

by Christine Becker

Disaster Recovery: A Local Government Responsibility

Disasters happen. A massive flood inundates a central downtown. A tornado levels a small town in a matter of minutes. A hurricane ravages a community.

And, all disasters are local. They happen in cities and towns and counties of all sizes where citizens look to their local government managers and elected officials to lead the immediate response, guide the longer-term recovery, and reassure them that life will be normal again . . . someday.

Regardless of community size or the nature of the disaster, local government leaders are responsible for overseeing all four phases of emergency management—preparedness, response, recovery, and mitigation (see Figure 1). Federal and state governments play a supporting role in the immediate aftermath and in providing funding and guidance for long-term recovery and mitigation.

Preparation and response—half of the emergency management cycle—generally get the most attention, particularly in high-risk areas. Preparing to respond usually involves significant training and practice to ensure that key local employees and supporting resources are ready to jump into action quickly and that local residents understand their roles and responsibilities in preparing for and responding to disasters.

Local government leaders—particularly those who have been through a major community disaster—recognize that preparing for long-term disaster recovery demands as much attention as preparing for short-term response. After a major disaster, the recovery process takes months and even years to bring a community back to a “new normal” and as strong as or better than before the disaster.

Frances L. Edwards, associate director of the Collaboration for Disaster Mitigation in San Jose, California, and former director of emergency services in San Jose, California, says the recovery process begins “when the situation is no longer getting worse, all the living have been rescued, and the community has found the floor.”

Brett Kriger, director of the Institute for Building Technology and Safety’s (IBTS) Disaster Management Group, says the recovery process begins even before the response stage is complete because decisions made while responding to the emergency can affect the recovery process (see Figure 2). “There’s usually a 30 percent overlap in the middle where the community is still responding while gearing up for recovery,” Kriger says.

Kriger, who has worked in numerous disaster response and recovery operations with and for the Federal Emergency Management Agency (FEMA), says actions taken during the response phase can have an impact on overall results once the community moves into recovery.

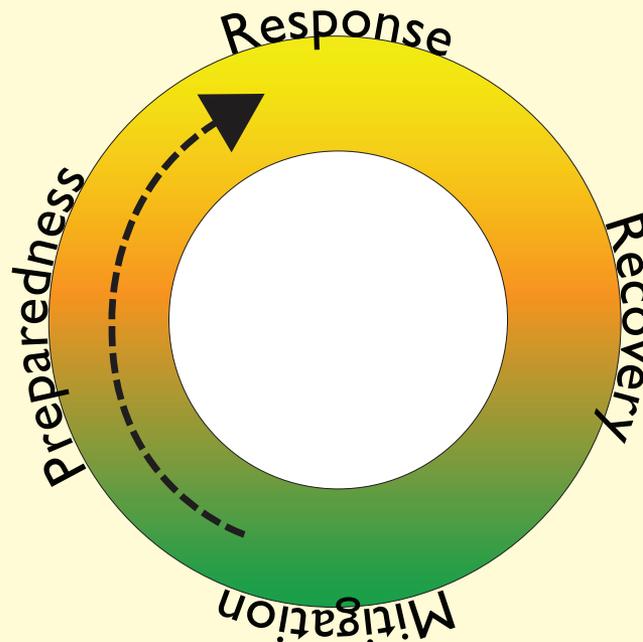
“Sometimes local officials become so wrapped up in the urgency of the response that they don’t do the necessary documentation to qualify for reimbursements and longer-term recovery funds,” Kriger says. “That’s why planning for recovery is as important as planning for response.”

And, according to Kriger, good work at the response stage supports recovery. “The four phases of emergency management produce the ebb and flow of a preparedness-based community life and define how the community perseveres before, through, and after times of crisis,” he adds.

Marcy Douglas, city administrator of Northwood, North Dakota, a community of 1,000 that was leveled by a category 4 tornado on August 26, 2007, believes that a commitment to recovery from the first day of the emergency has helped that tiny community rebound.

“If you respond to a disaster with recovery in mind, recovery will happen,” Douglas says.

Figure 1. The Emergency Management Cycle.



Emergency Management is an ongoing process with four mutually dependent and overlapping components. Source: Institute for Building Technology and Safety Disaster Management Group.

FOCUSING ON LONG-TERM RECOVERY

Long-term recovery involves more than debris removal and restoring power, which are considered short-term recovery actions. According to FEMA, long-term recovery refers to the “need to re-establish a healthy, functioning community that will sustain itself over time.” In its *Long-Term Community Recovery Planning Process: A Self-Help Guide*, FEMA outlines a recovery approach that emphasizes a community-driven process with significant public involvement and local control.¹ The process also emphasizes a “project-oriented” focus on actions that will have the greatest impact on community recovery.

In this guide, FEMA also urges a significant focus on mitigation as part of long-term recovery to prevent or at least minimize similar damage in the event of another disaster.

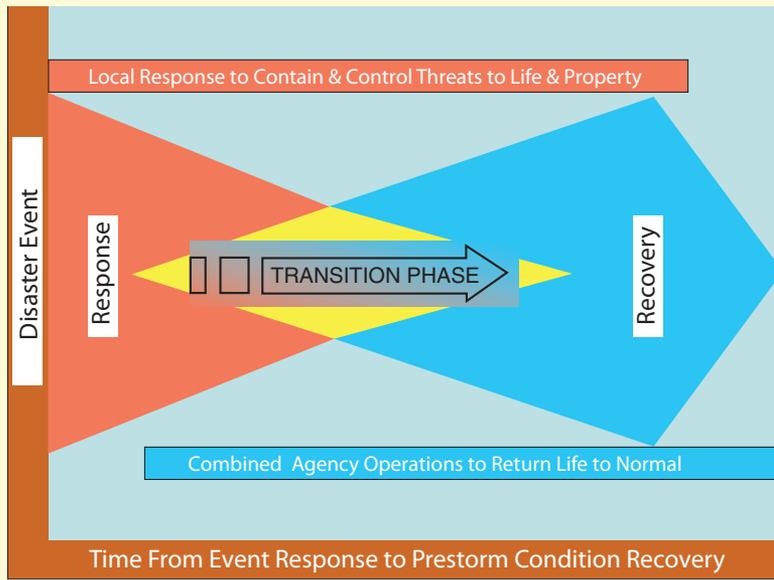
The Association of Bay Area Governments (ABAG), which serves 109 cities and counties in the San Francisco, California, area, has developed

a program designed to help cities and counties be better prepared for long-term recovery in the event of a disaster. Based on a survey and a series of meetings and workshops, ABAG identified four areas that cities and counties should address to prepare for long-term disaster recovery:

- Financing.
- Expediting long-term housing recovery.
- Supporting recovery of downtown businesses and the local economy.
- Ensuring local government facilities and services recover smoothly.²

Long-term recovery strategies and needs will vary depending on the scope of the disaster. In small communities like Northwood, North Dakota, and Greensburg, Kansas, tornadoes damaged or destroyed everything—homes, businesses, municipal buildings, schools, recreation facilities, and more. For those communities, deciding to rebuild was a first step, followed quickly by engaging the entire community to ensure that their hometowns

Figure 2. Transitioning from Response to Recovery Process.



When a crisis occurs, the needs are vast and the humanitarian response relatively proportional. As the humanitarian community provides for the vulnerable population, the crisis fades away. But to establish good foundations and effective linkages to longer-term development, the recovery from the crisis needs to start as early as possible. As can be seen from the diagram, the transition phase overlaps both the relief and development phases. Recovery is the process of transformation from relief to development. Source: Institute for Building Technology and Safety, Disaster Management Group.

would come back, and then bringing other resources to the table.

In other communities, when significant damage is confined to one area, local leaders must balance ongoing public service expectations with urgent long-term recovery needs while ensuring that the vision for “new normal” keeps the community together.

The following sections highlight long-term recovery approaches and lessons; they draw on the direct experience of managers who have been there.

ECONOMIC RECOVERY

Most managers who have experienced disasters recently say getting the local economy working again is vital to launching a successful comeback. Restarting the economic engine depends on a number of factors:

- A willingness and capacity of business to reopen quickly if facilities aren't severely damaged or to rebuild in the community.

- Affordable and available housing for workers.
- Large employers with business continuity plans who can get up and running quickly to launch the economic comeback.
- Strong connections between government and business to facilitate a recovery partnership.

Bruce Moeller, city manager of Sunrise, Florida, says open communication with the business community is essential.

“The city manager needs to have a frank discussion with the business community regarding the importance of business continuity plans in the event of a disaster,” Moeller says. “This is particularly true with small businesses to help them understand how to prepare to recover quickly after a disaster.”

Because Florida experiences frequent hurricanes, Moeller says both government and businesses learn with

each disaster and get better prepared for the next one.

Kyle Hayes, city manager of Beaumont, Texas, which was hit by Hurricane Rita in 2005 and more recently by Hurricane Ike, notes that businesses ramped up quickly in both cases, which helped sustain the local economy. Because 35 percent of Beaumont's revenue comes from sales tax, the rapid recovery of retail businesses was essential to community recovery.

Hayes explains that the massive devastation sustained in Louisiana and Mississippi from Hurricane Katrina only a few weeks before Hurricane Rita occurred helped Beaumont and other cities in Texas get ready. “We hadn't had a hurricane in decades, and when we saw what happened from Katrina, we started getting ready,” Hayes says.

In Biloxi, Mississippi, where 35 percent of city operating revenue comes from taxes on the gaming industry, the city had purchased a business interruption insurance policy at the beginning of the 2005 hurricane season. The policy guaranteed \$10 million in income if the gaming industry were shut down because of a disaster. Hurricane Katrina shut down the gaming industry, but the payment from the business continuity insurance policy provided some financial breathing space as city leaders launched the city's recovery.

In Northwood, North Dakota, city officials met with all the local businesses right after the tornado to identify needs and figure out how to encourage local rebuilding. “They all had a scared, stoic look but eventually we talked about plans to rebuild,” says City Administrator Marcy Douglas. “In a small town like Northwood, buying local is a way of life, and everyone wants everyone else to survive. But the local government is an essential spark to encourage small businesses to stay.”

A 2001 study published by the Public Entity Risk Institute (PERI) looked at factors that affected the ability of small businesses and not-for-profits to recover from natural disasters and thus contribute to long-term local

economic health. The study found these five factors that were critical to long-term survival:

- The disaster's impact on the organization's clientele.
- The availability of convenient substitute goods and services that can replace the business while it is trying to rebuild.
- The status of the business before the disaster.
- Financial resources lost by the business.
- The owner's ability to adapt to the new, post-disaster environment.³

LEADING THE RECOVERY

Most agree that the key factor in successful long-term recovery is local leadership. A clear vision, a well-defined plan, broad and diverse funding to finance the recovery, a supportive and involved business community, and effective partnerships at the federal, state, and local levels all contribute to successful long-term recovery. The biggest difference, however, is effective leadership.

In Greensburg, Kansas, where recovery was difficult to envision on May 5, 2007, the day after one of the strongest tornadoes on record leveled the town, City Administrator Steve Hewitt led the immediate response and helped coordinate development of an ambitious recovery plan. Hewitt was recently named *American City & County* magazine's municipal leader of the year for "creating a vision for a better Greensburg and leading his town toward it."⁴

Cedar Rapids, Iowa, is still in

Guidelines for Employee Support and Continuity of Service

Here are guidelines that can be useful for maintaining local government service levels:

- Prepare a clear plan for enabling employees to participate in response and recovery by helping them meet family needs in advance.
- Establish a disaster housing plan for essential first responder employees—police, fire, emergency operations center staff, shelter workers, and damage assessment and repair teams.
- Maintain the necessary financial relationships to ensure that employees' paychecks are issued and a backup plan for delivery when direct deposit is not used.
- Ensure that employees and their families have guidance on developing a personal support kit and family disaster plan.
- Establish expectations of all employees—both essential first responders and all other employees—in personnel policy and labor agreements, with options for dealing with failure to meet those expectations.
- Establish a clear communication method for employees only—an 800 number, a radio station, an e-mail system, a meeting place for information, or other means—to provide up-to-date information about employee expectations and public service needs.

Source: Adapted from Frances L. Edwards, "Businesses Prepare Their Employees for Disaster Recovery," *The Public Manager*, Winter 2006.

the early stages of recovering from massive flooding in June 2008 that completely submerged the downtown. With floodwaters still rising, City Manager Jim Prosser created a recovery and investment coordinating team that has led the charge from immediately after the flooding, beginning with response and moving now to recovery. The team includes representatives of every sector of the community and has met regularly to guide long-term recovery.

The team wasn't part of the city's response and recovery plan. It was just something Prosser knew he needed to do quickly to bring the community together. He says the broad team has been an effective resource for leading the recovery and coordinating diverse activities.

But the role of the manager in sustaining the momentum and helping the community weather the ups and downs of long-term recovery is essential. "There's a delicate balance between acting fast to meet the community's need to see progress and waiting for better information, a better plan, a solid response," Prosser observes.

"There's a big push to do something now. But if you don't have a good plan and you can't get the resources, you're setting up people for more disappointment. Overpromising can be fatal in long-term recovery."

Prosser points out that Cedar Rapids was lucky to have already carried out a visioning process well before the flood as part of a change in government structure.

"Pre-flood, we had a clear sense of

Look to ICMA

Emergency Management: Principles and Practice for Local Government, 2nd edition. This second edition of ICMA's landmark book is the only comprehensive resource and textbook for state-of-the-art emergency management for local government. Hardcover. December 2007. Item no. 43482. Regular price: \$80.00; member price: \$68.00.

Homeland Security: Best Practices for Local Government. An ICMA Special Report that includes a collection of contributions from public safety professionals involved in all phases of emergency management—mitigation, preparedness, response, recovery, and more. Special Report. 2003. Item no. 42858. Price: \$54.00.

Aftermath: Rescuing Essential Records after a Disaster

“They were very nasty, wet, and stinky.” That’s how Cynthia Mahner describes tax records inundated during Hurricane Katrina. The records were essential to Mahner’s real estate business, and she was fortunate to be able to dry them and remove enough mud to make them useful again.

In the immediate wake of a disaster, life and safety issues take priority, but as the immediate crisis passes, governments and businesses turn to rescuing the records on which their functions depend. Safeguarding such records in advance of disaster is the best strategy, but no amount of planning will rescue every record. Knowing how to rescue damaged records is critical to disaster preparedness.

Public Enemy Number One: Water

Nearly every records disaster comes down to one thing: water. Certainly, disasters can affect records in many ways: they can be burned, carried off by strong winds, buried by a muddy landslide. But in such cases the records are often lost beyond recovery. Records that survive fires, floods, landslides, and even tornadoes are likely to be damaged by water. Water can quickly obliterate hard drives and other electronic storage devices; fortunately, water is often less damaging to paper records than people think.

This last point is important because responders may mistakenly believe that they have no alternative but to destroy wet records. Records professionals sometimes arrive on the scene to find that there are no records left to recover. The first thing to remember, then, is that even badly soaked and dirty records may be salvaged.

Even electronic devices might be salvageable if treated quickly enough. The tips here will help you rescue damaged records, and these suggestions apply equally to electronic and paper records (except where noted).

Stabilize the environment by lowering the tempera-

ture and humidity and increasing air circulation as much as possible. High temperature and humidity, and stagnant air, contribute to mold growth, a major long-term threat to records. Stabilizing the environment will prevent further deterioration until the records can be removed from the disaster area and treated.

Call a professional and get advice as quickly as possible. Your state archives can provide—or point you to—experts who can give advice tailored to your specific disaster. There are many options for recovering wet records, so the sooner a professional arrives on the scene the better the chances of recovery become.

Handle records carefully to prevent further damage. Wet records are especially vulnerable to greater damage and should be treated as if they are fragile. Don’t try to clean dirty records or storage media yourself. Don’t flatten pages or book covers. And don’t attempt to open wet books or computer casings.

Instead, carefully pack the damaged materials in either plastic milk-carton-type crates or cardboard boxes lined with plastic trash bags. Separate wet items, especially bound volumes, with wax or freezer paper and freeze within 72 hours.

Protect identifying information as you pack damaged records. Identifying information such as box and binder labels can become separated from the records they identify, making recovering that much more difficult. Even identifiers written directly on boxes can wash or fade away unless they are written in permanent, non-soluble ink, so record the original location of records before removing them from the area. Take photographs to help document original order.

where we were going as a community,” he says. “If you don’t have that vision in the aftermath of a disaster, you’ll lose the community’s confidence.”

FINANCING THE RECOVERY

Financing long-term disaster recovery poses significant and often frustrating challenges for local leaders who must rely on the state and federal government as major sources of disaster recovery funds. Those challenges are exacerbated in the heat of a crisis when funding is urgent, not optional

or negotiable. That’s why incorporating a framework for financing long-term recovery improves the odds of success when disaster strikes.

Strategies that can be put in place well before a disaster include (1) understanding all federal requirements for response and recovery grants, including required documentation for reimbursements; (2) identifying all potential sources of funding for long-term recovery; (3) establishing lines of credit to provide cash flow for direct expenses and matches while waiting for federal

funds; and (4) identifying internal staff, or external resources, or both, to manage the financial side of recovery.

Knowledge of federal resources and the rules governing access to those resources is essential to maximize funds to support long-term recovery.

ABAG offers these pre-disaster financial recovery action steps for local governments:

- Modify purchasing and contracting procedures to expedite emergency purchases.
- Adopt a repair and reconstruction

Aftermath: Rescuing Essential Records after a Disaster (continued)

Air-dry slightly damp records. Records that are only slightly damp may be air-dried. Even electronic storage media may continue to function if they have become only slightly damp and not dirty. Distribute damp records in a way that allows air to circulate freely. If it is sunny, you can dry records outside. However, do not leave them overnight or unattended. Inside drying can be done on tables covered with plastic sheeting or on absorbent paper, such as unprinted newsprint. Place fans around the room to circulate the air.

Freeze wet paper as soon as possible. Extremely wet paper will stick together and begin to mold within 48 hours; inks will run and feather. It is important to freeze wet paper as soon as possible after a disaster. Freezing paper stops the deterioration process so that decisions about recovery can be made carefully over time. Note: Some items should never be frozen. See “Special Handling Required,” below, for more information.

Transport carefully. Such oversized materials as maps, plans, blueprints, and ledger books should be transported using bakers’ trays, pallets, or plywood covered in plastic sheeting.

Clean the area thoroughly before returning rescued records to their original locations. Carpets, ceiling tiles, wooden shelves, and other surfaces can harbor mold long after cleanup from a disaster has been completed. Records returned to such an environment can be damaged by a recurrence of mold. Be certain the environment that houses the records is actually clean before returning the records to their storage location.

—David Carmicheal is director, Georgia Division of Archives and History, Morrow, Georgia, and a former presi-

dent of the Council of State Archivists, Iowa City, Iowa (www.statearchivists.org). Christine Wiseman is preservation administrator for the Georgia Division of Archives and History (www.statearchivists.org).

SPECIAL HANDLING REQUIRED

Photographs:

- Keep wet photographs in clean water until able to air-dry (no longer than 72 hours).
- Blot excess water carefully with a color-free paper towel.
- Air-dry, emulsion side up.
- Large quantities of wet photos may be frozen (never freeze early glass formats).

Film negatives, microfilm, and microfiche:

- Fill watertight container with cold water.
- Submerge items so that they don’t move around.
- Make sure water is at least 1 inch above packed materials.
- Ship to a film processing lab for recovery.

CDs and DVDs:

- Wipe dry using a soft, lint-free cloth.
- Wipe only from the center of the disk to the outside edge (never use a circular motion).
- If necessary, clean with gentle soap-and-water solution.

Hard drives:

- Unplug all power and peripherals.
- Remove hard drives and place in airtight plastic bags to prevent hard drives from drying out.
- Arrange for hard drives to be shipped to a data recovery specialist as soon as possible.

ordinance to facilitate use of FEMA public assistance dollars.

- Establish an internal claims reimbursement process for FEMA funds.
- Adopt a local hazard mitigation plan as part of the general plan to facilitate access to additional FEMA funds.⁵

In Cedar Rapids, financing recovery remains a major challenge. Lower than expected allocation of community development block grant (CDBG) funding to the state has left the city

far short of the federal funding it had hoped for.

“CDBG is a primary source of funding for our recovery plans, and it is coming a lot slower than expected and at lower levels,” Prosser says. “That adds complexity to what we’re doing. We could move much quicker if more resources were available sooner.”

But, he remains optimistic, which is essential for his community’s recovery. “Cedar Rapids is still Cedar Rapids despite the

devastation, and we will emerge as a better, greater community—our new normal,” he says. “But that process will take three to five years, and the community needs to understand that.”

COMMUNITY CARE

Long-term recovery from a major disaster can be a long, slow process. In Grand Forks, North Dakota, it took more than 10 years. On the Gulf Coast, since Hurricanes Katrina and Rita and, more recently, Ike and

PM Disaster Management: An International Scenario

After the devastating tsunami of December 2004, ICMA's CityLinks program provided disaster recovery, mitigation, and preparedness assistance to two coastal cities in southern India. The Post Tsunami Recovery Program, funded by the U.S. Agency for International Development, created a partnership between Cuddalore and Nagapattinam in Tamil Nadu state and three hurricane-prone Florida cities—Palm Bay, Oldsmar, and Port Orange.

A team made up of ICMA staff, officials from the three Florida cities, and representatives of the India-based Urban Management Centre provided pro bono, hands-on technical assistance, capacity building, and focused exchanges. The CityLinks team helped the cities rebuild damaged parks and playgrounds and improve municipal services. They undertook flood mitigation projects to improve the cities' ability to respond to natural disasters, plan for seasonal weather, and mitigate recurring flooding in low-lying areas through improved drainage systems.

Because mapping is a crucial element in disaster preparedness and planning, the team also completed computer-aided design (CAD) base maps for the two Indian cities and showed municipal staff how to update them. The maps identify geographic features, low-lying areas vulnerable to flooding, public infrastructure systems and facilities, land uses, and important structures. Later the Tamil Nadu state government purchased CAD mapping software for cities in the state to sustain the commitment to mapping as a vital disaster preparedness and planning tool.

Although the CityLinks program came to an end, it left in place sustainable improvements—and an international partnership between local government professionals in Florida and in India—that will continue for years to come.

For more details about the program, visit the ICMA Web page at <http://icma.org/inter/ns.asp?nsid=3925>.

Gustav, recovery has been an ongoing process—almost a way of life.

Constant information and community connections are vital. Even when there's no real news, having some news is important to assure a tired community that there is a light at the end of the tunnel.

Frances Edwards says a long-term recovery plan should include strategies for dealing with the psychological impact of a disaster and the pace of recovery. "It is important to know your community and how segments will be affected by the disaster and the recovery process," Edwards says. During a recovery from a major flood in San Jose, Edwards explains that the city's large Cambodian community was particularly affected because the flood brought back memories of traumas in their home country.

"Once traumatized, individuals relive the first trauma while going

through the second, and the city needs to be prepared to deal with that," Edwards says.

Trees became a focal point in Northwood, North Dakota, after the tornado. "People didn't have roofs over their heads, but they wanted to plant trees because Northwood was always known for its tree-lined streets," City Administrator Douglas says.

"They wanted that normalcy instantly, and we had to manage that need carefully." The city eventually developed a tree recovery program as part of its plan that led to the planting of 1,000 new trees.

In Florida, with each hurricane, local leaders focus on refining their long-term recovery processes. Broward County, for example, has created a "vulnerable population registry" to help local leaders pinpoint those most in need after a disaster.

"There are so many people who are just getting by," says City Manager Bruce Moeller. "A significant event that interrupts normal life will push them over the edge. This registry helps all the local governments in Broward County anticipate those special needs."

Keeping an eye on the pulse of the community—and on the pulse of local government employees who are leading the recovery process—is important for sustaining the momentum and preserving the community spirit.

"We were blessed with strong people who, in many ways, started the road to recovery before the city could do it," says John Schmisek, director of finance and administrative services in Grand Forks. "Their attitude was 'we know we need to recover and we can do it.' Ten years after the flood, I'm here to tell you—don't ever say never." **PM**

¹Long-Term Community Recovery: A Self-Help Guide (Washington, D.C.: Federal Emergency Management Agency, December 2005), www.fema.gov/library/viewRecord.do?id=2151.

²Linda Min and Jeanne Perkins, "Summary: Long-Term Disaster Recovery Planning by Local Governments in the San Francisco Bay Area" (Oakland, Calif.: Association of Bay Area Governments, October 2008), 1, <http://quake.abag.ca.gov/recovery/SURVEYresult2008.pdf>. Visit the Web site for the Regional Long-Term Disaster Recovery Initiative at <http://quake.abag.ca.gov/recovery/> for additional information and available resources.

³Daniel J. Alesch, James N. Holly, Elliott Mittler, and Robert Nagy, *Organizations at Risk: What Happens When Small Businesses and Not-for-Profits Encounter Natural Disasters* (Fairfax, Va.: Public Entity Risk Institute, October 2001), https://www.riskinstitute.org/peri/images/file/Organizations_at_Risk.pdf.

⁴"Municipal Leader of the Year: Come-back Kid," *American City & County*, November 2008.

⁵"Financing Disaster Recovery," Local and Regional Disaster Recovery Planning Issues Paper (Oakland, Calif.: Association of Bay Area Governments, July 8, 2008), <http://quake.abag.ca.gov/recovery/PR-Recovery-Finance.pdf>.

Christine Becker is president, Christine Becker Associates, Washington, D.C., and coordinates association relations for the Institute for Building Technology and Safety (IBTS), Herndon, Virginia (csbecker11@juno.com). IBTS is an ICMA strategic partner.

PM Check Your Emergency Supply Kit

Daylight saving time begins in the United States on the second Sunday in March and ends on the first Sunday in November. Thanks to public education by fire and rescue officials, U.S. residents are made aware that the batteries in smoke alarms should be changed every six months, and a good way to remember is to change the batteries when clocks are changed at the beginning and end of daylight saving time.

The Fairfax County, Virginia, Office of Emergency Management also reminds county residents to use the beginning and end of daylight saving time as a reminder to check and restock emergency supply kits. The county offers information about what can be included in a kit on its emergency information Web page at www.fairfaxcounty.gov/oem.

Here's what the county recommends for its residents.

Recommended Items to Include in a Basic Emergency Supply Kit

- One gallon of water per person per day for at least three days, for both drinking and sanitation.
- At least a three-day supply of nonperishable food, such as ready-to-eat canned meats, fruits, and vegetables; protein or fruit bars; dry cereal; peanut butter; nuts; crackers; and canned juices.
- Flashlight and extra batteries.
- Battery-powered or hand-crank radio and a NOAA weather radio with tone alert and extra batteries for both.
- First-aid kit.
- Whistle to signal for help.
- Dust mask, to help filter contaminated air; plastic sheeting and duct tape to shelter in place.
- Moist towelettes, garbage bags, and plastic ties for personal sanitation.
- Wrench or pliers to turn off utilities.
- Can opener for food (if kit contains canned food).

Additional Items to Consider Adding to an Emergency Supply Kit

- Prescription medications, eyeglasses, contact lenses, and supplies and denture needs.
- Infant formula, powdered milk, bottles, diapers, dia-

per rash ointment, medications, and moist zZ towelettes.

- Pet food and extra water for your pet.
- Important family documents such as copies of insurance policies, identification, bank account records, and Medicare cards, all in a waterproof, portable container.
- Cash or traveler's checks and change.
- Emergency reference material such as a first-aid book.
- Sleeping bag or warm blanket for each person.
- Change of clothing, including a long-sleeved shirt, long pants, and sturdy shoes.
- Household chlorine bleach and medicine dropper. When diluted nine parts water to one part bleach, bleach can be used as a disinfectant. Or in an emergency, you can use bleach to treat water by using 16 drops of regular household liquid bleach per gallon of water. Do not use scented, color safe, or bleaches with added cleaners.
- Fire extinguisher.
- Matches in a waterproof container.
- Feminine supplies and personal hygiene items.
- Mess kits, paper towels, paper cups, plates, and plastic utensils.
- Paper and pens or pencils.
- Books, games, puzzles, or other activities for children.

Additional Supplies for People with Disabilities

- Prescription medicines, list of medications including dosage, and list of any allergies.
- Extra eyeglasses and hearing-aid batteries; extra wheelchair batteries, and oxygen.
- A list of the style and serial number of medical devices.
- Medical insurance and Medicare cards.
- List of doctors, relatives, or friends who should be notified if a person is injured.

—Merni Fitzgerald

Director of Public Affairs

Fairfax County Office of Public Affairs

Fairfax, Virginia

publicaffairs@fairfaxcounty.gov