



Published by the Boston Society of Architects  
52 Broad Street, Boston, MA 02130  
617.951.1433  
bsa@architects.org  
www.architectureboston.com

**May/June 2007, Vol. 10 No. 3, "Fiasco"**

Roundtable: "Prepared Response"

Pages 18-26

**The best way to avoid  
a fiasco is to be ready  
for disaster**



# PREPARED RESPONSE

## PARTICIPANTS

**William G. Barry, Jr. AIA, LEED** is the principal of Heritage Planning & Design in Cambridge, Massachusetts. Previously with Shepley Bulfinch Richardson and Abbott, he is a native of New Orleans and has consulted to the Preservation Resource Center of New Orleans following Hurricane Katrina and volunteered in recovery efforts.

**Robert Cowherd, PhD** is an associate professor of architecture at Wentworth Institute of Technology. He participated in recovery efforts in Sumatra following the 2004 tsunami and was recently the BSA delegate to the UNESCO Emergency Architects Meeting in Paris.

**Charles Harper FAIA** was a founding principal and is a continuing consultant of Harper Perkins Architects in Wichita Falls, Texas. A former mayor of Wichita Falls, he was also for 32 years the chair of the national AIA Disaster Assistance Task Force. He has consulted with AIA chapters around the country on developing disaster assistance programs and has served in recovery efforts following numerous catastrophes, including tornadoes, floods, earthquakes, and hurricanes, as well as the Oklahoma City bombing.

**Arnold M. Howitt, PhD** is the executive director of the Taubman Center for State and Local Government at the Kennedy School of Government at Harvard, where he is also co-director of the Program on Emergency Preparedness and Crisis Management.

**Elizabeth Padjen FAIA** is the editor of *ArchitectureBoston*.

**Elizabeth Padjen:** Our response to disaster seems to follow a predictable pattern: something terrible happens, everyone reacts to it, life gets back to normal, and no one wants to think about terrible things any more. But these days, there seems to be more general awareness that terrible things do happen, perhaps because of events that have been in the news recently: Katrina; the tsunami in the Indian Ocean; the explosion in Danvers; the floods in Jakarta; the ongoing discussion about LNG tankers; and of course, the events of 9/11. All that contributes to a new awareness that disasters can happen anytime, anywhere, for any number of reasons. It seems to be a good moment to talk about preparedness and response and to explore the role of the design community in planning for such events.

**William Barry:** For a long time, these kinds of events were small enough, or far away enough, that they were just another minor news item and we moved on. The Indian Ocean tsunami, with the magnitude of the devastation and the unpreparedness of the region, was one of the first to draw international awareness and trigger a massive response. Then there was Katrina, in many ways the same thing: a disaster of substantial scale, impacting a broad area that already faces economic challenges. And again, there was a huge response.

**Rescue workers in the aftermath of the Oklahoma City bombing.**

**Arnold Howitt:** The question of scale is an interesting one. We're building things in harm's way to a greater degree than ever before. In our society, people are drawn to coastal areas and to flood plains for a variety of reasons, and of course these are the regions that are particularly vulnerable. In less-developed countries, they are also often the cheapest places to build.

But it's the almost-instantaneous availability of photographs, video, and communications about these events that is shaping our reaction to them. Had the tsunami happened 50 or 75 years ago, it would have taken a while for us to find out about it. The experience would not have been conveyed so vividly, and people undoubtedly would have had a much harder time putting themselves in the position of those who were affected by it. But when you saw those images, and perhaps in that case also because there were a lot of Western tourists who were affected, the stories resonated in a way that made them real — as with New Orleans and certainly the World Trade Center.

**Robert Cowherd:** *The New York Times* did a fascinating piece shortly after the tsunami [January 2, 2005], which looked at several natural disasters that happened in the past. They looked at population concentrations and settlement patterns. For example, the population of Assam, India has tripled since the 1950 earthquake that caused the deaths of 1,500 people. They asked how many deaths there would be if that same earthquake happened today. And it was an order of magnitude larger. That same earthquake would kill between 30,000 and 50,000 today, simply because the settlement patterns in the past few decades have changed so radically.

**William Barry:** You would hope that that increased order of magnitude would be somewhat tempered by better design and construction technology. But in reality, that improved knowledge affects a relatively small percentage of structures, mostly at the higher end. Most of the people living in harm's way are not living in structures that are designed and built to the best of our technical ability.

**Elizabeth Padjen:** That's certainly true here in Boston. We had a significant earthquake in 1755 centered on Cape Ann, yet the seismic code here wasn't introduced until 1975. A very small percentage of buildings here have been designed with seismic considerations in mind. So the size of the population that might be affected by an earthquake is enormous.

**Arnold Howitt:** My colleague Dutch Leonard talks about alternative time-frames for thinking about disaster and response. For example, considering Katrina, you would say that the first would be centuries long: the path of the river, the way in which the sediment builds up, the initial decision to locate the city of New Orleans at that point in the river. Then there are factors that evolve over the course of decades, such as building codes and neighborhood development patterns. Then there are the issues that fill a time-frame of a few years, such as the development of emergency evacuation plans. And finally you have the very tight time-frame immediately before and after the hurricane struck, in which decisions were made by individual agencies at various levels of government. Each of those time-frames,

with the possible exception of those occurring over centuries, represents a conceivable target of interventions or changes in policy.

**Elizabeth Padjen:** Charlie, what's been your experience in coming into a community after a disaster? What are the common factors?

**Charles Harper:** In some respects, the worst of a disaster occurs about 90 to 120 days after the event, which is when the mental health of the community takes a hit. But all disasters look pretty much the same the day after. There's always a group of politicians and community leaders sitting around, saying, "Don't worry, we're going to put it back just like it was." Which in my opinion is the biggest mistake you can make. You need to put it back *better* than it was, which means you've got to make decisions about mitigation. Otherwise, you're just rebuilding the disaster all over again. If you make it better than it was, that alone will build a worthwhile memorial to the people who suffered and died in the disaster. But it's very difficult to get the politicians off the "just like it was" shtick.

**Robert Cowherd:** The remarkable similarity between the post-disaster situations in Sumatra and New Orleans was the shocking realization that government, while it's uniquely capable of doing certain things very well, is remarkably incapable of doing many of the things we all assume it would do well. The disappointment with government in New Orleans is well known. In Sumatra, the survivors were waiting around for help, and it took a while to realize that help wasn't coming, that they needed to organize on their own and mobilize their own efforts. The organization I worked with was a survivor-based organization that gathered young men between the ages of 15 and 50 — young men were really the only ones who survived, as women, children, and the elderly died in disproportionate numbers. This had the double benefit of getting something done and also giving them something to do, rather than sitting around in tents getting bitten by mosquitoes and wondering how they can go on without their families.

**Charles Harper:** That's an important lesson. People need to be empowered so they can act. I think the response to most of the disasters that we have in this country is victimization, which is not helpful or healthy. Generally speaking, our government responds pretty well, but the response, or lack of response, to Katrina was probably one of the worst things that has ever

happened in this country, and it was perpetrated by the federal government. Still, Katrina was a completely different disaster in Mississippi from what it was in Louisiana.

**William Barry:** That was because of the physical differences — topography, geology, development patterns, and building — and the differences in populations. The people in Mississippi tended to be better off economically and they were geographically more dispersed. But at the risk of getting myself in trouble with all my Louisiana friends, I'd say a big difference was the pre-disaster effectiveness of government, which functioned reasonably well in Mississippi. The ability to respond and provide assistance as well as to accept assistance offered from outside is directly impacted by how effective that government was before the event.

**Elizabeth Padjen:** What are some of the differences in state and local governments that make some better able to respond?

**Arnold Howitt:** There are a number of factors. Certainly, there are different cultures of emergency management in different states and different metropolitan areas. It's very striking to compare what you see in California and Florida with other states — California and Florida are accustomed to frequent natural disasters and the level of preparation is very strong. By contrast, Colorado and Massachusetts don't have a lot of natural disasters; recent ones have mostly been severe winter storms.

Another kind of culture of preparedness grows around major special events. For example, in recent years, Colorado has had visits by the pope and meetings of the G7. Boston frequently hosts big events: Tall Ships, Fourth of July, First Night, the last Democratic national convention. So the emergency management culture of those states is oriented toward relatively mild natural disasters and special events. The significant difference is that they are predictable events. They require preparation, but they often don't require execution of emergency responses. And that's a very different mindset.

The second dimension that's really important is that nobody would have put either New Orleans or the state of Louisiana on the list of best-governed communities in the United States. Although Mississippi has historically not been high on that list either, it has actually improved significantly over the last couple of decades. The current governor of Mississippi is very well plugged in to

## DISASTER OVER TIME

Mount Vesuvius,  
Pompeii

79 A.D.



Great Boston  
Fire

1872



Galveston Hurricane

1900



PHOTOS: CORBIS

federal circles because of his political background and is apparently a very capable manager.

**Elizabeth Padjen:** Charlie, do you see differences in terms of how organized the design professionals are in different regions?

**Charles Harper:** Enormous differences. Two of the things that help an area recover quickly are strong politicians and the degree to which the local design professionals participate in political life. After the initial response, architects can bring a special expertise to disaster recovery; their training prepares them for those situations and they probably react to them better than a lot of other people. But one of the big problems with the design profession is that we hesitate to step up beforehand in the planning and preparedness process and, as a result, we get left out when the time comes.

**William Barry:** Looking back on it, I wonder if the design community, urban designers in particular, didn't descend upon New Orleans all too quickly with all too much vim and vigor, when people were still in shock.

**Charles Harper:** Absolutely. That was not the time to get involved. There are different points in the timeline after a disaster that require different kinds of responses from professionals. After the initial emergency, you need assessment and stabilization.

**Elizabeth Padjen:** That brings up the question of the role of outside experts and how they are perceived. What is the role for outsiders versus the people who are within the community?

**Charles Harper:** My whole push has always been to organize the insiders — to prepare the local people to act when the time comes. They're going to be accepted better than anybody else. As an outsider, you can only stay so long before you wear out your welcome. In the disasters that I have experienced, recovery has been best and most sustained when the local people are strong, get involved, and drive the process. My city of Wichita Falls, Texas, suffered a tornado in 1979 that was at the time the largest insured disaster to date. A billion dollars, which doesn't seem so much now. But the recovery process was remarkable — it actually won awards — because of community organization and participation. Today you would not know we suffered such a catastrophe.

## Architects bring a special expertise to disaster recovery.

— Charles Harper FAIA

**Elizabeth Padjen:** New Orleans and the tsunami have been the focus of an outpouring of goodwill. This may be an unkind question, but how useful, really, are some of these efforts? It seems as though every design school has sent students down to New Orleans, and they all have offered studios on redesigning sections of New Orleans or designing new housing prototypes. It undoubtedly has enormous educational value, especially in terms of sensitizing a generation of students to some critical social, technical, and ecological issues. But has this been truly useful to the people in the affected communities?

**Robert Cowherd:** After the tsunami, I met with the head of public works for the city of Banda Aceh. He said, "Oh my God, not another architect!" He had been inundated with architects showing up with their solutions to everybody's problems: a pre-fab aluminum panel, or a pre-fab concrete panel; a floating this, or a floating that. Crazy solutions. Fortunately, I introduced myself as a planner. I said, "I have no solutions. I'm coming empty-handed. I'm not being paid by anyone. I'm just here." He put his arm around me. He had had to set aside two sites for architects to build their sample houses, just to get them out of his hair. So this was an example of architects wanting to do the right thing, and the local response being, "Excuse me, but we know how to build houses, thank you very much. What we need is to figure out how to reorganize our society to work without women and children and old people. All we have left is a lot of bachelors."

The professionals had a specific role to play, but it wasn't one of stepping in and taking command. They really had to work in a more flexible, loose way. We had to come up with a scheme for redistributing land based on former ownership, while respecting the inheritors. There was no unclaimed land despite the loss of 85 percent of the population in many of these communities. If the Indonesians rebuilt their communities exactly as they had been, they'd end up with houses all over the landscape — a mosaic pattern of reconstruction, because of the smaller population.

San Francisco  
Earthquake

1906



Providence, Rhode Island  
Great Hurricane of '38

1938



Boston, Coconut  
Grove fire

1942



# All of the actors — government, the profession, the people — have an important role to play.

— Robert Cowherd

That also wouldn't work socially, because the people need to be surrounded by their neighbors and near their mosque.

When you are able to coordinate your efforts with others who are also trying to contribute, all of a sudden the enormity of the problem suggests that everyone who has anything to contribute should come. But as soon as you get the sense that things are out of control, that the process can't be managed, you start wanting to push people away. The more open and flexible and coordinated the culture of response is, the greater capacity to involve everyone who wants to contribute.

**Elizabeth Padjen:** And yet, at the time of a disaster, people seem to yearn for authority and control.

**Robert Cowherd:** All of the actors — government, the profession, the people — have an important role to play. And each, in varying degrees, has an instinct for top-down command-control of the situation: no one else is going to do it right so I have to take control. That can often interfere with effective recovery. There are some things that absolutely have to be controlled from the top; they won't happen otherwise. But there is a vast area of activity that cannot be effectively accomplished from the top-down.

That was the big lesson I gained from the experience in Sumatra. The scale of the situation was so vast that the Indonesian military was overwhelmed. The United Nations was overwhelmed. There was no single entity that could possibly entertain the fantasy that they could command and control the whole situation. So what quickly evolved was an open-source, flexible system, where things would be coordinated at different levels. Things that lent themselves to top-down control, like the rebuilding of roads, were handled by the military. But when you had to reach 500,000 people, you had to distribute control.

**Elizabeth Padjen:** We tend to think in terms of recruiting teams of specialists: someone is the water expert, someone is the infrastructure expert. But the notion of breaking down these distinctions — perhaps something akin to the Sumatran open-source experience — strikes me as a very different way of coordinating responses. It resonates with something written by Don Dusenberry, a principal at the engineering firm Simpson Gumpertz & Heger. He wrote about building design after 9/11, suggesting the same idea at a different scale: "Our pre-9/11 assumption that fire protection, sprinkler, and egress systems would function when needed is now challenged. If it did not occur to us before, we now know that protection of occupants in buildings in multi-hazard events that couple threats such as structural damage, blast, fire, earthquake, cannot be considered on a system-by-system basis. Perhaps the biggest challenge in this new era is to provide coordinated and redundant building systems that are robust enough to survive previously unimaginable trauma." That notion of coordinated and redundant systems strikes me as a way of resolving some of these issues. People in management positions think along those lines. Is that paradigm finding a place in the world of emergency preparedness?

**Arnold Howitt:** It's beginning to, although not always effectively. The redundancy issue is complicated because, on the one hand, you want to have something that's survivable and, on the other hand, you don't want to spend a lot of money on things that will never be needed.

The questions are hard: How do you figure out what the core emergency response resources ought to be in every community? How do you persuade communities they don't need to do too much beyond that? How do you think through the question of where to place additional resources — regionally? statewide? Are there certain kinds of very specialized resources that should be provided only at the federal level? And if so, then what is the tradeoff in terms of response time?

We're only at the early stages of thinking that through for individual states, and we haven't really done a very good job of thinking through at the federal level what those resources are, where they ought to be, and how to allocate them geographically, so they can be ready when emergencies strike.

**Robert Cowherd:** The question of specialization also needs to be part of that process. My sense is that specialization holds us back

## DISASTER OVER TIME

Mount St. Helens eruption

1980



Chernobyl explosion

1986



Hurricane Andrew

1992



after a certain moment. All of these disaster preparedness plans are absolutely essential, and there are very smart people trying to predict and prepare for certain events. But as 9/11 pointed out, there are some combinations that you simply can't completely predict and provide for.

And that's where the lesson of flexibility comes in. At its simplest, it's the flexibility to cross a jurisdictional boundary, to respond to something that might be a next-door-neighbor's problem. Specialization, at a certain point, places a serious limitation on how to respond effectively. Flexibility of roles is an essential component. You need a community of flexible responders who are not crippled by thinking, well, I'm not the expert in turning off the gas in my house. In an earthquake, everyone should be an expert in turning off the gas in any house.

One of the great things that happened in response to the tsunami was that the United Nations High Commission for Refugees set up a tent with two laptops, and it became an information exchange for anyone who showed up. They had reports, plans, and guidelines collected from the Internet and from experts all over the world. You could download anything onto a flashdrive, and they'd encourage you to add in your own photographs and reports. And they had weekly coordinating meetings for every sector of the recovery process, not to control what was happening but explicitly to prevent anyone from indulging the instinct to control everything that was happening. Everyone was sharing resources.

**Arnold Howitt:** The US has recently adopted another paradigm, a model called the Incident Management System, which is based on experiences in wildland firefighting over the last 35 years. It addressed the problem that, if you have a big fire, lots of people show up who have never worked together before. So it features a management system that essentially defines the roles that would be played and trains people both in executing these functions and also in relating to each other; so that now, when people show up, they have a methodology. And it works because even though people are taking on responsibilities that might be different from their day jobs, they have been trained in them and practiced them in real life over and over again. The system that previously existed at the state and local levels was a bit in conflict with the way the federal government responds, and those conflicts have not been completely worked out. And in Hurricane Katrina, it of course failed miserably.

**Elizabeth Padjen:** Let's return to the problem of recovery and rebuilding. How do you get community consensus when everyone is so traumatized? How do you move beyond "let's build it just as it was" because that's what the emotional need is at that moment?

**Robert Cowherd:** It's actually a related topic. We need to shift from the power of our expertise and our professional tendency to control things to what Jürgen Habermas referred to as "emancipatory knowledge" — offering our knowledge to people in a way that empowers them to work through things and develop consensus.

**William Barry:** And yet you need leadership to get beyond the disaster into recovery. Even if you have an excellent emergency-preparedness plan in place, if you don't have true leadership at the moment you need it, it's not going to succeed. Someone must be willing to stand up and say, "We want to restore your sense of place, your sense of community. The actual buildings may have to be a little different."

**Charles Harper:** You do that through the local people grabbing control of the process very quickly after the disaster. They must be involved in everything. It's a political issue — the cities that recover most quickly are the ones where government allows that kind of empowerment.

**Arnold Howitt:** Leadership in these circumstances is quite complex. In one important dimension, it means people who are brave enough to say things that might be contrary to the instinct of reassurance, even contrary to the notion that you need big ideas about what should be done. The other dimension, which is not necessarily contradictory, is that leadership can also be about engineering consent — finding viable compromises among alternative visions of what the community was, is, and could become.

**Robert Cowherd:** We should clarify the term "engineering consent." A lot of people look for consent with the "right" answer already in mind, and engineering in that sense is doomed. People aren't dumb. The only successful way to effect big changes is to lay it all out with an open-ended question: What must we do? What can we do?

Hurricane Katrina

2005



Danvers, Massachusetts industrial explosion

2006



New Orleans tornado

2007



**Charles Harper:** We also need to remember that a lot of good things can come out of a disaster. But the process needs to allow them to surface. And then you need to continually revisit and revise your process based on what you learn in each case. For example, at one time, the Corps of Engineers handled all the significant disaster recoveries. Its approach to recovery was to bring in bulldozers — until a tornado destroyed a large Olmsted park in downtown Louisville. The Corps was ready to clear the whole thing until the local architects literally threw themselves in front of the bulldozers. That got us thinking about developing a process that was more humane; coincidentally, a number of people and organizations had come to a similar conclusion. And so we — I say “we” because I testified in Washington for this on behalf of the AIA — proposed a new entity, which became FEMA [the Federal Emergency Management Agency]. The first time it was used, by the way, was in Wichita Falls. The idea was that FEMA would support the local people and communities; its great weakness is that Congress saw fit to make its director a political appointment.

**Elizabeth Padjen:** I suspect that most people don’t think in terms of designing a process for recovery when they think about preparedness.

**Arnold Howitt:** The psychology of preparedness is very complex. Max Bazerman and Michael Watkins, from the Harvard Business School, wrote a book called *Predictable Surprises*. It’s based on the

premise that most organizations already know all the potential disasters that might affect them — they can easily make a list. Yet somehow they don’t seem to prepare for the things on that list, which at the moment of disaster, become predictable surprises. The authors develop a set of psychological, organizational, and political explanations for that and try to get people focused on how to overcome it.

**Robert Cowherd:** We should also mention Jared Diamond’s book *Collapse*, which looks back in time at predictable surprises, where highly advanced civilizations saw the end coming with great clarity, yet did nothing. It’s a chilling book and relates directly to our own situation with rising sea levels and global climate change. The sense I get from reading his book is that we are doomed. So it’s reassuring to have the Dutch to look at.

In the eighth century, a significant portion of the Dutch population was killed by a flood, and they developed a polder mentality, that is, a culture of dealing with the landscape. It’s a design culture and a political culture. When they build flood protection, it’s not for a category three storm. When they built the floodgates in the Port of Rotterdam, they predicted the biggest sea event in the next 10,000 years and built for that. We don’t even build for a 100-year storm. So there are choices that can be made. Some would say it’s a question of leadership, some would say it’s culture, but leadership and culture go together.

**William Barry:** The Dutch visited New Orleans years ago when they were making a major step in some of their protection systems. They



Fallingwater – Mill Run, PA  
Post-tensioning System  
to Repair Cantilevered Balconies



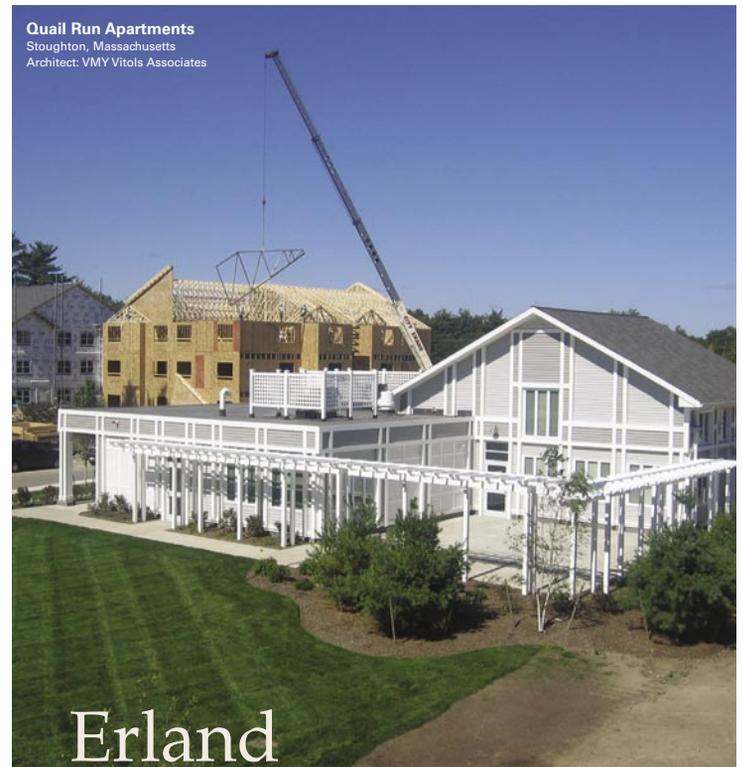
Structural Engineers, Inc.

[tdeg.com](http://tdeg.com)

63 Cops Hill Road, Ridgefield, CT



Public Housing - Connecticut  
Investigation & Designs for  
Concrete Repair & Reconstruction



Quail Run Apartments  
Stoughton, Massachusetts  
Architect: VMY Vitols Associates

Erland

Building Solutions Through Commitment and Teamwork

Program Management • Construction Management • Design/Build

Erland Construction, Inc. | 83 Second Avenue | Burlington, Massachusetts 01803  
t:781.272.9440 | [ejjellowitz@erland.com](mailto:ejjellowitz@erland.com) | [www.erland.com](http://www.erland.com)

took what they learned and jumped light-years ahead. They're not fighting nature, they're living with nature, and it's a constant work in progress. It's a very different attitude — so far, we build against nature.

**Arnold Howitt:** In talking about the Dutch, we've returned to the question of what you can do by way of prevention and mitigation before an event. I'd be curious to hear more thoughts about the role of the design professions in prevention and mitigation activities in the United States.

**Charles Harper:** We're all taught in architecture school how to plan. I'm not sure that very many other professionals have that kind of education. We understand the charrette process — how to work quickly, with limited time and under stress, to evaluate conditions and synthesize ideas, come up with solutions, and present them to a public audience. We know how to work with people and communities. That's why nobody can exceed the architect's ability to lead that planning effort or to lead a community through these kinds of processes. I've often said that nobody is better equipped to be the mayor of a city than an architect — which I can say as someone who has served as a mayor.

**William Barry:** The experience of New Orleans shows that an important subset of the design community in these scenarios is the preservation community. The people who focus on that type of work have been invaluable down there, especially in terms of

evaluating damaged structures. But even before a disaster, their role in surveying historic structures — often with regard to properties that might be historically significant and on the National Register — is also extremely valuable. That work allows you to inventory what you have and to take advantage of GPS and GIS technology, so that if nature wipes the slate clean, as it did on the Gulf Coast where even the streets disappeared, you have a way to get your bearings and assess your next steps.

**Charles Harper:** The biggest ally that we have in pre-planning in any city is always the preservation community. They come in very early and stay longer than anybody else does.

**William Barry:** And because they are organized and have their on-the-ground networks in place, they are in a better position to request aid and know how to apply it. We should also mention the Heritage Emergency National Task Force, which has been in place for quite a while.

**Charles Harper:** They do a terrific job — they're trying to get every state to catalogue local historic places. They try to come in very quickly after a disaster and assist in evaluating conditions. They were a great help after Hurricane Hugo in St. Croix in the Virgin Islands, when the Corps of Engineers came in to "fix" all the damage in St. Croix with their bulldozers, by razing all the old Dutch-style buildings with beat-up roofs and blown-out windows,



**PELLA ADVANTAGE  
NUMBER 67:  
YOUR PROJECTS WON'T  
LOOK LIKE ALL THE REST.**

Not every project is cut out for aluminum. Pella builds a broad offering of wood and fiberglass commercial windows to fill any opening. From punched openings to ribbons. Entrances to window walls. More choices so you can break the mold.

That's **The Power Of Yellow.**<sup>SM</sup>



COMMERCIAL

which of course could have been fixed up. We got the razing halted thanks to the Task Force, so that they'd have a chance to mark the buildings that actually needed to be torn down and the ones that didn't. They saved the heritage of the island of St. Croix.

**Elizabeth Padjen:** Which presumably eventually contributed to the economic recovery as well.

**Robert Cowherd:** I often look at what worked in Indonesia after the tsunami and realize that the village structure and the social structure centering on the mosque allowed so many things to happen that never would have been possible if the only social structures occurred at the town, the state, and the national levels. They provide very fine-grain levels of hierarchy, down to the neighborhood and the block, and those associations are actually extremely important in the daily lives of the local people. Here in the United States, perhaps one of the reasons why the heritage groups have been so effective is that they are able to act on a local level in a way that municipalities do not. We might benefit from more capacity-building at that small social scale, above the family but below the municipality.

**William Barry:** Neighborhoods are central to the real character of New Orleans, and the neighborhood scale associations have been central to recovery. Where community was strong in an area before the disaster, you see greater success in recovery.

**Elizabeth Padjen:** One way to build that capacity in this region is to develop a network of design professionals—architects, planners, engineers, and builders—who are interested in preparedness and recovery issues. The BSA and the design community have been extraordinarily generous in their response to disasters, making substantial cash donations. And there are many individuals who have responded with donations of their time, labor, and expertise. But we don't yet have a coordinated effort in place to address disasters here and elsewhere to the degree to which we are capable.

**Charles Harper:** Let me say how important it is to raise the awareness of the architectural and planning community in this region about a disaster that may or may not happen in your lifetime—although it's frequently helpful to remind people that every state in this country has experienced a tornado in every month of the year, with the exception of the state of Maine, which hasn't had one in January. But let me also warn: be prepared for failure. It happens more than success does. An initiative gets started and goes great guns for a while, but then the energy can run out. You must be prepared for failure, but not give up. Keep after it, and you'll be better off in the long run. Later on, eventually, people will be grateful that you did. ■

Editor's note: New England design professionals and allies interested in the Boston Society of Architects' efforts to build a disaster preparedness and recovery network are invited to e-mail BSA director Richard Fitzgerald at [rfitzgerald@architects.org](mailto:rfitzgerald@architects.org).

institutional | commercial | residential design



**ray dunetz landscape architecture**

12 pond street, suite 1 | boston ma 02130  
617.524.6265 | [raydunetz.com](http://raydunetz.com)



Foley Fiore Architecture Gregory Lombardi Design, Landscape Architecture

Fine remodeling. Custom construction.



**FBNConstruction**

617-333-6800  
[fbnconstruction.com](http://fbnconstruction.com)

Builder of the Year – 2005  
Remodeler of the Year – 2005, 2002, 1998