

Moving to San Francisco

and what one should consider before moving there.

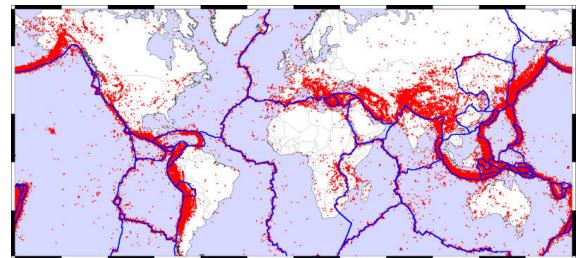
Noah Foilb
November 29, 2021

Introduction:

This story map focuses on the dangers of living in San Francisco. I wanted to explore the natural/human dangers that come from living on the San Andreas Fault as I plan on moving to California and have considered San Francisco. There will be talk about liquefactions, earthquakes and crime as one should consider these when moving to San Francisco. This purpose of this story map is to answer, "What are the biggest dangers of moving to San Francisco .

Earthquakes

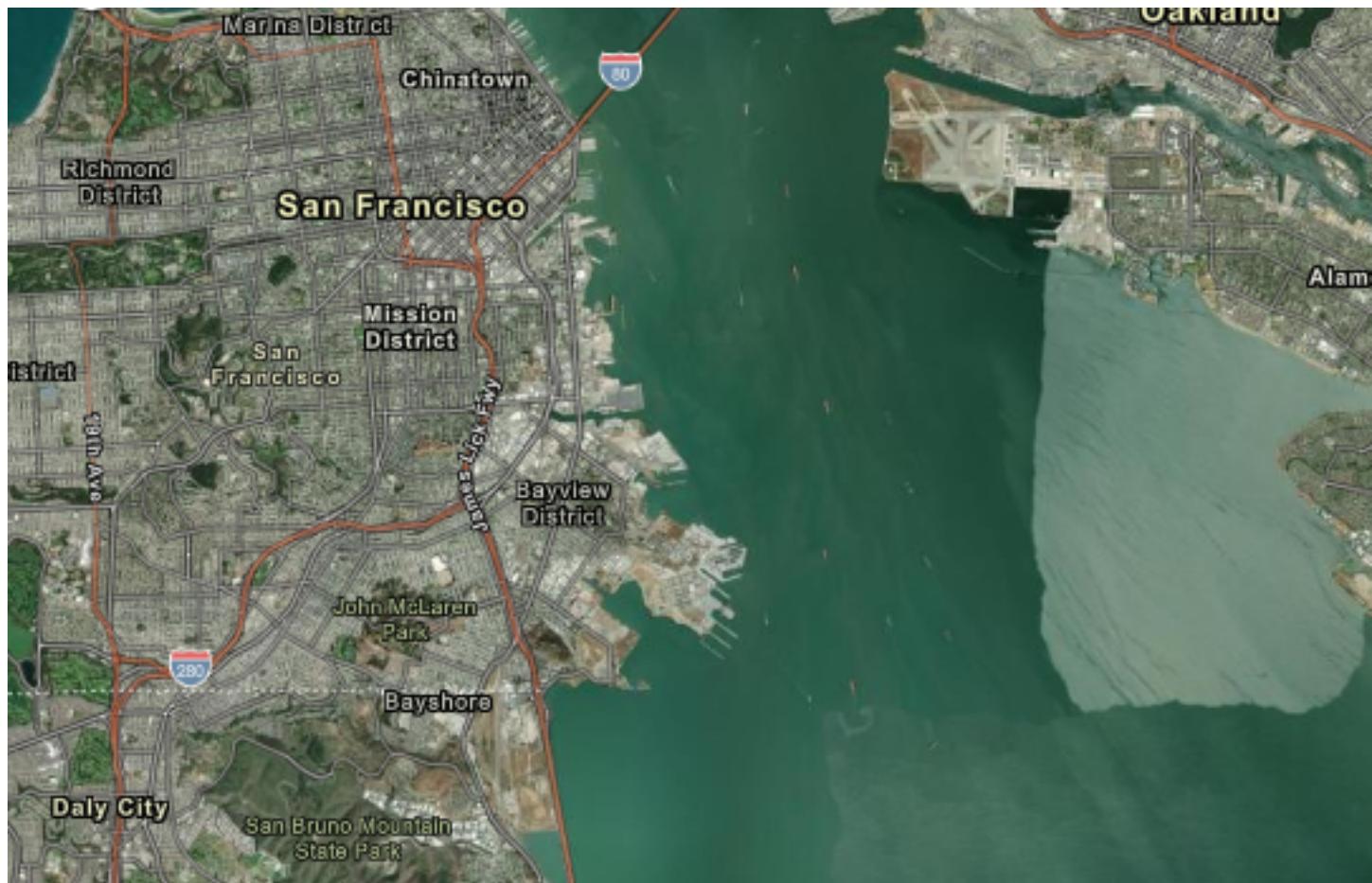
As most people know the earth consists of tectonic plates and when these tectonic plates clash the earth shakes and things like earthquakes and



liquefaction occur. Where these tectonic plates clash are called faults.

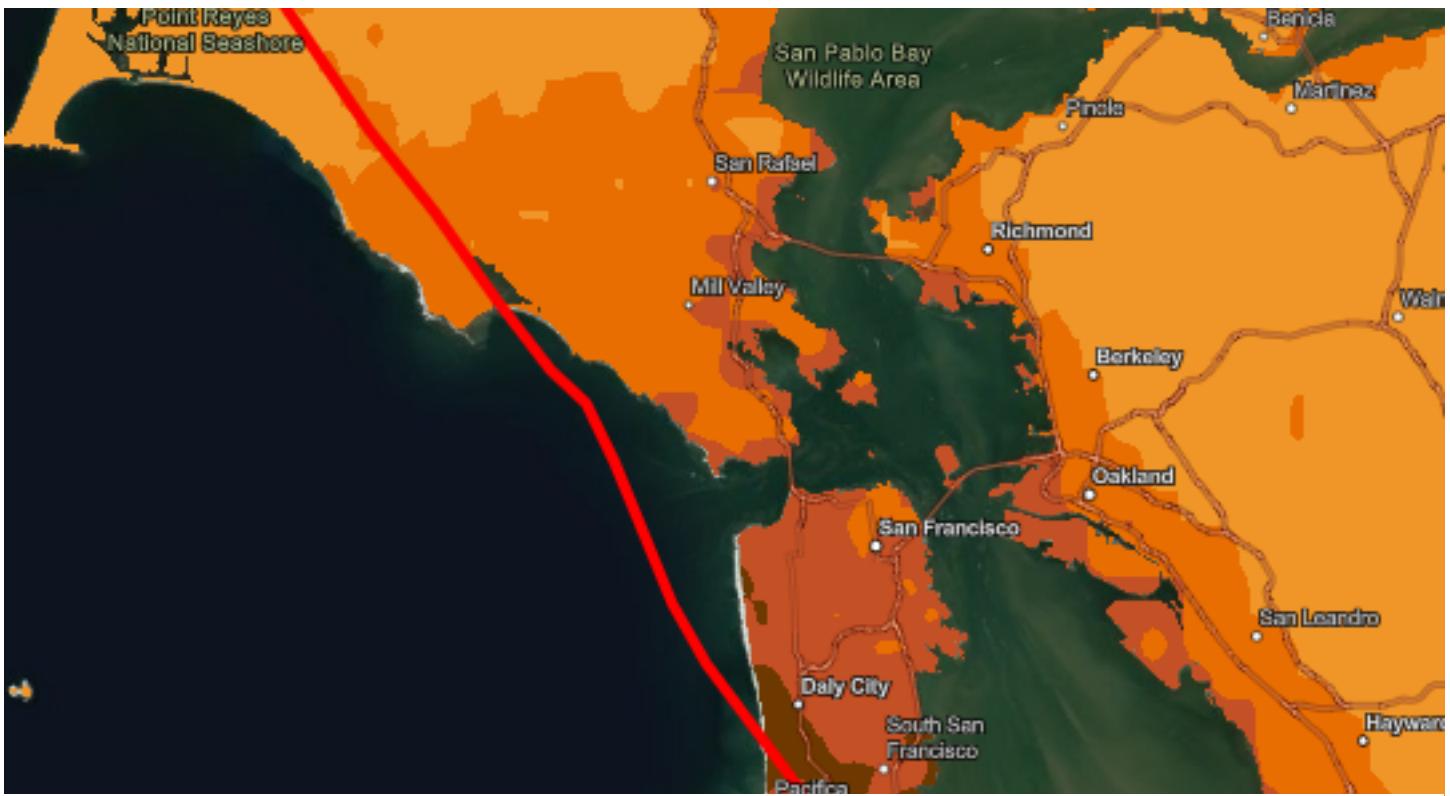
According to britannica.com the technical definition of an earthquake would be:

"any sudden shaking of the ground caused by the passage of seismic waves through Earth's rocks. Seismic waves are produced when some form of energy stored in Earth's crust is suddenly released, usually when masses of rock straining against one another suddenly fracture and "slip." "



Earthstar Geographics | <http://earthquake.usgs.gov/hazards/qfaults/> | California State Parks, Esri, HERE, Garmin... Powered by Esri

What Britannica.com refers to as "masses of rock" are what we referred to as tectonic plates. As we can see there is a fault that passes right past San Francisco.



Earthstar Geographics | California Integrated Seismic Network (CISN) CISN is made up of California Geological... Powered by Esri

Earthquakes:

As we can tell, earthquakes by the San Andreas Fault are mostly Violent and Severe.

Liquefactions

Earthquakes are a big deal when deciding to move to that location but what's more dangerous is what happens after earthquakes, "liquefactions".

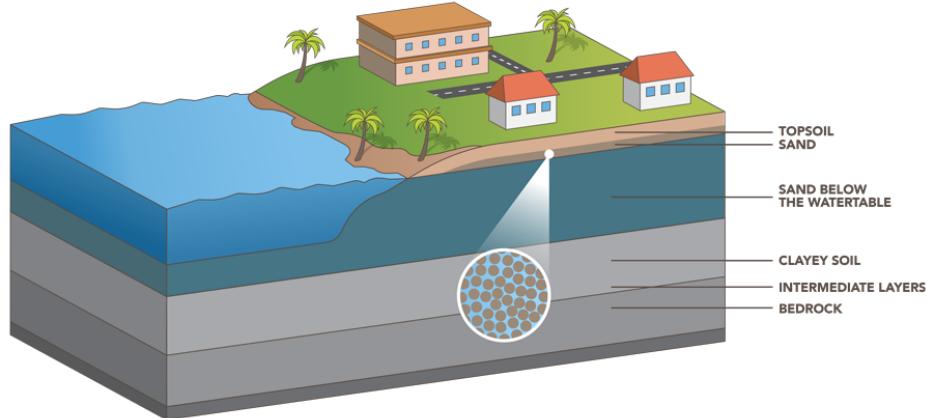
Liquefactions happens in areas with wet and weak soil and create land-slide type effects of flat lands. By definiton of <http://depts.washington.edu>



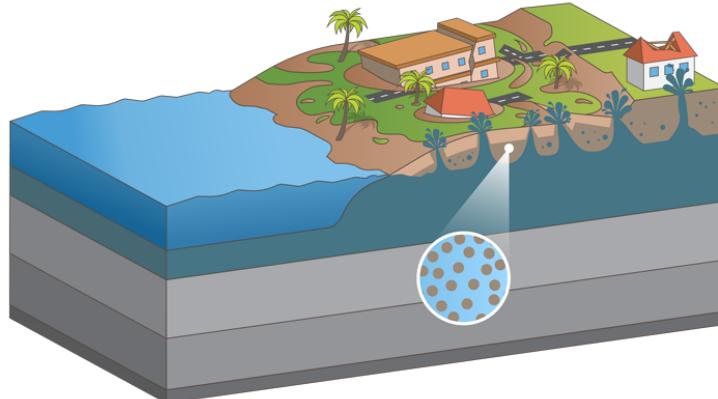
"Liquefaction is a **phenomenon in which the strength and stiffness of a soil is reduced by earthquake shaking or other rapid loading**. ... Liquefaction occurs in saturated soils,

that is, soils in which the space between individual particles is completely filled with water."

Stable Soil: Before earthquake



Liquified Soil: During and after the earthquake



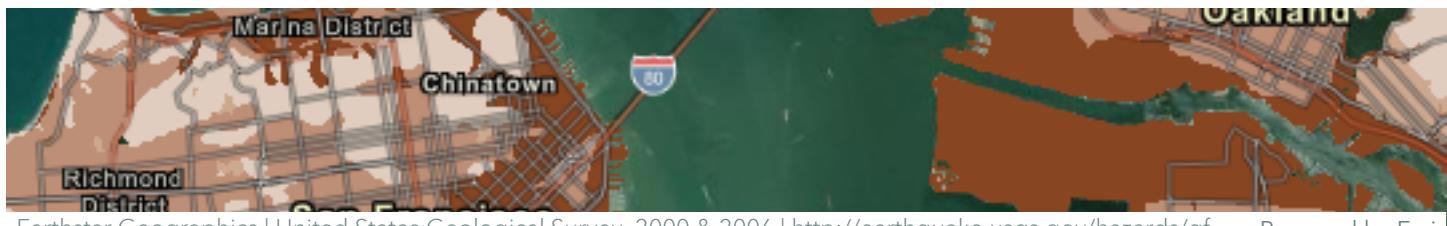
Locations bordering a body of water are subjected to the dangers of liquefaction more frequently than others.



As the ground shakes the soil loosens up and buildings/cars sink and collapse.



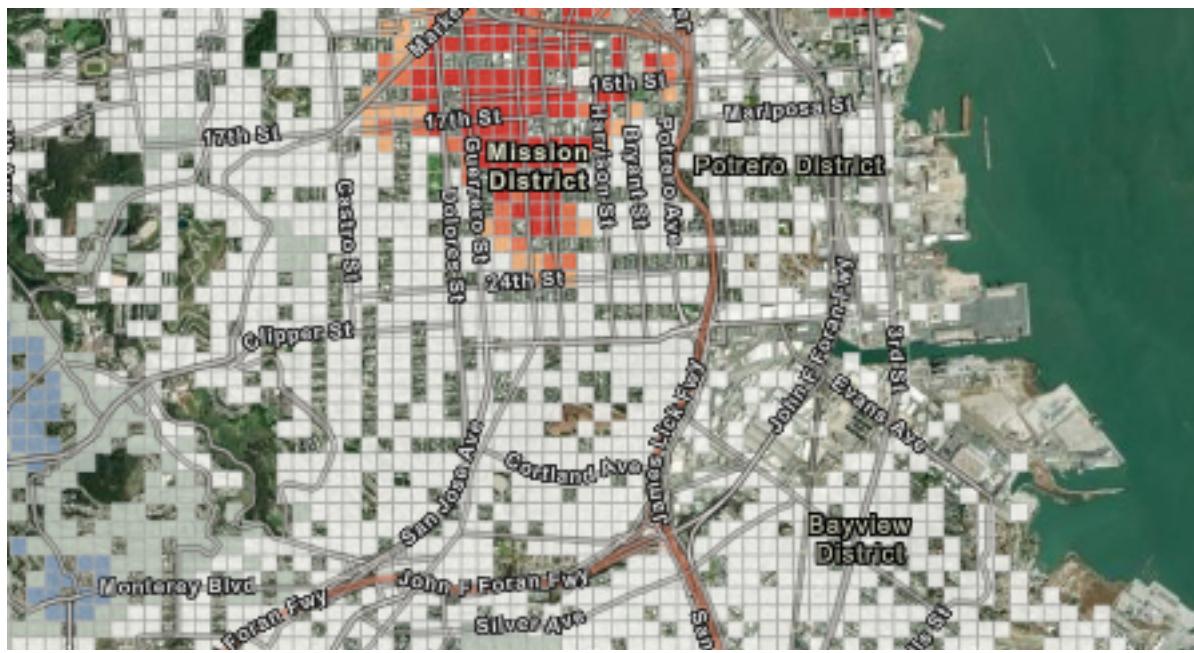
As earthquakes are common by the San Andreas Fault, so the side effects of earthquakes are common as well. Since San Francisco is by the water they are subjugated to liquefaction after earthquakes.



As you can see there is high Liquefaction Susceptibility by the boarders, but if including the frequency of earthquakes this leads to a very dangerous environment.

Crime

Aside from natural disasters there are other key factors when deciding to move to San Francisco. For example, the next biggest concern would be the community you are moving to and San Francisco definitely has an intense community. With a crime rate of 64 per 1000 and having a chance of being a victim is 1/16, there is major concern moving into such a place. - Neighborhoodscout.com



Conclusion

I wanted to explore the the dangers that come from living on the San Andrea's Fault as I plan on moving to San Francisco. In order to do this I looked at environmental dangers and human dangers. As both of these are extremely severe as not only does San Francisco live along the San Andrea's Fault but also it has a victim rate to be 1/16. I do not recommend moving to San Francisco based off the dangers, but if someone where to move to San Francisco I would recommend moving to the middle of southern San Francisco as has the lowest earthquake frequency, low liquidation and lowest crime percent. Overall, as there is no realistic reason to move to San Francisco and with such a hostile environment I do not recommend moving there.

Noah Foilb

Works Cited

Brinklow, Adam. "Earthquake Map Reveals Liquefaction Risks in Bay Area Neighborhoods." *Curbed SF*, Curbed SF, 14 Oct. 2019, <https://sf.curbed.com/2019/4/15/18311670/earthquake-map-california-geological-survey-liquefaction>.

"Earthquake." *Encyclopædia Britannica*, Encyclopædia Britannica, Inc., <https://www.britannica.com/science/earthquake-geology>.

"San Francisco, CA Crime Rates." *NeighborhoodScout*, <https://www.neighborhoodscout.com/ca/san-francisco/crime#:~:text=With%20a%20crime%20rate%20of,he,re%20is%20one%20in%2016>.

"San Francisco: Are You Living in a Liquefaction Zone?" *Redfora*, <https://redfora.com/blogs/advice/sf-liquefaction-zones>.

“See a Presentation to Understand Liquefaction.”

Encyclopædia Britannica, Encyclopædia Britannica, Inc.,

<https://www.britannica.com/video/185615/liquefaction-event-soil-particles-earthquake-combination-water>.

What Is Soil Liquefaction,

<http://depts.washington.edu/liquefy/html/what/what1.html>.