Corporate Exposure: Predicting Property Loss

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Property loss control, as an area of management, is usually taken for granted and underemphasized. Property losses may *appear* to be random, unpredictable events, but in fact, with proper recording and data analysis, they can be predicted with a high degree of accuracy.

The loss of property is tangible and quite obvious. It includes the loss of buildings, equipment, furniture and fixtures, raw materials, materials in process, finished products, money, and possibly even land. It is important to take a broad perspective in analyzing causes of property losses. Traditionally, the insurance industry has been the primary impetus in developing information on the elimination and control of fire hazards. Though a positive step, it has diverted attention away from other important causes of property losses.

Basic Categories

All organizations are faced with an infinite number of potential risks. Because it is not possible to deal with so broad a spectrum, a simplified approach is needed. We have developed nine basic risk categories that should be reviewed to identify problem areas. They are:

- Employee injury
- Public liability
- Earth
- Personnel
- Combustion and chemical reaction
- Breakdown and damage
- Security
- Air
- Water

Of these nine categories, the last six relate directly to property damage and interruption of operations. Because the first three categories are usually addressed by others, we have concentrated the balance of the column on those perils most frequently misclassified as "unpredictable occurrences." They are, in order, (1) water, consisting of flood, storm runoff, coastal erosion, Tsunami, and storm surge; (2) air, involving high winds, tornado, hurricane, hail, snow, fog, lightning, intense rain, drought, and falling objects; and (3) earth, including earthquake, subsidence, landslide, avalanche, and volcano.

Tracking the Data

Tremendous strides have been made with regard to the information and expertise available to meet these

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It's possible to predict losses from natural disasters with reasonable certainty.

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challenges. Data on the frequency and severity of natural phenomena disasters can be obtained from federal and state agencies; they are also contained in special reference publications. Design criteria information is noted in specialty code and guideline regulations. Controlling the damage from natural phenomena disasters depends largely on the relationship between construction, operation, maintenance, and the environmental forces at work.

Three principles form the basis for our natural phenomena disaster exhibit: (1) Each city or town has its own unique profile regarding the likelihood of natural phenomena disasters effecting their operation; (2) Performance characteristics of buildings and their contents in response to these natural phenomena disasters are predictable; and (3) If you know your exposure to loss, appropriate mitigation techniques or practices can be set in motion.

We suggest that for each location specific information be captured for comparison:

- Fog—Annual number of days with fog
- Earthquake—Zone taken off seismic maps
- Lightning—Annual number of days with thunderstorms
- Hail—Average number of days with hail per year
- Blizzard—Frequency of ground blizzards
- Tornado—Frequency per year
- Snowload—Snowload per square foot
- High wind—Annual fastest mile speed 30 feet above ground
- Intense rainfall—Rainfall intensity (inches per hour)

Once this information is captured, the company can compare it to U.S. averages to determine potential exposure to disasters.

For Further Information

Exposure to losses from natural phenomena disasters can be predicted with reasonable certainty, which means that losses themselves can be curtailed significantly. Applied Risk offers a Natural Phenomena Profile to assist in your overall evaluation of risk. For a free copy of this one-page exhibit, write to Harry Mirijanian, Applied Risk, 100 Dutch Hill Road, Suite 214, Orangeburg, NY 10962.

Harry P. Mirijanian is president of Applied Risk, an independent risk management services firm established to assist the business community in reducing its exposure to loss and insurance costs. Mirijanian is a frequent speaker at AMA seminars.

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