

## **A project for the active fault survey and earthquake perilous estimation in mega-cities of China**

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With the citifying speeds up, the life and property losses caused by the seismic hazard become more and more serious to the safety of the societies. Earthquake resistance and seismic hazard mitigation are the important subjects to the government, international organization and the research institutes. The continental earthquakes occur in a high level in China, and many mega-cities are located in the active seismic zones. The active faults penetrate many large cities, and most of them are hidden faults underneath the thick sediments.

In order to understand the distribution of the active faults in the cities and estimate the potential seismic hazard, the project on “the active fault survey and earthquake perilous estimation in mega-cities of China” was suggested by the China Earthquake Administration. It is funded by the central government, local provinces and related cities. For the first step, 20 mega-cities are chose to be surveyed in the project during the year 2004-2007. The project aims to detect the location and the geometric parameters of the faults mainly by using the geophysical methods, to judge if the faults are active, and to estimate the earthquake perilous. Based on the results of the surveys on the local structures and the predicted parameters the potential earthquakes, the seismic hazard maps will be estimated. The project will be very helpful for government and the administration department of the city in their work of the seismic hazard mitigation.