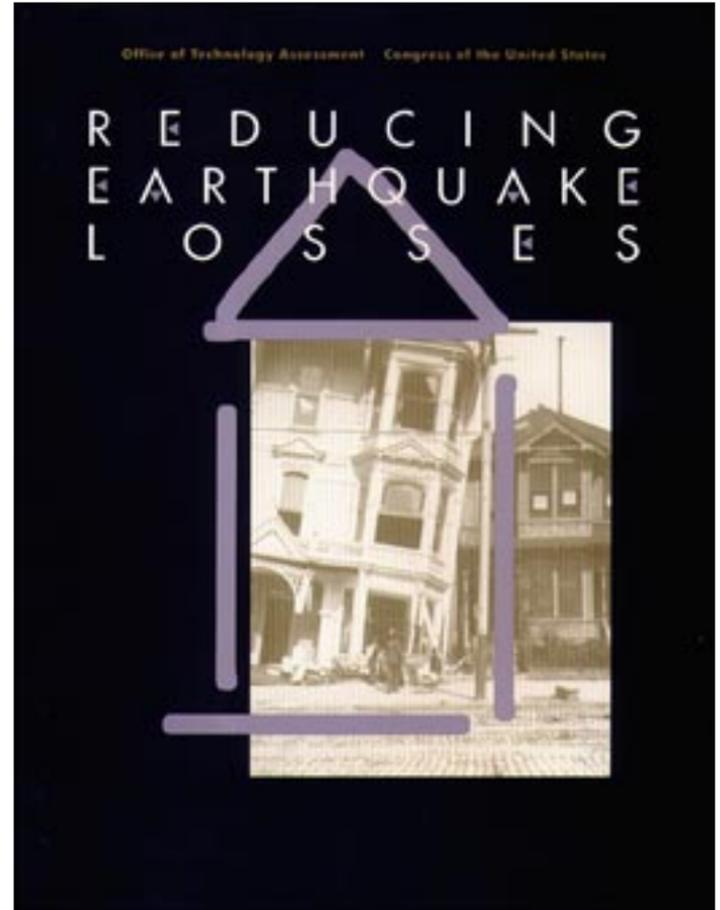


Reducing Earthquake Losses

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Foreword

Much of the nation is at risk for earthquakes. Although considerable uncertainty remains over where and when future earthquakes will occur, there is general consensus that earthquakes will strike the United States in the next few decades, causing at a minimum dozens of deaths and tens of billions of dollars in losses.

Recent congressional hearings on the nation's earthquake program—the National Earthquake Hazards Reduction Program (NEHRP)—revealed some dissatisfaction with the program, yet little agreement on problems or solutions. The House Committee on Science, Space, and Technology (now the Committee on Science) and its Subcommittee on Science (now the Subcommittee on Basic Research) asked the Office of Technology Assessment to review the nation's efforts to reduce earthquake losses, and to provide options for improving these efforts.

This Report assesses the state of the knowledge, identifies key future challenges in each of the three components of earthquake risk reduction—earth science, engineering, and implementation—and offers policy options to improve federal efforts. The Report concludes that, since its beginning in 1977, NEHRP support of efforts to better understand earthquake risk and find ways to reduce it have advanced our knowledge considerably, although many significant uncertainties remain. However, there is a large gap between knowledge and action—many known technologies and practices are just not used. In addition, NEHRP suffers from a lack of specific goals, making progress difficult to measure. Policy options for improving federal efforts include changes in the specific activities supported by NEHRP, changes in the management and operations of the program, and extension of federal activities into areas in which NEHRP is not currently active.

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Note: OTA appreciates and is grateful for the valuable assistance and thoughtful critiques provided by the advisory panel members. The panel does not, however, necessarily approve, disapprove, or endorse this report. OTA assumes full responsibility for the report and the accuracy of its contents.

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