**IGME: 771: GIS: Lab 3**

**The 2 options that I have selected are as follows:**

**Option1:** Find and incorporate additional relevant datasets into the map. Ideas   
include fault lines, census tracts, evacuation shelters, fire and police department   
locations and anything else that might be relevant to earthquake activity. Stylize   
these layers accordingly in terms of figure/ground relationships and visual   
hierarchy.

**Option 3:** Have the map focused on a specific California county, as opposed to the   
state level like was done in the previous steps. A map of a specific county could   
show all the available road types for a more detailed analysis of evacuation options   
in case of earthquake activity. Use an inset map to show the area of interest within   
the state of California

**Response to the three discussion questions:**

1. **What area of California is most susceptible to earthquake hazards in terms   
   of earthquake frequency, magnitude and population density?**

**Answer:**

In terms of earthquake frequency, magnitude and population density San Bernardino seems to be most susceptible to earthquake hazards.

1. **Limited access highways can move the largest number of people. What area   
   of California would be most susceptible to earthquakes causing damage to   
   Limited access highways**?

**Answer:**

The areas of California that would be most susceptible to earthquakes causing damage to limited access highways San Bernardino, Kern County and Fresno.

1. **What spatial patterns do you see emerging in your map? What might those   
   patterns imply for disaster management issues**

**Answer:**

The two spatial patterns that I recognized in my maps is randomness and clustered data. There is a random pattern for earthquake in Southern California. Where there is maximum number of earthquakes clustered patterns can be observed.

**Maps created**

**The two maps that I have created are: California Earthquake hazards and other one focuses more precisely on San Francisco**



