Disaster Assistance Team Program

Guidelines for Disaster Response and Recovery Programs

The American Institute of Architects
1735 New York Avenue, N.W.
Washington, DC 20006
(202) 626-7300
www.aia.org

Guidelines for Disaster Response and Recovery Programs

The Unpredictable Fury of Natural Disasters

The United States was particularly hard hit by natural disasters in 1998. Ice storms paralyzed the Northeast, California was swept by massive flooding, tornadoes and floods across the Southeast were spawned by El Niño, and the Atlantic coast states were pounded by a series of strong hurricanes and tropical storms. A record number of 17 tornado-related disasters were declared, topping the previous historic high of 13 set in 1992. The losses in the built environment were tremendous. Every available resource was necessary to prevent a total disruption of the physical and human fabric of those communities.

A major natural disaster occurs in the United States, on average, ten times a year, with minor disasters sometimes as frequently as once a week: floods, tidal waves, tornadoes, ice storms, fires, landslides, hurricanes, and earthquakes. These defiant acts of nature occur at any hour and often with little warning. Each time, the damage can range from a few trees uprooted to the near-obliteration of entire communities.

As soon as possible after each disaster strikes, relief efforts begin. First, the injured are cared for. If necessary, emergency repairs are made or severely damaged buildings are classified off limits. The focus then shifts to making homes livable and work places functional and putting the community in working order. Licensed building experts—architects, engineers, builders, and others—are often called to assist in evaluating post-disaster conditions and later to help in restoring a community.

As a community begins to rebuild, it needs some kind of "quality control." On one hand, opportunities may arise to improve, rather than simply replace, its physical structure. On the other hand, "rebuilding fever" can result in a built environment less attractive than it was before. A long-term redevelopment plan is crucial during this rebuilding time.

AIA Disaster Assistance Programs

In 1972 the AIA formally recognized the important role that architects can play in disaster response. It became clear that architects could take a lead role in disaster assistance when the mayor of Rapid City, S.D., called for an AIA Regional/Urban Design Assistance Team (R/UDAT) to revisit after a devastating flood. In Washington, members and staff began developing strategies to assist AIA components respond quickly to requests for aid. Since then, several AIA state and local components, including Texas, California, Ohio, Kentucky, Kansas, and New York, have developed formal programs to provide assistance in communities struck by natural disasters.

Currently, the AIA Disaster Assistance Programs encourage architects to use their professional skills to help communities recover from a natural disaster

and, in the long run, to foster a more productive relationship between AIA and the established disaster response community.

The Disaster Response Handbook

This handbook outlines initial and long-term disaster responses that AIA members can undertake, particularly at the state and local level. It examines the organization, training, and coordination of disaster assistance efforts are examined, and tips on liability and other concerns are offered. The principles and techniques presented here have been used by architects in the past. In fact, over 30 years of experience has proved that the unique skills of the architect can be applied broadly and visibly in lending assistance in assessing damage, arranging temporary relief, and in rebuilding and reshaping communities.

Disaster Declaration

Depending on its magnitude, a natural occurrence is a "disaster" when so declared by the governor of the state in which it occurs. This declaration triggers action from various statewide agencies, as well as the federal government and nonprofit groups.

Typically, the Federal Emergency Management Agency (FEMA) coordinates the disaster-response efforts of all federal agencies, particularly the Corps of Engineers and various federal insurance programs. On the state level, the Office of Civil Defense generally heads the disaster response. The Red Cross and the Salvation Army play prominent roles in aiding victims. Local volunteer organizations also participate. The AIA and other professional organizations, such as the American Consulting Engineers Council, the Associated General Contractors, and the American Public Works Association, take part. The National Guard and the State Police may be called upon to police the disaster-hit area.

Organizing a Disaster Assistance Team

In areas vulnerable to natural disasters, developing a response strategy before a disaster occurs will result in a more effective response, even if the plan is not be called into action for a long time. In Texas, for example, the state's disaster action committee, TSA Disaster Action, Inc., did not face a disaster until 18 months after its formation. Then, in 1972, two strong hurricanes smashed into different parts of the state within a space of a few weeks. The AIA California Council program ensures that a cadre of trained architects is available and ready to spring into action when disaster strikes.

Although AIA members have been involved with disaster assistance at the local, state, and national levels, the most effective programs have been organized at the state level, in part because:

- **Most government agencies coordinating disaster assistance and long-term reconstruction are at the state level. AIA state**

components can most easily plug into this network

- **A state component is better able to examine the entire state's history to discern disaster patterns and trends and tailor programs before a disaster**

- **The AIA state component can most effectively marshal professional resources from nearby, unaffected areas**

At the state level, the AIA disaster assistance team can consist of the state component's executive committee, a subcommittee set up by that executive committee or the chairperson of the AIA disaster team, or a separate entity, such as a nonprofit organization. A 501(C) nonprofit organization is highly recommended, since it can receive donations of services and materials that are tax deductible to the giver. In addition, a 501(C) nonprofit corporation may be required in some states to take advantage of volunteer liability protection and Good Samaritan laws. It is essential to adhere to the legal constraints of liability as defined by each state.

For an effective program, the AIA state component should establish a roster of potential volunteer component members. To accomplish this, the state component needs to know the capabilities and willingness of its members statewide. In addition, a directory of all human resources in the state promotes understanding of each other's capabilities. It is essential to understand state relief agencies — how they operate, what their mandates are, and how they are financed.

In areas where disasters can occur frequently, a coalition should be formed by representatives from the governor's office, the state association of mayors and city managers, officials of federal agencies operating in the states, state agencies dealing with construction, code enforcers, general contractors, home builders, insurance industry representatives, other professional associations, and churches. This will help avoid duplication of rescue efforts. A comprehensive list of contacts in each of these organizations should be regularly updated.

Coordination with AIA National may prove pivotal. At its headquarters in Washington, D.C., the AIA has assembled a team of willing volunteers in regions across the country. These volunteers can assist and supplement local volunteer efforts where necessary.

Three Stages of Disaster Assistance

EMERGENCY: This is the first response. It relies on quick, decisive action and involves providing emergency shelter, medical services, food, and other such efforts. This stage can last two to three weeks.

RELIEF: Short-term housing, health services, and employment counseling are provided. At this time, formal assessment of damage begins, with examinations of the condition of buildings, including analysis of historic properties and other non-building structures. This stage may last up to six months.

RECOVERY: This stage is characterized by rebuilding. Long-term comprehensive planning to enhance the physical fabric of the community should be emphasized. Regulatory changes may be necessary to mitigate the effect of future disasters. This period may last three years or more.

When a Natural Disaster Strikes

After a disaster strikes, architectural expertise must be provided as quickly as possible to assess the nature and extent of the damage. The disaster team's response should be patterned on the general plan formulated prior to the disaster, with any necessary emergency changes. Members of the AIA disaster assistance team from around the state will be called, depending on need and expertise.

Adequate accommodations for out-of-town team members must be secured. A conference room at the local AIA chapter or an architect's office can serve as the team's "war room" and readied with the following equipment:

- Communications: telephone (cellular much preferred), copier, fax machine, citizen's band radio, radio/TV
- Office supplies: clip boards, pens, pencils, evaluation forms, file cabinet, typewriter or laptop computer, maps, chairs and desks, soda, snacks, conference room with eight to ten chairs, chalkboard, and tackboard
- Team members: proper identification, pen/pencil, clipboard, camera and film, hard hat, first-aid kit, goggles, heavy shoes or boots, work clothes, gloves, flashlight

Four-wheel drive vehicles are preferred. Consider any other special equipment needed for a particular disaster.

Team members are assigned specific jobs, among them field evaluation work, liaison with local, state, and federal officials, "Good Samaritan" on-

site consultations, and press liaison.

The team leader should forewarn the members if the local police force or National Guard is policing the area.

Disaster Response Teams In Action

When team members arrive, the team leader should do the following:

- Note important emergency response telephone numbers
- Discuss the known scope of damages in the disaster area. Specific buildings may be identified
- Warn team members of the possible physical danger to be found in damaged buildings
- Explain that all structures will not need evaluation, particularly buildings totally destroyed and those with only cosmetic damage
- Advise team members not to give cost estimates of the repair of damaged structure. At the same time, remind team members of the Good Samaritan practices and liability limitations
- Instruct team members to evaluate a damaged building in as comprehensive a manner as possible
- Suggest team members be especially aware that building owners and dwellers maybe emotionally fragile. An effort should be made by all to identify owner concerns
- Set up a system for team members to report to the team leader during the day — at the latest by sunset

The local government will most likely set up a "one-stop center" of representatives of several emergency-recovery agencies. The AIA disaster response team should be represented there by architects or by others who are familiar with architects — office assistants, students, and others familiar with building construction.

At the "one-stop center," the disaster assistance team offers an overview of its services. Appointments are made for team members to go to specific sites for evaluation.

The victim must accompany the team member to the building, even if the architect is familiar with the area, since street signs and other landmarks may have been destroyed. The property owner must be present during the architect's evaluation.

At the site, the team member tours the building(s) thoroughly, recording any observations. The team member may discuss debris removal, demolition,

and repair/replacement with the owner of the site but should not offer cost estimates for specific repairs.

Evaluation forms are filled out in triplicate, with the original given to the owner, one copy to the building inspector, and one to the base of operations. A team member should take several blank evaluation forms to a site, because others in the field may solicit assistance.

The time needed for evaluations varies depending on the disaster and the team makeup. To facilitate 10 visits a day; each visit should be approximately 30 to 45 minutes.

At the end of the day, team members report back to the base of operations. All "war stories" are recorded and any other miscellaneous, but pertinent, information. It is particularly important to discuss the local public's fears, concerns, and needs regarding the buildings in their community.

An experienced team member will examine the evaluation files to correct errors. Corrections must be reported to the site owner. The forms are then filed at the base of operations.

In some instances, a cost estimate may be requested by authorities for use in establishing an overall cost of the disaster damage. Only highly experienced professionals should be assigned this job. Under no circumstances should the estimate be revealed to the victim, since it is not a fixed cost.

When the evaluation process is running smoothly and the team can initiate a long-range reconstruction plan, it is most effective to recommend any action directly to the mayor and city council. In fact, the team leader or members can take a leadership role in establishing a committee of 15 to 20 highly responsible citizens to oversee the day-to-day needs of recovery, as well as long-term planning. The committee usually is needed for 90 days to six months.

This committee can help mitigate potential problems. In the aftermath of the Loma Prieta earthquake, for instance, so many buildings were torn down that local architects and preservations cried "demolition fever." Thanks to intense lobbying, the state legislature passed legislation calling for mandatory approval before demolition was permitted.

When the AIA disaster assistance team is no longer needed, a written report of the entire operation should be delivered as soon as possible to the state disaster recovery board. The team's efforts will also be evaluated by the AIA's National Disaster Assistance Team program for future reference by others who may need to provide similar assistance.

What To Do After the Crisis

The reconstruction/redevelopment committee can envision a positive and imaginative recovery program for an area devastated by an natural disaster. Since local and state officials need to make long-term decisions that will affect and may even significantly alter the city's built environment, it is important that they are made aware of the opportunities for change and solidification. Among these are comprehensive neighborhood redesign, urban redesign, landscape redesign, preservation, appreciation of little-known assets, and utility relocation.

The architectural community should visually and verbally articulate a positive perspective of the future. Timing is important.

In other follow-up, the disaster assistance team should establish a positive relationship with other professions, suggest changes in the city's comprehensive plan and building codes, and educate others in the community about the options available.

The reconstruction/redevelopment committee may:

- Change building codes.
- Design "in-house" shelter for citizens on a pro bono basis.
- Modify the city's comprehensive plan.
- Establish a permanent disaster/emergency plan.
- Establish a community design center for reconstruction.
- Promote design assistance teams for redevelopment.
- Develop design/construction guidelines.
- List tradeoffs for future development.
- Set up a government affairs agenda.
- Research and analyze case studies.
- Set up a strategy for dealing with banks and insurance companies.
- Reinforce positive relationships with agencies involved.
- Review land-use guidelines.

The Link to AIA National

AIA National has established a network of volunteers in regions across the country who are interested in providing assistance to communities devastated by disaster. These volunteers receive training from the National AIA Disaster Assistance Team program to certify that they have the tools and knowledge necessary to conduct effective and empathetic disaster response operations within their region.

AIA National also compiles a clearinghouse of information for communities to assist them in disaster-mitigation efforts. Such information includes the latest research and manuals on hazard-resistant design and planning. This information is available to AIA members and components across the country to aid in local disaster mitigation and response efforts.

In addition, AIA National works with officials at FEMA, the Red Cross, and other disaster-relief agencies to establish more formal relationships and partnerships to benefit members and components on the ground at the scene of a disaster.

Special Skills Lead To Special Assistance

When a natural disaster strikes, architects can play an important role in emergency relief, as well as long-term recovery. Such aid is most effective if a disaster response is organized through the AIA state component. Architects can offer invaluable guidance as a community rebuilds itself.