Mitigation Works

Building Codes

If a builder build a house for some one, and does not construct it properly, and the house which he built fall in and kill its owner, then that builder shall be put to death."

Code of Hammarabi (c. 1780 BC)

- ▶"I've learned there's a pretty simple formula for telling which communities enact and enforce strong building codes from those that don't. Quite simply, structures built to a strong code are still standing afterwards and the people who live and work in those buildings are still alive."
- ▶ "We've made prevention the focus of emergency management in the United States, and we believe strong, rigorously enforced building codes are central to that effort."
- ▶ "We know we can't prevent disasters from striking, but we can prevent damage before they hit."
- ▶ "The importance of a strong building code is most evident after a disaster.
- ▶ "Code enforcement always brings more gratitude after disaster strikes than it does before."
- ▶ "Stronger, better enforced building codes will promote prosperity, not endanger it. Businesses will not be shut down from storms. Jobs will be saved, and the economic and social fabric of the community will be secure."
- ▶ "Communities must begin to recognize the life or death consequences of enacting and enforcing strong building codes."
- ▶ "We know we can't prevent disasters from striking, but we can reduce or eliminate the damage they cause. Building codes and local code officials are the first line of defense in this effort."

Senior FEMA Officials

▶ "The Building Code Effectiveness Grading Schedule (BCEGS) assesses the building codes in effect in a particular community and how the community enforces its building codes, with special emphasis on mitigating losses from natural hazards.

Building Codes

The result of this assessment is distributed to insurers who can use the information within their rating plans. The concept is simple: municipalities with effective codes that are well enforced should demonstrate better loss experience, and insurance rates can reflect that."

- ▶ "The anticipated upshot from the BCEGS program: safer buildings, less damage, and lower insured losses from catastrophes."
- ▶ "Nine of the ten most costly catastrophes in the United States occurred in the decade of the 1990s. In 1992, catastrophes accounted for \$22.97 billion of insured loss".
- ▶ "Adoption of the latest edition of model building codes and effective enforcement of these codes can serve to reduce the economic and social disruption that results from catastrophes' serious and widespread destruction."
- ▶ "The Building Code Effectiveness Grading Schedule (BCEGS) program recognizes and encourages good public policy in relationship to building code adoption and enforcement."

Dennis Gage, Manager, Natural Hazard Mitigation, Insurance Services Office, Inc.

- ▶ "He makes buildings safe for people" was my oldest son's response to Mayor Riley's question as to what his father did. My son was 4 at the time."
- ▶ " In this day and age the American public should not accept or expect anything less than the level of protection that building code enforcement provides."
- ▶ "The window of opportunity for mitigation opens with every permit application."
- ▶ "Proper mitigation produces a built environment that continues to function, as intended, post disaster. This brings comfort and hope before, during and after an event."
- ▶ " The insurance industry is now beginning to recognize the value of proper code enforcement coupled with mitigation. Remember, you build it once but you pay insurance on it forever."

Douglas M. Smits, C.B.O., Director of Inspections, Chief Building/Fire Official, Charleston, S.C.

Building Codes

▶ "Not by accident are buildings built to be resistant to natural hazards such as earthquakes or wind. Good performance is the result of careful design and construction. Today's engineering technology and knowledge is the equivalent of penicillin or a vaccine in being able to counteract a hazard and provide safety to the public. But this benefit is only delivered when our engineering know-how is implemented via building codes."

Robert Reitherman, Executive Director, California Universities for Research in Earthquake Engineering

▶ "The most effective way to significantly reduce building related property damage, injuries and loss of life due to earthquakes, wind storms and floods is through the effective development, adoption and enforcement of scientifically based building code provisions. The best way to accomplish that goal is through the nation's established model building code development process."

David A. Harris, FAIA, President, National Institute of Building Sciences

The Catastrophe Record, 1987 - 1999 (Millions of Dollars of insured losses)

1987 \$ 905

1988 \$ 1,409

1989 \$ 7,642

1990 \$ 2,825

1991 \$ 4,723

1992 \$22,970

1993 \$ 5,705

1994 \$17,010

1995 \$ 8,3101996 \$ 7,375

1990 \$ 7,375

1998 \$10,070

1999 \$ 8,160

Source, Insurance Services Office, Inc.