

## Race To Safety Challenge

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Our design is a proposal for how the city of Vancouver, in the near future, can manage its citizens after a large scale earthquake has occurred. Major structures could have fallen, fires could have started, and a tsunami could result from the seismic activity. The goal of our design is to enable the government to direct its citizens (and possibly emergency responders) on what they need to do, and where they need to go, whether it's to stay at a certain safe location, or to move inland away from an incoming tsunami. Our design will also help the government keep track of where people are to ensure they are safe.

How our goal is achieved is through the use of location based broadcasting and Quake Safe Zones.

Location based broadcasting allows the government to send wireless messages to mobile devices from unique cell broadcast towers. This type of messaging is independent from mobile networks (won't get congested), it can target specific locations, and can be sent to multiple mobile devices that have WEA's (Wireless Emergency Alerts) enabled.

We have designed Quake Safe Zones to function as 1) A safe location to stay at in case of an emergency, and 2) A method to let emergency responders know where they are and whether they are safe. How #2 is accomplished is by having a sign located at each zone with a unique zone number. If mobile networks are still functioning citizens can text that zone number to 7233 (or SAFE), after which they will receive an automated message, much like receiving bus schedules from bus stops.

The second part of our proposal is a game that can be implemented during Emergency Preparedness Week to help bring awareness to how the government might use location based broadcasting and Quake Safe Zones to manage its citizens.

The goal of the game is to reach the Quake Safe Zone sign which will be located a distance away from the starting booth where participants can sign up. Along the way, participants must complete challenges at other booths such as creating an earthquake kit, or completing a quiz. Participants will be given clues on where to go via text messages sent from small broadcast cells set up around the event. Participants who complete the challenge will hopefully be rewarded with a prize (a gift card from a sponsor). Participants can also post the time it took them to complete the Race To Safety Challenge on their social networks.