TOPICS FOR BRAIN-STORMING

There is vast amount of information accumulated from the past earthquakes (EQ) and building damages. Various techniques have already been developed for condition assessment and evaluation of buildings. How can those assessment techniques be improved, further developed, and applied to this project? The building properties versus damage after an EQ data are available for hundreds of buildings. How this information can be used?

What should be the targeted safety level that is deemed to be critical? Federal Emergency Management Agency (FEMA) criteria should be investigated. Possible levels of safety levels can be listed as below:

- Collapse prevention (building does not collapse but lives can be lost),
- Life safety (building does not collapse and stable enough to prevent life loss),
- Reparable damage (building does not collapse, no lives are lost, and repair is minimal and possible).

Current intention is to achieve the "life safety" level, and "reparable damage" may be luxurious for residential buildings.

Item 1

The initial screening is intended to select existing buildings that are definitely in critical condition. The selection needs to be very quick and rough.

Decision on the grouping of building types: Among hospitals, jails, schools, firehouses etc., only "residential building type" is selected to be the primary concern of this study. This selection is mainly due to the fact that the importance factors and design criteria are different for these groups. Furthermore, the available data is for residential buildings. Other group of buildings has to be handled separately due to their high importance during a natural disaster such as an earthquake.

Which parameters should be selected for **initial screening**? Possible variables are:

- Visual inspection (soft stories, # of stories, whether buildings touch each other or not, does the story areas expand for higher levels, etc.)
- Geological map, soil type distribution of the area
- Column area, wall area, brick wall area

This is the stage to have a closer look at the group remaining from the initial screening.