made of reinforced concrete that are not earthquake-resistant will collapse. <p>Low seismic resistance High seismic resistance</p>

Column If Your Home Will Cost a Lot of Money to Rebuild

If your home suffers expensive damages in a disaster, you will need to pay a lot of money to have it repaired or replaced. Public financial support or donations made in good faith simply will not be enough. In order to rebuild life smoothly in times of emergency, it is necessary to be prepared to rebuild your life, such as by purchasing insurance.

Reconstruction of Housing from Previous Damage (Case of Great East Japan Earthquake)



Source: Cabinet Office HP