



## Building codes without enforcement are like buildings without foundations

*Maximize your community's quality of life with ISO's BCEGS program*

The aftermath of Hurricane Katrina shows completely destroyed homes in the same area as homes with only moderate damage. Homes with superior construction experienced far less damage.

FEMA News Photo

Building code enforcement can have a major influence on the economic well-being of a municipality and the safety of its citizens. Municipalities that adopt up-to-date, unamended codes — and rigorously enforce them using a sufficient number of trained and certified code enforcement professionals — minimize damage from natural hazards, fire, and other perils, ultimately reducing insurance costs.

How can you determine the effectiveness of code enforcement in your community?

### **Building Code Effectiveness Grading Schedule (BCEGS®)**

ISO, an independent statistical, rating, and advisory organization that serves the insurance industry, manages the BCEGS® program. BCEGS is an evaluation system that has reviewed building code enforcement for more than 19,000 communities nationwide. Since 1995, trained ISO field representatives have visited communities to survey and collect information on building code adoption and enforcement practices. We analyze the data and assign each municipality a Building Code Effectiveness Classification from 1 to 10 for both commercial and residential construction. Class 1 communities represent exemplary commitment to building code enforcement. Insurers can use the classifications to grant premium credits for buildings constructed in jurisdictions that enforce the latest code revisions.



### Why should you participate in ISO's BCEGS program?

When your community participates in the BCEGS program, you get a free independent review of your building department by highly qualified field representatives. Program participation can also:

- improve overall safety in your community
- promote construction of code-compliant and damage-resistant buildings
- reduce property damage and personal injury losses
- minimize economic and social disruption from catastrophic events
- encourage good public policy
- justify budgets and staffing levels
- secure lower property insurance premiums, benefiting residential and commercial property owners

You'll also receive a comprehensive BCEGS benchmarking and evaluation report — customized for your community. The complimentary report contains all the results of ISO's evaluation, as well as valuable comparisons between your community's building code enforcement efforts and those of similar communities in your county and state and across the country.



FEMA uses BCEGS information in its pre-hazard mitigation grants and post-hazard funding decisions. FEMA also uses the BCEGS information and classification as a component of the community rating schedule that determines flood insurance discounts in participating communities.

If a community decides not to participate in the BCEGS program, it risks not receiving adequate hazard mitigation benefits. And properties built in communities that don't participate now won't be eligible to receive insurance discounts that may become available in the future.

“ I am active in the local Home Builders Association and am able to keep the public informed by offering classes for home builders and explaining the code. I also give classes to the public at builders' home shows. Many of my staff teach at local schools. These activities have helped the public understand the importance of building codes and helped my staff grow. The city of Orem is proud we achieved the ISO Class 1 rating. We'll continue to enforce adopted building codes and standards aggressively to protect the life and property of those who work and live in our city. ”



#### **Bill Bell**

*Building Safety Division Manager and Chief Building Official  
Orem, Utah*

*Class 1 BCEGS community – residential and commercial construction*



Our department has benefited significantly from participation in ISO’s BCEGS program. While we have always believed we have exceptional code enforcement officials, over the years the ISO grading process has sharpened our focus on qualifications and training. As a result, we are far more deliberate in our hiring and promotion process today, critically evaluating candidates for the line and, perhaps more so, for leadership positions. ISO’s training focus has proven invaluable to us. We reshaped our continuing education training requirements to match ISO criteria in 1999. In addition, as the pace of change in construction design and technology speeds up from day to day, our expanded training requirements allow us to stay abreast of how those changes impact building code application — supporting our ability to continue making sound code interpretations on difficult code compliance issues. Mecklenburg County Code Enforcement invests fully in the ISO process. We believe it is one of the pillars of our reputation as an exceptional AHJ [Authority Having Jurisdiction].



**James N. Bartl, AIA**  
 Director of Code Enforcement  
 Mecklenburg County Government  
 Charlotte, North Carolina  
 Class 1 BCEGS community – commercial construction

**How does ISO evaluate a community?**

Here are the steps in the evaluation process:

- ISO gives the community’s building official a detailed questionnaire to complete.
- A trained ISO field representative meets with the building official to review and verify the community’s commitment to code enforcement.
- ISO analyzes the questionnaire data and arrives at a total score, which determines the community’s Building Code Effectiveness Classification for both commercial and residential construction.
- ISO notifies the community of the results and publishes the classification for participating insurers.

The BCEGS analysis, and ultimately the community’s classification, depend on some key criteria, including staffing levels and qualifications of plan reviewers and field inspectors, code adoption and amendment, and the community’s commitment to building code enforcement. ISO also takes into account:

- public awareness programs and code development activities in a community
- details of the building department’s review of plans for residential and commercial buildings
- thoroughness of the inspection process
- zoning provisions in force to mitigate natural hazards

During the evaluation, we also collect and analyze additional data when determining the classification:

- underwriting information, including natural hazard data in the area
- number of permits issued
- number of plan reviews conducted
- number of inspections completed
- building department funding and expenses
- size and population of jurisdiction
- fair market value of all buildings



Building departments and code enforcement efforts change frequently. That’s why our field representatives evaluate communities approximately every five years. Or we can survey a community sooner if its building code enforcement agency has made significant changes or when a community requests a resurvey.



The Nisqually earthquake that struck Seattle, Washington, in February 2001 caused substantial building damage.

Kevin Galvin/FEMA

### **Mitigation reduces building damage and economic loss**

Here are just a few examples of how improved building codes can save billions and reduce damage from all types of natural disasters:

- Louisiana State University (LSU) conducted a modeling study to determine the mitigation effectiveness of the latest building code improvements following Hurricane Katrina. The study results, released in January 2006, were similar to results of studies conducted in Florida following Hurricane Andrew in 1992. The LSU study concluded that if communities had adopted and effectively enforced the latest

building codes, the residential wind damage suffered in Mississippi during Hurricane Katrina would have been 65 percent less, a reduction from \$4.8 billion to \$1.7 billion.

- A 2005 study conducted by a council of the National Institute of Building Sciences concluded that funds directed toward hazard mitigation before an event reduce losses by almost four dollars for every dollar spent. The federal government supports that concept with predisaster grants to communities that effectively institutionalize natural hazard mitigation strategies in their building code adoption and enforcement.

### **For more information...**

...about the BCEGS program, please call ISO at 1-800-444-4554, or send e-mail to [communitymitigation@iso.com](mailto:communitymitigation@iso.com). Be sure to visit ISO Mitigation Online at [www.isomitigation.com](http://www.isomitigation.com) — your source for up-to-date information on community efforts to mitigate the risk of losses from fire and natural hazards.



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