



# FEMA

## FEDERAL INSURANCE AND MITIGATION ADMINISTRATION

# Mitigation's Value to Society

## BUILDING SAFER AND STRONGER

Mitigation is the effort to reduce the loss of life and property by lessening the impact of disasters. A recent study by the Multihazard Mitigation Council (MMC)\* shows that each dollar spent on mitigation saves an average of \$4.00.

## VALUE TO SOCIETY

Mitigation yields benefits to society and therefore:

- It creates safer communities by reducing loss of life and property;
- It enables individuals to recover more rapidly from floods and other disasters; and
- It lessens the financial impact on the Federal Treasury, States, Tribes, and communities.

FEMA's Federal Insurance and Mitigation Administration implements numerous Congressionally-authorized programs that address the effects of natural hazards through mitigation activities.

## MITIGATION CREATES SAFER COMMUNITIES

In any disaster, buildings constructed to a higher standard not only reduce property damage but can also save lives. Homes constructed to National Flood Insurance Program (NFIP) standards incur 80 percent less damage from floods than structures not built to those standards.

## MITIGATION SPEEDS RECOVERY

Mitigation is key to decreasing the time it takes to rebuild and recover after a disaster. By using existing, proven plans and building standards, mitigation allows individuals and communities to lessen post-disaster disruption and rebuild more quickly. Long-term hazard mitigation planning and projects enable communities and individuals to break the cycle of disaster damage, reconstruction, and repeated loss.

## MITIGATION SAVES MONEY

Mitigation activities have been proven to lessen the financial impact on individuals, communities, and society as a whole. Floodplain management actions save the country more than \$1 billion in prevented damages each year.

## MITIGATION IS COST-EFFECTIVE

In December 2005, the MMC of the National Institute of Building Sciences (NIBS) released *Natural Hazard Mitigation Saves: An Independent Study to Assess the Future Savings from Mitigation Activities*. The report was the culmination of a 3-year, Congressionally-mandated independent study.

### CASE STUDY: GRAND FORKS, NORTH DAKOTA

In 1997, the Red River flooded 8,600 homes in Grand Forks, North Dakota, causing \$3.7 billion in flood losses. Following the disaster, the State of North Dakota, local governments, and FEMA worked together to buy out almost 700 of the most vulnerable homes in the State with FEMA mitigation grant program funds. The Red River flooded again in 2006, yet losses were kept to \$6.5 million as a result of the mitigation projects and studies. Demonstrating mitigation's cost-effectiveness is critical to the continued success of FEMA mitigation programs.



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## Key findings included:

- A dollar spent on mitigation saves society an average of \$4.00, with positive benefit-cost ratios for all hazard types studied.
- In addition to savings to society, the Federal Treasury can redirect an average of \$3.65 for each dollar spent on mitigation resulting from disaster relief costs and tax losses avoided.
- In each of the eight communities studied in-depth, FEMA mitigation grants were a significant part of the community's mitigation history and often led to additional loss reduction activities.
- Mitigation is sufficiently cost-effective to warrant Federal funding both before disasters occur and during post-disaster recovery.

## MMC REPORT RECOMMENDATIONS

The MMC report demonstrated through statistical and community analyses that positive net benefits result from hazard mitigation. In addition, the MMC report included three basic recommendations:

- Mitigation should continue to be Federally funded on an ongoing basis. It should encompass projects that relate to enforcing strong building codes and land use measures, and promote development of comprehensive plans to limit damage and reduce losses.
- Mitigation is most effective when carried out on a comprehensive, community-wide, and long-term basis. Implementing coordinated mitigation activities over time is the best way to ensure that communities will be physically, socially, and economically resilient to future hazard impacts.
- The effectiveness of mitigation activities must continue to be studied and analyzed. Systematic data collection and assessment of various mitigation approaches are required to ensure that lessons learned are incorporated into disaster public policy.

### FOR MORE INFORMATION

The two-volume study report is available for free download at: <http://www.nibs.org/index.php/mmc/projects/nhms>.

\* The purpose of the Multihazard Mitigation Council (MMC) is to reduce the total costs associated with natural and other related hazards to buildings by fostering and promoting consistent and improved multihazard risk mitigation strategies, guidelines, practices, and related efforts. The Council was established in 1997 as a voluntary advisory, facilitative body of the National Institute of Building Sciences (NIBS), a non-profit corporation incorporated in the District of Columbia.