

SAMPLE ASSIGNMENT ShakeOut Survivor

Purpose:

“In southern California, the most likely source of a catastrophe is an earthquake so powerful that it causes widespread damage and consequently affects the lives and livelihoods of all southern Californians.”

“The ShakeOut Scenario was also developed to break through a common, dangerous misconception that goes something like this: My home/my business made it through the Northridge earthquake so I know what future earthquakes will be like and can rest assured I will make it through the next one, too. Natural disasters come in many sizes, and the disasters most likely to cause catastrophes are those large enough to have regional, long-term consequences. No Californians have experienced an earthquake like this except for survivors of the 1906 San Francisco earthquake.”

“Our goal in the ShakeOut Scenario is to identify the physical, social and economic consequences of a major earthquake in southern California and in so doing, enable the users of our results to identify what they can change now – *before* the earthquake – to avoid catastrophic impact *after* the inevitable earthquake occurs” (p. 2 of 308, USGS Open File Report 2008-1150).

The purpose of this assignment is to encourage you to think deeply about how such a large earthquake could affect you and your loved ones, and motivate you to take action before it is too late.

Required reading:

- The ShakeOut Earthquake Scenario – A Story That Southern Californians are Writing, USGS Circular 1324. Available at <http://pubs.usgs.gov/circ/1324/>
More detailed information, including the full 308-page ShakeOut report referenced above, is available at www.shakeout.org.

Directions: Answer all questions on this assignment. This is a simulation. Answer questions according to your personal circumstances and the conditions dictated by the ShakeOut scenario, including those conditions specified in this assignment. You will get full credit for every question answered. You will get zero credit for any question not answered. The real test on this material will occur at an unknown future date. Consider this to be a study guide for survival.

Casualties by the numbers

Fortunately, most buildings in southern California, especially newer buildings, were built to code with earthquake-resistant design. The standard is “life safety”. This standard is met if all occupants of the building survive the earthquake, even if there are injuries and the building is a total financial loss. Odds are good that you will survive the “Big One” and most likely walk away from the building you occupied during the quake – but it will be a long time before life returns to normal. In addition to economic disruption, displacement, and homelessness, there is a significant chance that you or someone close to you will be injured by building debris or contents. Whether or not you are injured will depend on where you are when the earthquake strikes. You could walk away unscathed, or be in the wrong place at the wrong time. This element of chance will be simulated in this exercise by assigning your fate numerically according to the last digit of your student ID #.

0 – Sorry, but you were in the wrong place at the wrong time. You were trapped by falling debris. After being freed by strangers, you feel lucky to be alive but your left arm hurts and is not functional.

1 – You scraped your leg climbing over debris. You can still walk, but slowly, and it hurts to do so.

2 – You are frightened but not injured. You feel hopeful that the worst is over – until you see a plume of smoke rising from the general direction of your home.

3 – The person next to you was squashed by falling debris. Although you have seen dramatizations of fatalities a zillion times in the media, this is different. It could have been you. It is way too close for comfort. You are not injured but you are very anxious. It is a high priority for you to find out if your family and friends are O.K.

4,5,6,7,8,9 –The shaking has stopped and you are O.K. What a relief! You are glad it is over. But really, it is just beginning.

The shaking

Where were you when the earthquake occurred?

Where is your home?

How far away is your home from your location during the earthquake?

Consult the ShakeOut Scenario intensity map posted on the internet to find out how bad the shaking was at your location and home. What was the instrumental intensity (Roman numeral) of shaking at your location?

And your home?

Give a short description of the “perceived shaking” (not felt, violent etc) and “potential damage” (none, heavy, etc.) at each location.

Your supplies

The power is out, communications are down, and the water supply has been disrupted. How much water is available to you at the earthquake site, and how long will it last?

How much water is stored at home, and how long will it last?

How much *cash* (paper and coins, not plastic) do you have with you now?

How much cash do you have at home?

How much food is available to you at the earthquake site, and how long will it last?

How much food is stored at home, and how long will it last? (With no electricity, there is no refrigeration.)

Do you have a manual can opener – and can you find it?

Do you have a flashlight with you and extra batteries?

Do you have a flashlight at home and extra batteries?

What kind of clothes and shoes are you wearing?

If you had to wear these same clothes for several days, would you be protected from night-time cold and daytime sun or rain?

Would your shoes protect you if you had to walk over broken glass?

Could you walk a long way and carry water or other necessities?

Where is the closest first aid kit?

Where is the closest functional medical facility?

Where is the closest fire extinguisher?

Where is your car or other means of transportation?

Gas stations can't pump gas without electricity. If you use a car - how much gas is in the tank of your car?

Now that you have taken inventory, you have to make some decisions. Phones and computers don't work. You don't have information about conditions elsewhere. Will you stay where you are or go somewhere else?

If you go, where will you go and how will you get there?

If you go or stay, how will you survive for the next few days? Describe your plan for getting adequate water (essential!!!), food, shelter, and medical care. Include your plan for reuniting with family or friends who will help you, or who depend on you to help them.

Assume you have survived for 4 days. When was the last time you showered?

How have you been keeping clean?

What have you used for a toilet? (The sewer system probably doesn't work either.)

Have you run out of essential items such as prescription medication?

What have you done with all the broken glass and debris?

Where are you sleeping?

It hasn't even been a week. This is likely to continue for several days to several weeks. (Months in some areas.) How are you coping with the stress?

If you could turn back the clock and do things differently, what would you change?