

ATC-12

Comparison of United States and New Zealand Seismic Design Practices for Highway Practices

by

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PREFACE

In December 1981 Applied Technology Council (ATC) organized a team of 16 highway bridge researchers and practicing design professionals to visit New Zealand to develop a cooperative United States-New Zealand program of research and development and assess the design practices and their implementation of research findings. While in New Zealand the team visited various research facilities and examined numerous bridge structures that were being or had been constructed utilizing latest research findings. The two-week trip culminated with a 3-day long workshop on the "Seismic Design of Highway Bridges" held in Wairakei, New Zealand, and attended by the U.S. team and approximately 35 New Zealand bridge design engineers and researchers.

This report contains the workshop research recommendations and their priority ratings, summaries of all aspects and innovative procedures used in New Zealand design practice, comparisons of United States and New Zealand design practice, and the comments and observations of the U.S. team.

ATC is particularly grateful to Dr. Ian Buckle of the University of Auckland and Mr. David Jennings of the New Zealand Ministry of Works and Development for organizing both the itinerary in New Zealand and the Wairakei workshop. We are also most appreciative of the efforts of Dr. John B. Scalzi, Program Manager of the Earthquake Engineering Program of the National Science Foundation, for his support, encouragement, and cooperation throughout the duration of the project.

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