

Earthquake

Map: Vulnerability to Shaking

Introduction

On June 18, 2018, at 7:58 a.m., Ibaraki City was struck by a major earthquake with a magnitude of 6.1 (seismic intensity of 6-lower), centered in the northern part of Osaka Prefecture.

This earthquake has caused precious lives to be lost and many more to be affected. On September 6 of the same year, the Hokkaido Iburi Eastern Earthquake occurred, and many people were also affected by this earthquake.

The Nankai Trough Earthquake, which is predicted to occur with a high probability in the near future, is expected to cause widespread damage, and Ibaraki City has been designated as a disaster planning promotion district for the earthquake.

We reaffirmed that it is essential for individuals and families (self-help), local communities (mutual help, mutual assistance), and governments (public assistance) to cooperate and promote disaster prevention efforts to protect lives and minimize damage from such a major earthquake.

The Ibaraki City Earthquake Hazard Map provides vital information in the event of a disaster, such as the expected seismic intensity of an earthquake and the locations of evacuation areas and centers.

This hazard map aims to minimize injuries and damage in the event of an earthquake by raising awareness of earthquakes and helping you prepare for them.

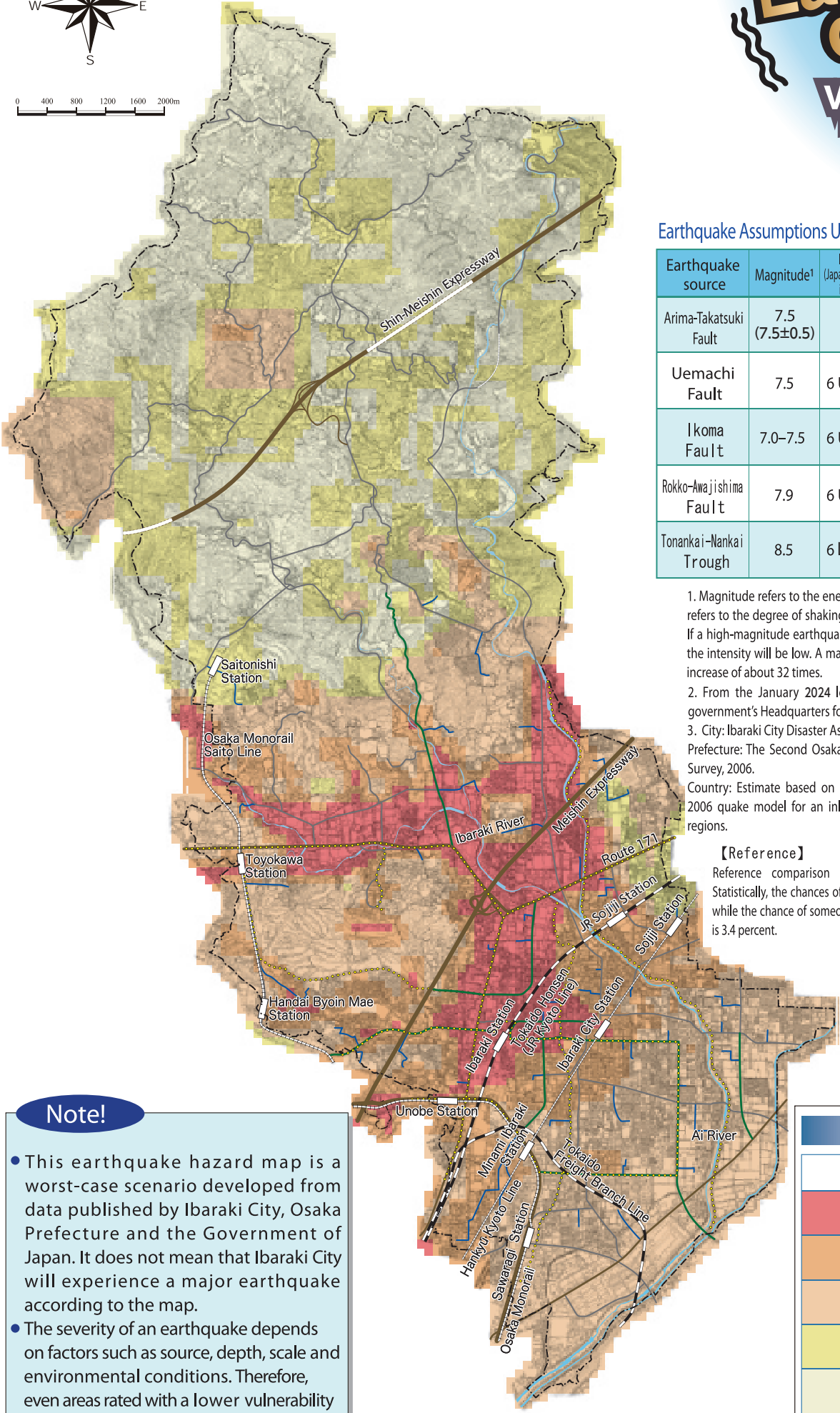
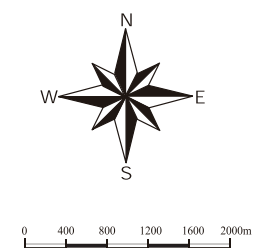
This hazard map does not indicate how a major earthquake will actually hit the city, but knowing what to expect is the first step in being prepared.

I believe it will benefit our entire community, every neighborhood, and every family to be prepared for earthquakes.

January 2021
Ibaraki City

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Earthquake Assumptions Used to Create This Hazard Map

Earthquake source	Magnitude ¹	Intensity (Japanese shindo) in Ibaraki	Probability in next 30 years ²	Data source ³
Arima-Takatsuki Fault	7.5 (7.5±0.5)	7	0-0.04%	City, Prefecture
Uemachi Fault	7.5	6 Upper	2-3%	Prefecture, Country
Ikoma Fault	7.0-7.5	6 Upper	0-0.2%	Prefecture, Country
Rokko-Awajishima Fault	7.9	6 Upper	0-1%	Prefecture
Tonankai-Nankai Trough	8.5	6 Lower	70-80%	Prefecture

1. Magnitude refers to the energy of an earthquake as a whole. Intensity refers to the degree of shaking at a specific point on the Earth's surface. If a high-magnitude earthquake is far away or deep in the earth's crust, the intensity will be low. A magnitude increases of 1.0 equals an energy increase of about 32 times.

2. From the January 2024 long-range assessment by the Japanese government's Headquarters for Earthquake Research Promotion.

3. City: Ibaraki City Disaster Assessment Survey, 1996.
Prefecture: The Second Osaka Prefecture Earthquake Damage Premise Survey, 2006.
Country: Estimate based on the Central Disaster Prevention Council's 2006 quake model for an inland earthquake in the Chubu and Kinki regions.

【Reference】
Reference comparison for 30-year quake probability figure: Statistically, the chances of dying in a traffic accident are 0.2 percent, while the chance of someone robbing your home while you are away is 3.4 percent.

Note!

- This earthquake hazard map is a worst-case scenario developed from data published by Ibaraki City, Osaka Prefecture and the Government of Japan. It does not mean that Ibaraki City will experience a major earthquake according to the map.
- The severity of an earthquake depends on factors such as source, depth, scale and environmental conditions. Therefore, even areas rated with a lower vulnerability may experience very strong shaking.

Map Color Coding		
	Meter reading	Intensity (shindo)
	6.5 or higher	7
	6.25-6.49	6 Upper
	6.00-6.24	
	5.75-5.99	6 Lower
	5.50-5.74	

This map is based on the 2006 map for Ibaraki City (scale: 1/10,000).