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Volume 1

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PREVIOUS U.S. NATIONAL CONFERENCES

- 1NCEE: June 18-20, 1975
Ann Arbor, Michigan**
- 2NCEE: August 22-24, 1979
Stanford, California**
- 3NCEE: August 24-28, 1986
Charleston, South Carolina**

PREFACE

Destructive earthquakes have continued to cause death, injury and serious property in the United States in the four years since the Third National Conference on Earthquake Engineering. These shocks, particularly the Whittier Narrows earthquake of October 2, 1987 ($M_L = 5.9$) and the even more disastrous Loma Prieta earthquake of October 17, 1989 ($M_S = 7.1$), have underlined the importance to public welfare of the disciplines of earthquake engineering and earthquake hazard reduction. The Loma Prieta earthquake, which was so damaging to several cities in Northern California, brought home again the lesson that good earthquake engineering practices and well-planned earthquake response measures are both necessary to protect life and limb and be cost effective. Conversely, both California earthquakes showed the losses of life and property that inevitably occur when such practices have not been applied.

The sponsor of the Fourth National Conference on Earthquake Engineering is the Earthquake Engineering Research Institute (EERI), which has sponsored all of the U.S. National Conferences on Earthquake Engineering and the two World Conferences on Earthquake Engineering that have been held in the United States, including the First World Conference in 1956. The officers, staff and members of EERI can be justifiably proud of the long history of leadership their organization has provided in the interdisciplinary fields of earthquake engineering and earthquake hazard reduction.

Four Southern California Universities have joined together to host 4NCEE. These are the California Institute of Technology; the University of California, Irvine; the University of Southern California; and the University of California, Los Angeles. We would like to acknowledge the support of these institutions in our efforts to prepare for the Conference.

We gratefully acknowledge also the financial support of 4NCEE received from the National Science Foundation, the United States Geological Survey, the Nuclear Regulatory Commission, the Federal Emergency Management Agency and the Electrical Power Research Institute. The assistance of these organizations has permitted EERI to make the Proceedings of 4NCEE available at a moderate cost to the registrants at the Conference and later to others in the profession. Their support has also helped ease the financial burden of planning and administering 4NCEE that would otherwise be borne entirely by EERI and the Host Universities.

Finally, we would like to take this opportunity to acknowledge the personal contributions of individuals who have taken a major role in organizing 4NCEE. The other members of the original Host Organizing Committee, Mihran Agbabian of the University of Southern California, chairman of the Liaison Committee, and Gary Hart of the University of California, Los Angeles, chairman of the Advisory Committee, merit particular thanks. Soon after the invitation by the four universities to host 4NCEE was accepted by EERI, the Host Organizing Committee was enlarged to include Susan Tubbesing of the EERI staff and Dee

Czaja, who is the Administrative Assistant for the Conference. Carl Johnson joined the Committee to provide liaison to the EERI Board of Directors. Williston L. Warren, IV, chairman of the Conference Operations Committee; Medhat A. Haroun, chairman of the Technical Program Committee; Roberto Villaverde, chairman of the Publications Committee; and James L. Beck, chairman of the Special Events Committee, also joined the Host Organizing Committee as it changed its role to that of a steering committee for the Conference. All of these people deserve our sincere gratitude for the time and effort they have devoted to making 4NCEE a successful meeting.

Paul C. Jennings, Chairman
Host Organizing Committee

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