TAKING ACTION BEFORE DISASTER STRIKES

Project Impact, the U.S. Federal Emergency Management Agency's response to catastrophes, successfully merges local community preparation, understanding and responsibility for disaster prevention with the financial muscle and technical assistance of the national government. BY JAMES LEE WITT

Above

THE INCREASING NUMBER OF DISASTERS IN THE UNITED STATES HAS PROMPTED A NUMBER OF PREVENTION INITIATIVES BY THE GOVERNMENT.

In 1984, Tulsa, Oklahoma, situated between two rivers, flooded again. Fourteen people were killed. It was the ninth flood in 15 years, and the community was left grief-stricken and exhausted.

South and east of Tulsa, in Deerfield Beach, Florida, violent hurricanes repeatedly threatened the ocean-front community. In 1993, the community barely missed the wrath of Hurricane Andrew; city leaders saw the devastation in neighboring counties and knew something had to be done.

In 1989, the Loma Prieta earthquake shook Berkeley, California, and two years later a fierce wildfire killed 25 and destroyed 67 houses in that small community overlooking the San Francisco Bay.

All three of these communities are now part of a national initiative called Project Impact: Building Disaster Resistant Communities. This initiative of the U.S. Federal Emergency Management Agency (FEMA) is designed to reduce the impact and devastation of natural disasters by helping communities come together and take action before the winds blow, the rain falls and the earth moves.

"It makes sense to do something prior to a disaster. If you stay with it and educate your residents and your businesses, it will work" says Ron Ruback, the hazard mitigation coordinator for Deerfield Beach.

Project Impact was created in response to the terrible toll that disasters were taking in the United States. In 1998, there were 65 major disasters declared in the United States, involving 34 of 50 states plus Puerto Rico, the U.S. Virgin Islands and territories in the western Pacific. In all, FEMA obligations for 1998 totaled nearly US$3 billion.

Unfortunately 1998 was part of a clear trend of an increasing number of disasters in this country. Relief costs following the Northridge, California, earthquake alone are more than $5.8 billion, and Hurricane Andrew relief stands at approximately $2 billion. And FEMA relief figures do not include aid provided by other federal agencies or by volunteer agencies such as the Red Cross.

The picture is much the same around the globe. According to the United Nations, natural disasters kill 1 million people each decade and leave millions homeless each year. Economic damage from natural disasters has tripled in the past 30 years—rising from $40 billion in the 1960s to $120 billion in the 1980s.

In the 18 months since FEMA started Project Impact in seven pilot communities, the initiative has spread to 118 communities—at least one in every U.S. state. These communities face a variety of risks—tornadoes, hurricanes, floods, earthquakes, mudslides, volcanoes and others. But no matter what the risk, in each community the process is the same: city and county officials, business leaders, school administrators, fire officials, residents, environmentalists, church leaders and others work together to protect their neighborhoods and their futures.

Project Impact is not a grant program. It is a way of leveraging private sector commitments alongside new public sector approaches. This combination of federal dollars and technical support with private sector, nonprofit and state and local government partners is key. FEMA's initial investment of $3.8 million in the seven original pilot communities, for example, has been matched by more than $25 million in contributions from private, nonprofit and other government partners.

Project Impact operates on a common-sense damage-reduction approach, basing its work and planning on three simple principles: preventive actions must be decided at the local level, private sector participation is vital, and long-term efforts and investments in prevention measures are essential.

In Deerfield Beach, for example, federal

grants, combined with volunteer labor, retrofitted 44 homes, the public safety building, two fire stations and the high school, which serves as the community's primary shelter with hurricane shutters. "Hurricane shutters are very important and not very expensive," explains Ruback. "As long as a house is sealed, the wind can't get in."

In addition, the community is creating Neighborhood Emergency Teams (NETs) to ensure that neighborhoods are self-sufficient. These teams are trained in administering first aid, putting out small fires and conducting minor search and rescue operations. The intent is for neighborhoods to survive for 72 hours without outside help. Ruback says the community's education and awareness efforts are paying off, not just with the neighborhood teams but with small businesses and families willing to take precautions when a hurricane approaches. In the recent Hurricane Georges, fully one-third of businesses and half of residents shuttered their windows in anticipation.

"Education and awareness are the key to this program," says Ruback. "Deerfield Beach and FEMA can only give out so much money. When the money is gone, this program still has to go on. It will take the people to keep it going."

Resident support was vital in the success of Tulsa's efforts after a deadly 1984 flood left much of the city in tatters. The community began actions still underway today under Project Impact. Buildings were moved off the floodplain, and former neighborhoods and city streets closest to the river were converted into parks, trails and sports fields that could absorb flood waters.

"Project Impact has given the citizens of Tulsa a valuable tool to avoid future losses. Disaster-resistance measures reduce threats to life, property and the economy," explains Tulsa mayor Susan Savage.

In all, more than 1,000 houses were eventually moved from the floodplain, and more than $200 million—including $80 million in federal funds—were used. While not inexpensive, the mitigation efforts cost less than what just one flood would have cost the city—and spared the city future trauma and grief. For its efforts, Tulsa was named one of Project Impact's Most Outstanding Model Communities in 1998.

Berkeley was also recently honored by Project Impact for its achievements in programs that avoid damage due to earthquakes, wildfires and mudslides. The city established a partnership with a large corporate entity—the University of California at Berkeley. This partnership was established to address risks and serve as a model of how communities and educational institutions can work together to become disaster resistant.

Successful bond issuances allowed the city to upgrade schools, retrofit fire stations and install a backup water system to fight fires following an earthquake. The city organized a preparedness program that has trained 2,500 residents in first aid and early fire suppression. The city has also encouraged hazard mitigation measures by waiving permit fees for seismic upgrades of residences and setting up a tax rebate program. Berkeley also is working with property owners in vulnerable wildfire areas to manage vegetation, reduce fuel load and encourage drought-resistant planting.

"It's very wise to invest in hazard mitigation. It's a very cost-effective way to protect communities and regions from the devastation of natural hazards," says Arrietta Chakos, chief of staff to Berkeley's city manager.

While these cities are distant from each other and face significantly different natural disasters, they all must first determine their local risks, identify partnerships to help implement necessary actions and then prioritize and implement the actions. Granted, some of the actions can be costly. Retrofitting buildings to make them earthquake safe or relocating businesses out of a floodplain may take resources, planning and time. But many less costly and difficult actions can be taken. Relatively small modifications to homes and businesses can make them more likely to withstand hurricanes or earthquakes. One study has shown that FEMA has saved $2 in disaster costs for every $1 spent by buying flood-vulnerable properties.

Businesses also play a large role in the success of creating disaster-resistant communities. More than 680 businesses have signed on as Project Impact partners, lending expertise, staff, creativity and funding. Visa Corporation, for example, has pledged donations to Project Impact for every flood insurance policy charged to its credit card, while low-cost loans for household mitigation have been made available by Fannie Mae, the nation's largest source of funds for home loans. Some home improvement store chains are offering classes on disaster mitigation to their customers.

So communities in the United States are taking responsibility, getting involved and taking action before disaster strikes. No matter where the community is or what risks it faces, the results can be the same—a safer future for families, communities and businesses.

James Lee Witt is the director of the U.S. Federal Emergency Management Agency.

For more information, visit the FEMA Web site at: http://www.fema.gov

PROJECT IMPACT IS DESIGNED TO REDUCE THE IMPACT OF NATURAL DISASTERS BY HELPING COMMUNITIES TAKE ACTION BEFORE THE WINDS BLOW, THE RAINS FALL AND THE EARTH MOVES.