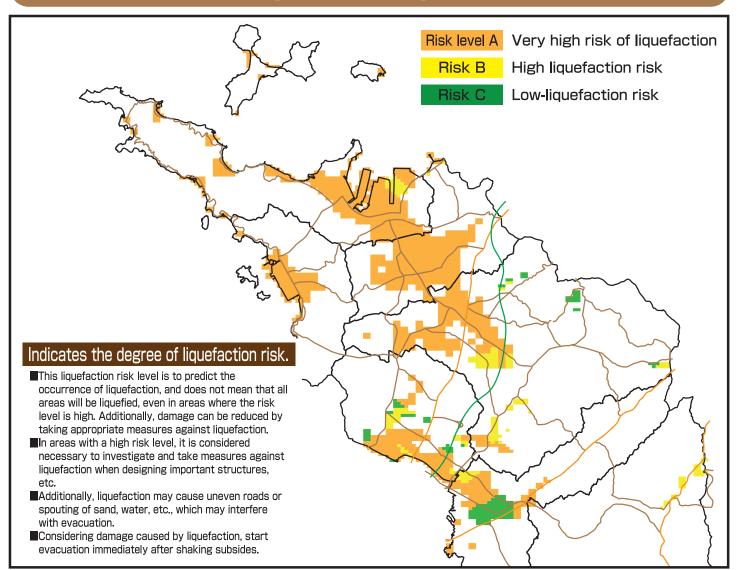


## **Liquefaction Map**



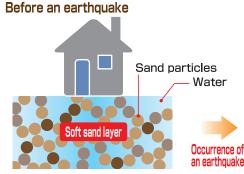
### **Assumption of liquefaction**



### What is liquefaction?

Liquefaction is a phenomenon in which the ground temporarily takes on a liquid-like state due to an earthquake. If a strong earthquake tremor is applied to loose sand with a high underground water level, the possibility of liquefaction becomes high.

Occurrence of



Ground lightly accumulated with sand, etc. in which sand particles adhere to each other to form a skeleton, among which water is contained. The skeleton strength is weak and fragile.

# 直面 Occurrence of liquefaction

During an earthquake

Due to earthquake tremors, sand particles become denser in the lower layer of soil, the upper layer becomes liquid, and houses start to lean. Jets of sand may occur on the surface of the ground.

#### After an earthquake



After an earthquake, the ground subsides and houses lean or sink (uneven settlement).

Due to liquefaction of the ground, it becomes impossible to support heavy buildings, etc., causing ground subsidence or inclination and floating of lightweight manholes in the ground. The ground may flow for several meters near river banks or revetments.