SMIP01 Seminar Proceedings

PREFACE

The California Strong Motion Instrumentation Program (CSMIP) in the Division of Mines and Geology of the California Department of Conservation promotes and facilitates the improvement of seismic codes and design practices through the Data Interpretation Project. The objective of this project is to increase the understanding of earthquake strong ground shaking and its effects on structures through interpretation and analysis studies of strong-motion data. The ultimate goal is to accelerate the process by which lessons learned from earthquake data are incorporated into seismic code provisions and seismic design practices.

Since the establishment of CSMIP in the early 1970s, over 900 stations have been installed, including 650 ground-response stations, 170 buildings, 20 dams and 60 bridges. Significant strong-motion records have been obtained from many of these stations. Significant strong-motion records have been obtained from the 1999 Hector Mine, the 1994 Northridge, the 1992 Landers, the 1992 Big Bear and the 1989 Loma Prieta earthquakes. These records have been and will be the subject of CSMIP data interpretation projects.

The SMIP01 Seminar is the 13th in a series of annual technical seminars designed to transfer recent interpretations and findings on strong-motion data to practicing seismic design professionals and earth scientists. The goal of the Seminar is to increase the utilization of strong-motion data in improving post-earthquake response, seismic design codes and practices.

In this seminar, investigators of two CSMIP-funded data interpretation projects will present the results from studies on shaking parameters for post-earthquake applications, and on development of guidelines for utilizing strong-motion data and ShakeMap in post-earthquake response. Invited speakers will present implications of data recorded in the 1999 Chi-Chi, Taiwan earthquake and 2001 Nisqually, Washington earthquake. In addition, there will be presentations on the TriNet/CISN engineering strong-motion data center and update on the Consortium of Organizations for Strong-Motion Observation Systems (COSMOS). Professor James Brune of University of Nevada at Reno will present a luncheon address on precarious rocks and seismic hazard.

The papers in this Proceedings volume presented by the investigators of the CSMIP-funded data interpretation projects represent interim results. Following this seminar the investigators will prepare final reports with their final conclusions. These reports will be more detailed and will update the results presented here. CSMIP will make these reports available after the completion of the studies.

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Note: The SMIP01 Seminar scheduled to be held in Los Angeles on September 12, 2001 was cancelled due to the tragic events of September 11. CSMIP is pleased to publish the proceedings for the Seminar.