18
Risk Management

R. Bradley Johnson and Bernard H. Ross

In the past decade, risk management has emerged as an important part of local government management with significant impact on public financial management. This emergence has been fostered by governments' need to provide services, guard against economic loss and ensure public safety during a time of uncertain legal liability and increasing litigation. The insurance crisis of the mid–1980s, which threatened government's ability to carry on basic operations, also encouraged the growth and visibility of public risk management. Local governments began to realize the need to reexamine operations and protect their increasingly limited resources. Public managers now recognize risk management as an ongoing management control tool applicable at all levels of operation.

BEYOND INSURANCE

Mention risk management and most government officials think of insurance. This is not surprising, as insurance was—and continues to be—the traditional way by which governments protect their assets. Although insurance is important, it is only one way to deal with losses.

Because every government operation involves some level of risk, risk management is one of the broadest fields in local government administration. Its practice is interdisciplinary, involving finance, environmental management, public works, safety, transportation, parks, recreation, health, education, personnel, purchasing, and law. In all such areas, risk management is a tool for exercising better operational control.

When a government official examines the potential for loss and takes steps to protect organizational assets, he or she is, in effect, performing the duties of a risk manager. Most local governments practice risk management; their efforts, however, are often fragmented and uncoordinated. A formal system of policies

and decision processes is critical to successful risk management. Risk management resembles a typical planning process. It provides a formal method to (1) identify risks, (2) evaluate their frequency and potential severity, (3) decide which method is best for dealing with them, and (4) implement the chosen method(s).

WHY MANAGE RISK?

Why should governments look beyond insurance and develop full-fledged risk management programs? Here are some answers:

- Risk management results in more effective use of funds that might otherwise be diverted to purchasing unnecessary or expensive insurance, replacing damaged property, or paying liability or workers' compensation claims.
- Overall costs are decreased while productivity is increased. Risk management aids in preventing worksite accidents and injuries, reducing medical expenses and other costs related to lost workdays, replacement workers, etc.
- Risk management identifies exposures that can be covered by means other than insurance—or that can be avoided completely.
- Risk management also helps make communities more attractive to insurance companies, which can increase insurance availability.
- Risk management can lower expenditures by reducing the overall "costs of risk."
- Risk management reduces uncertainties associated with future projects—by highlighting better ways to prevent and pay for accidental losses.

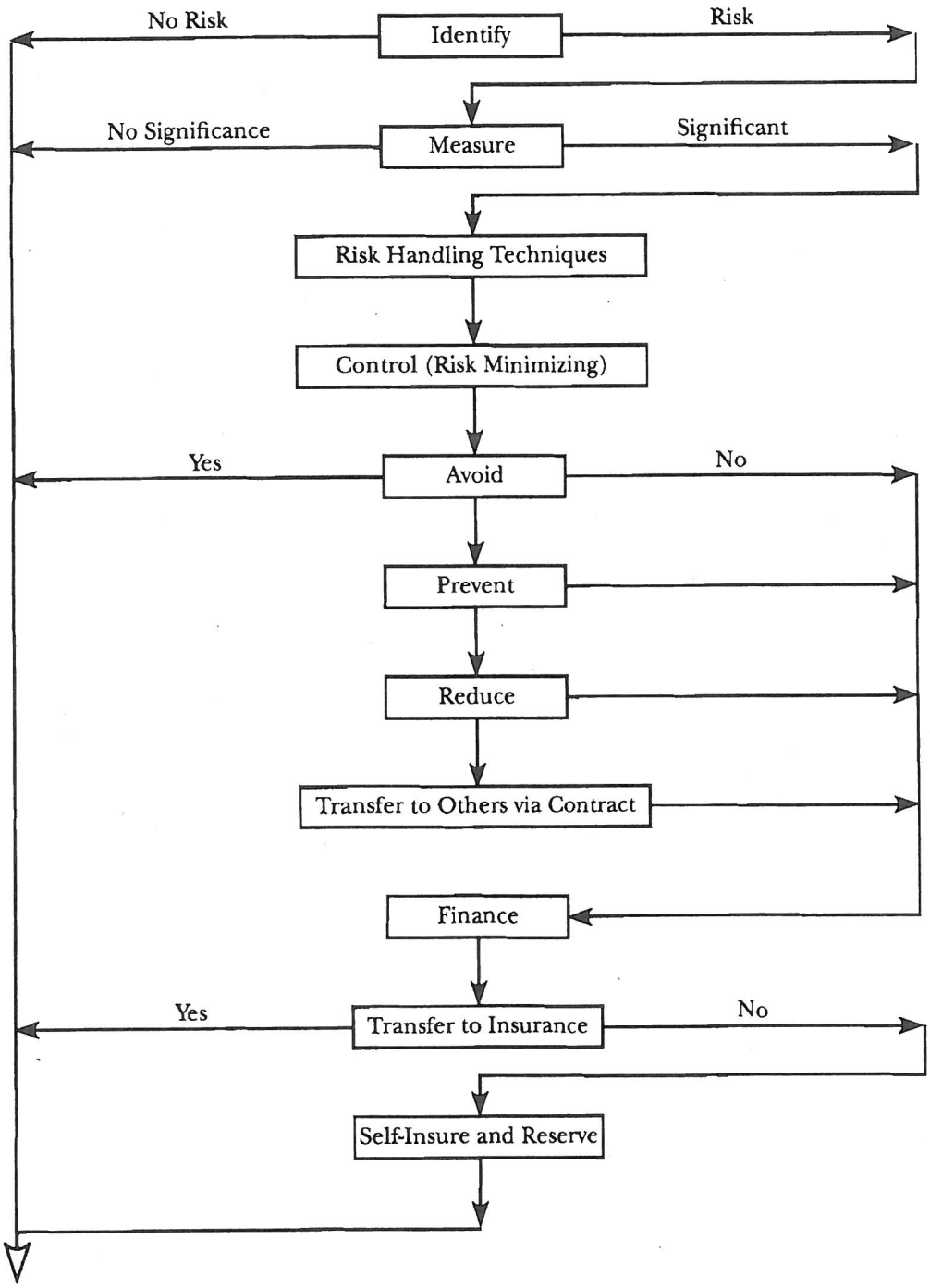
Although risk management may not be the definitive answer to all liability and insurance problems, it does help make operations safer, less costly, and more efficient.

The risk management process answers the following questions: What are the loss exposures facing our organization? What is the potential for loss and probable effect? What is the best way to deal with these risks? To reiterate, the steps in this process are

1. Risk identification—outlining the potential exposure to loss
2. Risk evaluation—analyzing the potential for loss both on a historical basis and for future frequency and severity
3. Risk treatment—reviewing alternatives available to deal with risks (including control and financing)
4. Implementing the best alternative

Figure 18-1 illustrates the key steps in public risk management.

FIGURE 18-1
Risk Management Process



SOURCE: Reprinted with permission from *Risk Management and Insurance: A Handbook of Fundamentals*, copyright 1983, National Association of College and University Business Officers.

RISK IDENTIFICATION

Many local governments do not adequately identify loss exposures, so risks go undetected until an incident occurs. Risk identification may not locate all exposures to potential losses, but it does help to spot trouble areas and to make reasonable predictions. This is a ongoing process, since exposures change—as do government operations and legal climates.

There are six types of risks that can result in economic loss:

1. *Legal liability to others:* Liability claims involving injuries and property damage represent serious loss exposures for public agencies. Claims may result from actions of employees or public officials (e.g., intentional or unintentional negligent acts). Claims involving contractual liabilities may surface with privatization of public services or intergovernmental service arrangements.
2. *Property loss:* Accidental loss or damage can occur to both real and personal property, including public buildings, parks, swimming pools, public records, desks, chairs, typewriters, computers, and tools. Losses may result from carelessness, natural disasters, faulty equipment, or fire and theft.
3. *Extra expense:* After some losses, governments incur additional expenses to renew or maintain services from cleanup or repair of damaged property, overtime, or hiring and training of replacement workers.
4. *Loss of income:* Unfortunately, loss-of-income exposure is often overlooked by governments. For localities that operate revenue-producing facilities (such as stadiums, gymnasiums, and fairgrounds) destruction of or damage to these facilities means a loss in income. In addition, taxes, charges for services, licenses and permits, fines and other sources could be lost if governments' ability to collect revenue is somehow disrupted.
5. *Human resources loss:* Job-related illnesses and injuries mean higher medical and hospital expenses plus costs associated with replacement of workers and lost productivity.
6. *Crime and fidelity loss:* Dishonest, fraudulent, or criminal acts committed by employees or others can also result in losses.

Risk identification asks the question: "What and where are the risk exposures in each of these areas?" Governments use any of several investigative tools for uncovering unique and not-so-unique risks, including field inspections, exposure checklists, and analyses of claims history and accident reports.

RISK EVALUATION

Once risk exposures are identified, the financial risks of each need to be determined. Potential financial loss is measured by frequency and degree of loss. In other words, how often is a loss likely to occur, and how severe could it be? By evaluating loss exposures, decisions can be made on how best to handle them.

A review of prior loss expenses is the best predictor of future losses. This loss history data should go back at least five years and should show the number of losses and the dollar amounts involved (those paid by the government or another party).

Unfortunately, evaluating loss severity is speculative, especially for liability exposures, and is the most difficult part of risk management. This is why accurate records of claims, incidents and settlements are absolutely vital.

The following steps may be used to estimate the severity of liability exposures:

1. Assess the liability exposure by reviewing state laws on public liabilities and immunities, local claims history (three to five years), liability suits in nearby communities, recent court cases, jury award amounts, settlements, and common defense costs.
2. Identify liability exposures most likely to affect the organization. While it's difficult to accurately predict which lawsuits might befall a jurisdiction, records of recent cases within the area and state can help identify potential claims.
3. Estimate the potential losses from all events that might occur. Consider all costs, including defense costs, settlements, property and income losses, and costs related to personal and bodily injuries.

In estimating the severity of property loss exposures, values should be assigned to real and personal property. Property valuation should include two estimates of the potential total losses: maximum probable loss and maximum possible loss.

Maximum Probable Loss

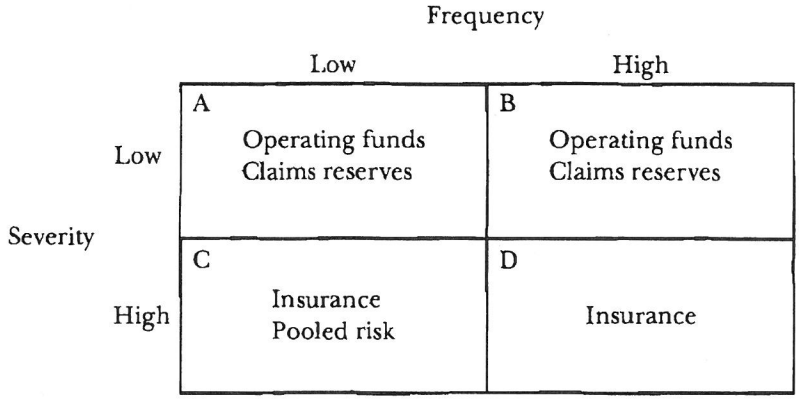
This projects the worst loss occurring under average conditions. For example, in estimating the severity of fire loss for a building, the type of structure, fire detection/prevention systems, and building contents must be considered. If a building has smoke detectors and sprinklers, a fire probably would not destroy it completely (assuming all safety devices work). A property valuation, then, would estimate what portion might be destroyed and what parts are most susceptible to fire.

Maximum Possible Loss

This is a worst-case scenario predicting the greatest conceivable loss assuming all safety measures fail. It assumes the total destruction of a building and its contents, as well as damage to nearby structures. Estimates of maximum possible loss identify exposures not covered by property insurance policies, so they can be integrated into other coverages.

Estimates of loss severity should also project indirect costs stemming from disruption of daily operations, loss of income and other expenses (e.g., rental equipment, etc).

FIGURE 18-2
Types of Risks and Their Treatment



The matrix presented in figure 18-2 is used as a guideline to determine how to handle each exposure based on its frequency/severity analysis.

Low-frequency, low-severity losses in quadrant A do not occur often, and when they do, are not severe. Examples include petty theft, vandalism, and minor building damage. Governments usually pay for such losses with operating funds or claims reserves.

High-frequency, low-severity losses in quadrant B occur fairly often, but are not costly. They include minor vehicle accidents, small workers' compensation claims and general liability claims, such as slip-and-fall accidents. These losses are also paid from operating funds or claims reserves.

Low-frequency, high-severity losses in quadrant C are very serious but do not occur often. Examples include natural disasters, boiler and machinery accidents, major fires or theft, large liability suits, permanent disability injuries, and environmental claims. A single claim can have a devastating effect on a jurisdiction, so insurance or pool coverage is generally the best way to protect against these sizable claims.

High-frequency, high-severity losses in quadrant D are the most serious of all claims. They include major liability suits against law enforcement officials, serious accidents resulting from faulty road maintenance, and severe workplace injuries. Loss control is important in terms of these exposures and transfer of risk through insurance is often the best financing strategy.

RISK TREATMENT

After identifying and evaluating exposures, the next task is to determine how to treat these exposures. Typically these exposures are handled either through control or finance measures. Risk-control techniques can be categorized as either risk avoidance or loss prevention and control.

Risk Avoidance

Some governmental activities or services carry risks so great, it is best to avoid the activity altogether. In the strictest sense, avoidance is the most complete way to manage risks, because it eliminates any chance of a loss. Governments avoid risks by either avoiding or discontinuing the activities that create risk. For example, a town planning to build a skateboard park may determine that the liabilities and safety risks involved are too great, and therefore it avoids these risks by not building the park.

Often, however, avoiding one risk may create others. The town children, in the example here, may ride their skateboards on public streets instead of in a park, endangering themselves and others and exposing the town to other liability risks.

While risk avoidance is the most complete way to handle exposure, it is rarely used by governments because some loss exposures cannot be avoided. Some public services must be provided regardless of risk. In these instances, it is the risk manager's job to find safe ways in which government services can best be delivered.

Loss Prevention and Control

Steps can be taken to reduce the likelihood that risks will occur and reduce the severity of losses when they do occur. Fire-safety training programs, rules for storage and handling of flammable materials and fire inspections of public buildings can help prevent fire loss. These are common *loss-prevention* measures.

Smoke detectors, fire extinguishers, fire alarms, and sprinkler systems cannot prevent fires, but they help minimize fire damage. These are *loss-control* measures.

Governments can benefit from the creation of safety and loss-control committees, although community size and accident and claim levels can affect the size of the benefit. Loss-control committees usually include key supervisors and staff from various agencies. Committee duties include creating safety policies and procedures; developing inspection programs; designing safety orientation programs for new employees; creating accident and claims investigation systems; identifying safety measures needing funding; developing disciplinary procedures; and establishing review boards to investigate fatalities, serious injuries, or major accidents.

A variety of other risk-control techniques, such as contingency planning and claims management, are also available to local governments.

Even if every effort is made to avoid or control risks, governments must still be protected financially in case accidents occur. Risk-financing techniques fall into either *transfer* or *retention* categories.

Risk Transfer

The most common method of financing risks is transferring the financial burden of loss to another party. Transfer is usually more feasible than avoidance because it ensures continued service provision while protecting the jurisdiction. Insurance

is the most popular form of financial risk transfer, but other methods may also be used successfully.

Insurance. Commercial insurance is the most common way to pay for losses, with most public agencies buying one form or another. Problems arise when governments buy insurance with little idea of their own loss exposures or how they can be controlled. As a result, they may not purchase enough insurance or, when premiums are low, they may buy more coverage than is needed. The decision to purchase coverage must be made in conjunction with other measures.

Insurance is designed in "layers" of coverage. Primary coverage is the first layer, covering the first dollar of losses (usually after a deductible) up to a specified limit. Excess insurance pays beyond the primary level, up to a specific amount. For example, a city may carry $1 million of primary coverage and $5 million in excess coverage. If the city has a $2 million claim, it probably would pay a deductible and the primary coverage would pay the first $1 million, with excess insurance paying the balance. Umbrella coverage is one type of excess insurance and, as its name implies, it covers all primary liability insurance as well as some self-funded retentions not covered by any insurance. Umbrella coverage does not provide complete coverage for all perils, types of losses, or amounts of losses. Because its coverage is so broad and limits are usually high, it is not always available.

Governments face losses associated with many types of exposures. As a result, they need different types of coverage:

- *Property insurance* protects against damage or loss of property or its ability to generate income.
- *Liability insurance* covers losses related to a government responsibility (legal or contractual) not being met.
- *Fidelity bonds* cover losses from embezzlement, fund misappropriation, and loss of money or property from dishonest acts committed by employees or volunteers. These bonds obligate insurance companies to reimburse governments for such losses.
- *Workers compensation* provides employees with coverage for all medical bills resulting from job-related injuries or disabilities.

Employers also must offer protection from loss of income and rehabilitation or other services, as specified by state law.

Noninsurance Transfers. Insurance is one method of risk transfer. Other methods can also be used to transfer risk but may, at the same time, shift the risks of other organizations to the government. "Hold-harmless agreements" are one form of noninsurance transfer. In these agreements, one party agrees to indemnify, or hold another party harmless, for all claims and legal expenses incurred in specified situations. For example, local governments can hold a contractor harmless or a contractor can indemnify and hold the government harmless according to some states' laws.

Hold-harmless agreements impose different levels of responsibility. For example, a contractor could hold a government harmless against

- Suits resulting solely from the contractor's negligence
- Claims arising from joint negligence
- all possible suits

Risk Retention

Governments may also retain some risks; that is, assume financial responsibility for some losses. For example, paying for slip-and-fall claims from a general fund (rather than purchasing insurance coverage) or carrying deductibles on automobile insurance (paying for claims up to the point where insurance coverage begins). Unfortunately, many jurisdictions retain risks unknowingly because they are unaware of their exposures and have neither budgeted nor planned for payment of losses.

Various mechanisms allow governments to provide their own risk protection, outside of the commercial insurance marketplace. Two alternatives that can help protect against catastrophic loss, if properly used, are self-insurance and intergovernmental pools.

Self-Insurance. When a government self-funds or self-insures, it accepts all or part of its operational exposure by using (or combining) the following options to pay for losses:

- Using operating funds (treating losses as expenses)
- Establishing loss-reserve funds to cover estimated claims
- Establishing lines of credit at financial institutions for preapproved loans
- Purchasing "excess" insurance for catastrophic losses

Self-insurance is often advantageous for governments with large budgets, but it is generally not an option for smaller jurisdictions. The adept use of deductibles is, however, a feasible form of self-insurance for a government of any size.

Most organizations that self-insure pay for losses only up to a certain amount, with insurance coverage paying for losses over that amount. For example, a government may decide to budget funds to pay for the first $100,000 of claims and purchase insurance to cover any claims above that amount. Very few organizations can afford to be fully self-insured. Property exposures, in particular, do not lend themselves well to self-insurance. Replacement of a $10 million building would have to compete with new capital improvement projects for limited capital funds.

An important decision in self-funding is determining which exposures will be retained. The most common of these exposures are: low-frequency/low-severity losses (e.g., minor bodily injuries, fender-benders), and high-frequency/low-severity losses (e.g., broken windows or other minor property damage).

Self-insurance offers several advantages over commercial insurance:

- *Cost-avoidance*—insurance transactions entail certain additional costs (e.g., premium taxes, commissions)
- *Cashflow*—funds reserved for self-insurance are held until claims are paid, providing additional investment opportunities
- *Service control*—government decides with which claim adjusters and loss-control professionals to contract
- *Enhanced awareness*—public officials and managers become more aware of risk liabilities and consequently should manage risks better[1]

These advantages naturally must be weighed against the disadvantages of experiencing fluctuations in claims payments and incurring extra costs associated with administration and contracting with service providers.

Recent surveys indicate an increase in nontraditional risk financing in the public sector. In a PRIMA member survey,[2] 79.5 percent of the respondents reported some form of self-insurance in three liability areas (general, public-official, and police professional) as well as automobile, property, workers' compensation, and employee benefit coverage. Only 20.5 percent reported the use of commercial insurance for all these areas.

Roughly 60 percent of those surveyed were self-insured for workers' compensation; 55.4 percent for general liability; 53.7 percent for auto liability; and 47 percent for public-official liability.

In this survey, *self-insured* meant having no primary insurance coverage; it did not distinguish, however, between formal self-insurance and merely going without coverage. In either case, respondents did not have primary coverage through a traditional insurer and therefore would pay claims directly from public funds. As noted earlier, self-insurance is often a tool of larger governments whose fiscal capacity allows them to retain loss rather than transfer it. Of the 320 self-insured governments surveyed, the average operating budget was $195 million compared with $48 million budget for those who do not self-insure. More than one-third of the self-insured group had operating budgets in excess of $100 million, while two-thirds of the remainder had budgets of less than $25 million.[3]

Intergovernmental Pools. One of the fastest-growing risk-financing alternatives, intergovernmental pools, enable governments to pool funds for loss payments among contributing members.

Group self-insurance pooling began in 1974 when the Texas Municipal League created the first risk-sharing pool in the United States. Today, 200 pools serve as a risk-financing alternative for over 25 percent of the estimated 80,000 general and special-purpose local governments in the United States.

Pools operate as cooperatives with members paying contributions, receiving coverage, and making claims. Many public agencies also rely on pools for assistance with risk-management operations. These groups normally operate within state

boundaries, either on a regional or statewide basis, and function under statutory authorization. Generally, they use three levels of coverage:

1. Members pay for their own losses up to a specified amount, with an annual limit. For example, members cover their own losses up to $1,000, with an annual limit of $25,000. Thereafter, the pool pays for any additional losses.
2. The pool pays for losses over the individual limit, up to its own limit. For example, the pool pays for losses between $1,000 and $100,000.
3. Pools use membership funds to purchase insurance for losses exceeding the pool's own limits. For example, the pool purchases coverage for losses ranging between $100,000 and $5 million.

Forty percent of the PRIMA survey respondents indicated that they belonged to an intergovernmental risk pool. Market analysts expect up to 50 percent of the existing property/casualty market to shift from traditional insurance to other alternatives, such as pools, in the near future. They foresee pools expanding into new areas, such as pollution/environmental impairment liability and employee benefits and expect an increase in pool usage among regional and interstate special districts and other quasi-public bodies.[4]

Implementation of Risk Management

Selecting appropriate risk-treatment strategies is a significant part of managing risks. Unless risks can be avoided, governments should apply (at a minimum) one risk control and one risk-financing technique to each major loss exposure. While it is possible to substitute techniques of like kind, it is usually not wise to substitute risk financing for risk control or vice-versa. Any risk-control technique (except avoidance) can be used with any risk-financing option or with another control method. Similarly, any risk-financing technique can be used along with any risk-control method or other risk-financing option. In deciding which techniques to use, three criteria are recommended for risk analysis:

1. *Frequency and severity:* estimating how often losses occur and how much they may cost.
2. *Effectiveness:* analyzing how effective a technique will be in achieving the objective. For example, if workers experience back injuries, teaching proper lifting may not be the only answer. Analyzing the work procedures with an eye toward redesign could eliminate movements which cause injuries.
3. *Costs:* analyzing the costs (cash outlays and maintenance expenses) and benefits of each technique.

Governments should design and implement a risk-management plan to carry out these strategies. Risk management is a function that covers all operations and whose principles must be instilled in all employees.

The growth of risk management in the last ten years has developed with a variety of administrative structures and organizations used to operate public risk-management programs. About one-third of PRIMA's 1987–88 survey responses noted the existence of a separate risk–management department. This option gives the risk-management function more authority to work with other top-level administrators and report directly to top management.

When a separate risk-management department does not exist, the risk-management function typically is assigned to a finance, administrative, or personnel agency. PRIMA's survey found that most governments place risk management within finance departments (30.6%), administration departments (18.5%), or human resources/personnel offices (16.4%). In contradiction to one view of risk management, as a purchasing function, only 4.3 percent of respondents identified risk management as a function of purchasing departments.

Despite its recent growth, risk management is often handled by staff whose primary duties are not risk management. This is particularly true in smaller communities. It is interesting to note that finance directors make up the largest percentage (9%) of those handling these responsibilities. This is indicative of the strong financial element involved in managing risk.

Risk managers must open channels of communication with elected officials and department heads, agency supervisors, and the public. They must work closely with elected officials to develop and disseminate comprehensive policy statements regarding their risk and insurance management objectives. These policies should aim to eliminate fragmentation in managing risk across agencies.

Program objectives should identify the risk-management function as protecting the general public and public assets against accidental loss, so government can continue to provide services, even after a catastrophe.

CONCLUSION

Risk management, like most government functions, provides officials with both problems and opportunities. Because its scope is broadly based, risk management has the potential to affect all departments and operations. How public officials organize and implement this function can have a profound effect on the organization's financial and administrative health.

Today government managers are aware of the many risks involved in urban crime, hospital emergencies, recreation areas, and fire fighting. Already on the horizon, however, are new and emerging risks associated with AIDS, drug testing, toxic emissions, and solid and hazardous waste disposal. Each of these potential risks poses a series of new managerial and financial challenges. Events during the 1980s indicate that public risk management will continue to grow in scope and importance. The need to focus new resources on public risk-management

activities will continue to grow as jurisdictions move toward greater internal control of risk-management activities and funding.

NOTES

1. Excerpted from "Self-insurance," a presentation by David M. Randall at the Public Risk Management Association at its 11th annual conference, June 10–13, 1990, in Reno, Nevada.

2. *Public Risk Management: State of the Profession, 1987–88,* (Washington: Public Risk Management Association, 1988). For further discussion of these survey results, see Bradley R. Johnson and Bernard H. Ross, "Risk Management in the Public Sector," *Municipal Yearbook* (Washington: International City Management Association, 1989).

3. For information on accounting and financial reporting issues of risk financing, see *Accounting and Financial Reporting for Risk Financing and Related Insurance Issues,* Statement 10 (Norwalk, Conn.: Governmental Accounting Standards Board, 1989).

4. For additional information on pooling, see *Pooling: An Introduction for Public Agencies* (Washington: Public Risk Management Association, 1987).