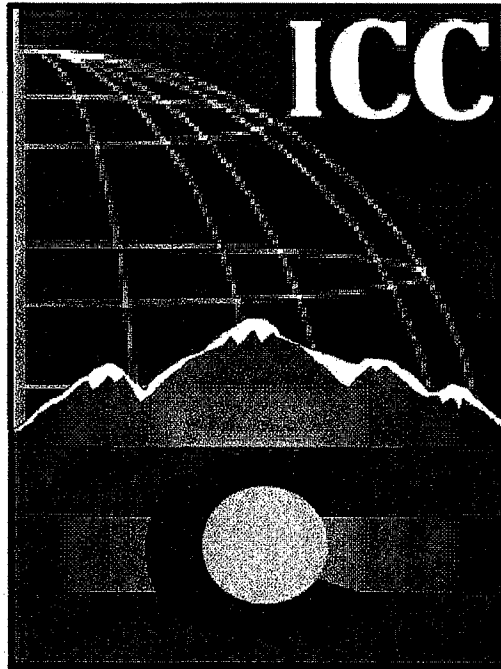


INTERNATIONAL
CODE COUNCIL



COLORADO CHAPTER

Introduction

Introduction

Preface

Colorado's natural beauty, breathtaking scenery and sharp contrasts in terrain and climate are testimony to the diversity and severity of Colorado's geologic setting. By their nature, many of these features also have inherent hazards. In other cases, man's actions have undermined the structural integrity of the natural features. Colorado must move from a reactive role to a planning mode in responding to natural and manmade hazards. There are places in the state where settlement and construction should not have occurred. However, in the wake of such land use decisions, we must look at the structural and non-structural options and funding sources available to mitigate the impacts to private land owners and the public when damage occurs.

Disasters are defined as sudden calamitous events resulting in great damage, loss or destruction. Most disasters are the results of earthquakes, fires, floods, hurricanes, landslides, tornados, snowstorms and, less prevalent, tsunamis, volcanic eruptions, explosions, airplane crashes and nuclear power plant accidents. Disasters may be widespread or of relatively limited scope, but they all have one thing in common - they are disruptive to normal daily life. The secondary effects of disasters are the dangers they leave in their wake in the form of damaged and unsafe structures. Such damage must be assessed by personnel who are qualified to evaluate conditions and authorized to initiate necessary and proper actions for the abatement of threats to life and safety.

Two of the tools that can be used to assist in reducing the amount of disaster damage to buildings and minimizing secondary damage and injuries are modern building and fire codes and effective post-disaster building damage assessment.

The use of sound planning for new developments and the adoption and effective administration of model building and fire codes by local jurisdictions can serve to reduce the amount of damage to buildings in many different kinds of disasters. Quick and effective initial building damage assessment in the wake of a disaster will identify unsafe structures and help to prevent further damage, injuries or deaths.

This manual was prepared by a committee of the Colorado Chapter of the International Code Council (ICC) in cooperation with and with the assistance of the Colorado Division of Emergency Management. Known nationally for its competence in building code development, administration, and education, the Colorado Chapter of the International Code Council (ICC) has published this document in the public interest in order to provide guidelines for conducting a rapid building damage assessment response in the wake of a disaster.

The objective of this operations manual is to provide a practical field guide for persons involved with initial damaged building assessment.

The information provided includes step-by step directions for initiating a response and performing building damage assessments, sample mutual aid agreements, forms and placards, and other resource information.

Acknowledgements

Much of the material contained in this manual is taken from the International Code Council *Creating a Hazard Mitigation and Emergency Management Plan*, Second Edition 2004, ICC *Building Department Guide to Disaster Mitigation*, 1991, The State of Oregon *Disaster Mitigation Plan for Buildings*, the Applied Technology Council's

ATC-45 *Field manual: safety evaluation of buildings after windstorms and floods*, and the Colorado Division of Emergency Management *Colorado Damage Assessment Handbook*. This publication is also based upon the personal experiences of the members of the Colorado Chapter who have responded to various disasters over the past thirty years and assessed the building damage resulting from those disasters. Wherever possible, the manual has been formatted for utilization with the Incident Command System (ICS) format for emergency response. Local agencies may want to consider supplementing this material with policies and guidelines that vary from this material or are unique to local operations and conditions.

Manual Disclaimer

This manual provides guidelines for the operations of building damage assessment teams in emergency situations arising as the result of a disaster. The manual outlines typical roles, responsibilities and procedures and is intended to serve only as a guide.

This plan is not intended to guide day-to-day operations nor is it intended to constrain persons involved in the post-disaster safety evaluation of buildings from using different approaches if they are considered necessary under the circumstances.

The Colorado Chapter of the International Code Council (ICC), Inc., is a non-profit corporation. Its statutory membership is comprised of local government code enforcement agencies. These local governments appoint individual members to serve as voting members of the Colorado Chapter ICC. This document is published as a guide to Colorado Chapter ICC members. The Colorado Chapter of ICC shall not be liable in damages for any act or conduct in the course or conduct of the use of this manual.

Authorized building damage assessment team members shall not be liable in damages for any act or omission in the course of or in the context of the discharge of duties covered by this manual or any provisions related to it. Any claim or suit brought against any authorized damage assessment team member which arises or is alleged to have arisen as a result of any act or omission in the course or conduct of any actions contemplated by this manual shall be defended by the requesting jurisdiction until final termination of such proceedings, and any judgment resulting there from shall be assumed by the requesting jurisdiction.

Scope of the Operations Manual

This manual is intended to aid public officials in Colorado in protecting people from the hazards associated with buildings that have been damaged as the result of a disaster. It is intended as a guide for building damage assessment team members in quickly determining the level of post-disaster safety of buildings, in posting the results of this initial determination, and in making recommendations to local public officials regarding further use of such damaged structures.

The provisions of this manual apply to the evaluation of all buildings which have been damaged by a disaster.

This manual assumes that other emergency response agencies, such as fire and police departments, have made an initial response to the life-threatening results of the disaster. The damage assessment procedures in this manual are to be implemented only after the disaster area has been "stabilized" by other authorities.

Disaster forces may dislodge or relocate buildings or portions of buildings. Thus, some damaged structures may be partially or totally located within public rights-of-way or on other public property after a disaster. In these