

What is BCEGS?

The Building Code Effectiveness Grading Schedule (BCEGS) assesses the building codes in effect in a particular community as well as how the community enforces its building codes.

BCEGS particularly emphasizes building-code requirements designed to mitigate losses from natural hazards. BCEGS develops a relative Building Code Effectiveness Classification for each community for insurance rating and underwriting purposes. BCEGS is similar in concept to ISO's Public Protection Classification (PPC™) evaluations of municipal fire-suppression capabilities used by insurers for decades.

The concept is simple: municipalities with effective, well-enforced codes should demonstrate better loss experience, and insurance rates can reflect that. The prospect of lessening catastrophe-related damage and ultimately lowering insurance costs provides an incentive for communities to enforce their building codes rigorously — especially as they relate to windstorms and seismic damage.

Why is BCEGS needed?

BCEGS encourages the implementation and enforcement of effective building codes, resulting in safer buildings, less damage, and communities that suffer less damage when natural disasters occur.

Insured catastrophe losses of more than \$17 billion made 1994 the second-worst catastrophe year on record, with more than \$12.5 billion of insured losses due to the Northridge earthquake. In 1992, catastrophe losses reached more than \$23 billion, largely because of Hurricane Andrew, which resulted in more than \$15.5 billion of insured losses.

Serious natural disasters have recently occurred with greater frequency, and high-risk areas are becoming more populous.

Windstorms. Some 135 million people, more than half the U.S. population, now live near one of our nation's coasts — the most windstorm-prone areas. Windstorms — hurricanes, tornadoes, and tropical storms — account for a majority of the insurance industry's catastrophe losses since 1986.

Earthquakes. Ninety percent of the U.S. population lives in seismically active areas, and some 5,000 quakes occur in the United States each year. Four hundred of those earthquakes can cause interior damage, and 20 can cause structural damage. More than six million people live in the San Francisco Bay area, home to at least ten active faults.

Studies of various catastrophes, including Hurricane Andrew and the Northridge earthquake, graphically demonstrate that effective building-code enforcement reduces loss in catastrophic events.

According to *Best's Review*, experts estimate that Hurricane Andrew's losses would have been 30% to 40% lower if Florida communities had strictly enforced their existing building codes. A study by Factory Mutual Insurance Group shows that effective enforcement of building codes in those communities would have reduced the damage to buildings by up to 55%.

We can't control where people live. But we can encourage more effective enforcement of municipal building codes. BCEGS will provide that encouragement.

ISO worked closely with the Insurance Institute for Property Loss Reduction (IIPLR) to develop BCEGS. In developing the program, ISO also tapped the expertise of the three organizations that produce model building codes — the International Conference of Building Officials, the Southern Building Code Congress International, and the Building Officials and Code Administrators International. ISO also gleaned information from more than 1,500 building-code officials. To further refine the grading criteria, ISO pilot-tested the program in 154 communities in Florida, Georgia, North Carolina, and South Carolina.

BCEGS helps communities by:

- improving building codes (by encouraging the adoption of the most current codes), building departments, and code enforcement
- promoting construction of better, more catastrophe-resistant buildings
- reducing property losses from catastrophes
- reducing the economic and social disruption that results from catastrophes' serious and widespread destruction

The first step in the implementation process in a particular state is ISO's filing and the insurance regulator's approval or acknowledgment of the Building Code Effectiveness Grading Schedule. Once that occurs, ISO representatives begin evaluating individual municipalities in that state, with the goal of classifying all municipalities in the state within two years. As ISO evaluates municipalities, the company releases the classifications with updates to Public Protection Classifications, a program that reflects ISO's assessments of municipal fire-suppression capabilities.

Concurrent with the evaluation of the municipalities' building-code effectiveness, ISO develops and files BCEGS advisory rating credits to be applied to loss costs for personal and commercial property coverages in each community. ISO also files manual rules to be used with the credits. Once state regulators approve or acknowledge the filings and the filings go into effect, insurers that have given ISO filing authorization can automatically apply the credits.

The program applies to all natural hazards. Model building codes have most clearly addressed the hazards of wind and earthquake, and experts maintain that buildings constructed according to requirements of the model building codes suffer fewer losses from wind and earthquakes. If municipalities properly enforce adequate codes, losses from other perils should also decrease.