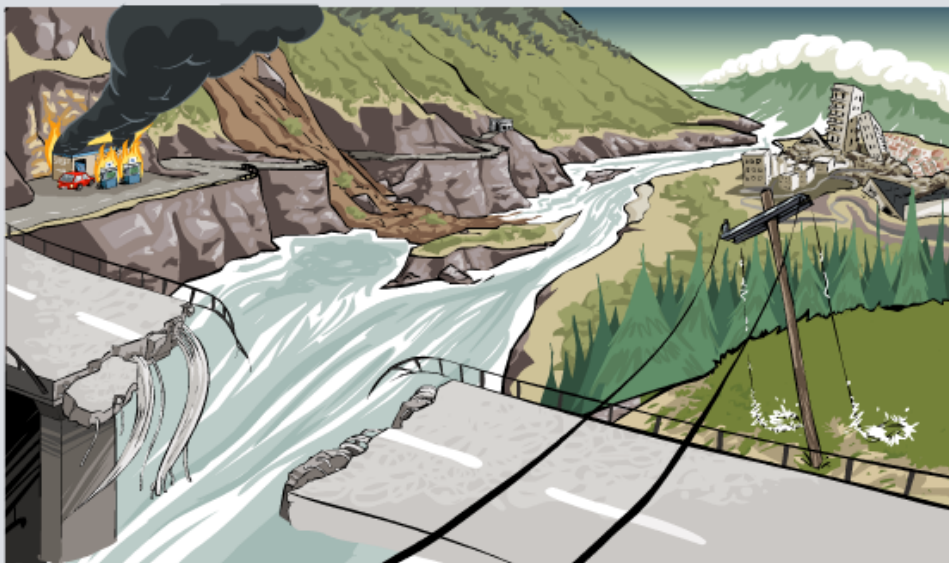


Managing Earthquakes



There are four main ways of managing earthquakes:

- **technology:** in the 1970s it was hoped that technology and engineering skills could control earthquakes, but seismic activity still proves impossible to control
- **reduce vulnerability:** this can be done by building expensive earthquake-proof buildings and infrastructure
- **improved prediction:** heavy investment in research, e.g. remote sensing by satellites, is used to view small crust movements
- **modify the loss:** **seismologists** work with insurance companies to calculate risk and cost premiums.



Being prepared means detailed planning and testing of short- and long-term responses.

Short-term responses:

- storage of emergency supplies
- emergency action plans.

Long-term responses:

- education about how to react
- safer building design and construction
- development plans in vulnerable areas.



Involving the local community is important for all responses. This could include training them in skills such as first aid and firefighting and making them aware of emergency plans.



Earthquakes continue to damage or destroy buildings, bridges, roads and other structures.

The **United States Geological Survey (USGS)** monitors how structures respond to earthquakes and applies the knowledge gained to improve the ability of structures to survive major earthquakes.

San Francisco's **Transamerica Pyramid** was built to withstand earthquakes. It swayed but was not damaged by the 1989 earthquake in Loma Prieta, California.



What makes a building strong? Why is a pyramid the best shape to withstand earthquakes?

Comparing earthquake management

Developed countries have been able to employ advanced building techniques to minimize the devastation caused by earthquakes. These techniques are very expensive.

High demand for housing in developing countries and poor economic conditions mean that many buildings are poorly constructed. People cannot afford the expensive building techniques that are employed in developed countries.



Can you think of other reasons why developing countries do not manage earthquakes as well?



Stakeholders

