## THE NEED FOR EARTHQUAKE EDUCATION1

Ian G. Buckle
Deputy Director
National Center for Earthquake Engineering Research

## ABSTRACT

In 1977 the United States Congress found that 1) all 50 States are vulnerable to the hazards of earthquakes, and at least 39 of them are subject to major or moderate seismic risk, including Alaska, California, Hawaii, Illinois, Massachusetts, Missouri, Montana, Nevada, New Jersey, New York, South Carolina, Utah, and Washington. A large portion of the population of the United States lives in areas vulnerable to earthquake hazards; and 2) earthquakes have caused, and can cause in the future, enormous loss of life, injury, destruction of property, and economic and social disruption. With respect to future earthquakes, such loss, destruction, and disruption can be substantially reduced through the development and implementation of earthquake hazards reduction measures, including (A) improved design and construction methods and practices, (B) land-use controls and redevelopment, (C) prediction techniques and early-warning systems, (D) coordinated emergency preparedness plans, and (E) public education and involvement programs. Education is seen in this extract from the Earthquake Hazards Reduction Act of 1977 to be one of five reduction measures to be undertaken under Public Law 95-124.

More than 10 years later, this need is even more urgent. A destructive earthquake is expected to occur, with almost 100 percent certainty, somewhere in the Eastern or Central United States before the year 2010. This means that every child in grade school today will most probably experience this most catastrophic of all natural disasters.

Knowing what to expect, how to prepare and how to respond to an earthquake is a proven method of mitigating the loss of life and property. Teaching this knowledge is the ultimate responsibility of today's educators.

Text written in part by the late Robert L. Ketter.