The Role of Business in Disaster Response









A Business Civic Leadership Report BCLC is an affiliate of the U.S. Chamber of Commerce.



Introduction

2 **Business Civic Leadership Center** Corporate Expertise in Disasters

Preparedness

- 6 **Office Depot** Talking About Preparedness: Leave No Stone Unturned
- 8 **Citi** Natural Disaster Financial Management: It's All About Precrisis Preparation
- 10 **Shell** A Strategic Approach to Response and Recovery

Public-Private Partnership

- 14 Maryland Emergency Management Agency Maryland Businesses Get Their Stake in Emergency Response
- 16 Walmart Public-Private Collaboration: Six Years After Hurricane Katrina

Logistics

- 20 **UPS** We Love the Logistics of Disaster Response
- 22 **FedEx** Logistics Support During Disasters: Another Day at the Office

Food

26 **Cargill** An Unprecedented Crisis in the Horn of Africa Prompts an Extraordinary Response From Cargill

Information Technology

- 30 **Cisco** Using Expert Networking Knowledge to Assist Communities in Crisis Resilience
- 32 IBM Beyond Search & Rescue: Improving Disaster Zone's Long-Term Prospects
- 34 **Google** Google's Crisis Response Initiative
- 36 Microsoft Increasing Information and Technology Capacity in Times of Disaster

Insurance

40 Allstate A Promise to Our Communities Is Our Business

Infrastructure

- 44 **Degenkolb Engineers** Degenkolb's 70-Year Tradition of Earthquake Chasing Lessons Learned
- 46 **Proteus On-Demand** Learn From the Past, Be Involved in the Future
- 48 **Project Jomo** Storm of Ideas

Debris Removal

- 52 **Caterpillar** Changing Lives Through Sustainable Progress
- 54 **Ceres Environmental** Helping Jefferson County Recover

Corporate Expertise in Disasters

By Stephen Jordan and Gerald McSwiggan, U.S. Chamber of Commerce Business Civic Leadership Center

> Over the past decade, the Business Civic Leadership Center (BCLC) has issued a series of reports on the role of businesses in disaster response, primarily focusing on the philanthropic and social contributions that businesses make throughout the various stages of the disaster response process. This report looks at a different issue—what are businesses doing as innovators and developers of products and services to make communities more disaster resilient?

What we are finding is that companies are helping communities manage disasters simply by doing business. In many cases, protecting their business operations in order to get back up and running quickly after a disaster is the best thing a business can do for its community. What we are also finding is that companies are developing advanced technologies to help communities not just withstand disasters but also deliver benefits that contribute to their long-term development.

Business processes are driving risk management. The insurance and reinsurance industries have played fundamental roles in educating business owners and operators about the importance of disaster mitigation and preparedness. It is in their self-interest to encourage businesses and communities to be as resilient as possible, which pays off for everyone if a disaster happens.

Logistics companies are also playing a huge role in helping manage disruptions due to extreme events. As you might expect, UPS and FedEx are on the cutting edge of this as outlined in the report, but companies like Walmart and Cargill are also logistics experts in terms of getting supply chains flowing again and needed goods and services back into circulation in a community. Cargill's work in the Horn of Africa is an example of how this is managed. Retailers often get short shrift for their roles in disaster resilience, but many emergency management officials will tell you that a community will begin to return to normalcy once the convenience stores and gas stations reopen. Once people are confident that food and gas is easily accessible, it enables them to shift their minds to other things (as Maslow's hierarchy of needs suggests). Shell has an important role to play in this effort, and the company explains its system for ensuring that products get to market after disasters.

This in no way diminishes the importance of the utilities and the value of getting power and water restored and running. It also doesn't diminish the importance of street sweepers, debris haulers, IT experts, and environmental and industrial engineers, all of which are discussed in this report.

Craig Fugate, director of Federal Emergency Management Agency (FEMA), has talked about this incredible restorative function of businesses. In fact, he frequently cites a story about how FEMA was spending a lot of money to ship in ice to a community, only to learn that the local grocery store was already up and running and had ice on hand. As he reasoned, the more business could take care of everyday needs, the more FEMA could devote its resources to more critical situations. In short, ordinary functioning of business was an extraordinary help to the disaster response process.

This report describes ways that companies are thinking creatively about a host of social, environmental, community, and infrastructure challenges; and shows that businesses have a key role to play in disaster resilience, response, and recovery.





Preparedness

OFFICE DEPOT

Talking About Preparedness: Leave No Stone Unturned

By Mary Wong, President, Office Depot Foundation

It's perfectly understandable why disaster preparedness might not be a front-burner issue for most small business owners. There are customers to meet, employees to manage, bills to pay. But time and time again, it's been proven that pushing the subject to a back burner is a recipe for disaster.

As a company that is committed to helping small businesses succeed—and as a nonprofit organization for which disaster preparedness, relief, and recovery are strategic priorities— Office Depot and the Office Depot Foundation use a variety of channels to communicate this message.

The need to talk about disaster preparedness was driven home emphatically by a study commissioned by Office Depot in 2007. A survey of 2,500 business owners and decision makers found that

- 71% of small businesses did not have a disaster plan in place,
- 64% said that they did not need one, and
- 63% were confident that they would be able to resume business within 72 hours if impacted by a natural disaster.

However, according to The Hartford's Guide to Emergency Preparedness Planning, of those businesses that experience a disaster and have no emergency plan, 43% never reopen; of those that do reopen, only 29% are still operating two years later.



To ensure that small businesses have ready access to information designed to help them prepare, Office Depot offers disaster preparedness strategies on a special section of its website, "Expecting the Unexpected," as well as a downloadable brochure with additional information. Practical ideas for protecting employees and data are featured as are suggestions for building a disaster plan and links to resources offered by a variety of agencies and organizations.

Office Depot retail stores in the United States also play a significant role in communicating the disaster preparedness message—and in helping small business owners get ready when natural disasters, such as hurricanes and tropical storms, are threatening various parts of the country. Office





Depot offers simple and affordable solutions that need to be part of any disaster prep checklist, including batteries, flashlights, surge protectors, battery backup, flash drives, and, of course, water.

The key message shared by Office Depot is that the most important step any business can take is to create a disaster preparedness and recovery plan. All that's required are a few simple and inexpensive steps that can help business owners minimize or even prevent disruptions. Below are quick tips for creating a disaster plan and preparing a business:

- Keep the plan simple and inexpensive—It should be easy for employees to follow and not costly to maintain or update in the coming years.
- Update your employee, emergency, and key contact lists—People are irreplaceable assets, so create and update lists to be used during and after an emergency.

- Back up and protect your data—Without data, businesses can't recover. Back up your data regularly and store it off-site. An inexpensive CD/DVD could be the key to a business' successful recovery.
- **Test the plan**—At least annually, execute the plan to make sure it consistently meets the changing needs of the business and incorporate any updates.
- Stock up on essential emergency supplies—Disaster preparedness is a wise investment; therefore be sure to stock up on basic and affordable supplies.

The Office Depot Foundation website,

www.officedepotfoundation.org, also features links to disaster preparedness, relief, and recovery resources from the Business Civic Leadership Center's (BCLC) Business Disaster Assistance and Recovery Program, SCORE, and the Disaster Resistant Business Toolkit among others.

Another key way in which Office Depot and the Office Depot Foundation reach out to small businesses is through the Foundation's continuing sponsorship of BCLC's National Disaster Help Desk for Business. This toll-free, 24-hour hotline—1-888-MY-BIZ-HELP (888-692-4943)—provides essential information, expert guidance, and connections to invaluable resources at times when people often feel overwhelmed by the impact of a disaster. While the focus of the Help Desk is on disaster response and recovery, it also stands ready to assist businesses that want to be proactive in preparing for disasters.

Make no mistake about it. Disaster preparedness is central to business survival. Not having a contingency plan or a backup system in place can cause a business to close its doors for good. We urge any company that interacts with small businesses to leave no stone unturned in emphasizing the importance of being ready for disasters—and don't be shy about telling your customers how you can help them prepare.

Natural Disaster Financial Management: It's All About Pre-crisis Preparation



By Jay Collins, Vice Chairman of Corporate and Investment Banking, Citi

Global economic losses related to natural disasters in 2011 reached a staggering \$380 billion, making it the worst year in history. Put in the context of the last two years of natural disaster damage, \$124 billion in 2010 and \$48 billion in 2009, the magnitude of the increase is daunting. While the Japanese earthquake and tsunami shook the world in so many ways, 2011 will also be remembered for the breadth and number of global tragedies, from tornados across the United States to floods that devastated families from China to Colombia.

Many countries can now be classified as serial victims of natural disasters, experiencing catastrophes with increased frequency and severity. Regular, repeated, and sustained events, like those impacting the Philippines and Pakistan, are straining the capacity of governments around the world to respond to the urgent needs of citizens, financially challenging governments' ability to operate, and ultimately inhibiting the efforts of governments to rebuild. As the size, frequency, and global nature of natural disasters mount, the real challenge for governments is to reprioritize pre-crisis planning and preparation.

The need to develop viable and appropriate contingency plans is particularly critical in the area of emergency financial management. Governments living in a cash and paper world stand little chance of successfully responding to the demands of their citizens and the suffering of victims in the aftermath of a disaster. The application of technological advances in the areas of electronic banking and financial management are now enabling governments to replace cash and paper with fast, transparent, efficient, and controlled ways to move money in a crisis. Unfortunately, these tools require planning and cannot be introduced as calamity strikes.

There are several examples of financial crisis management where pre-crisis work is critical to minimizing damage and human casualty as well as improving response effectiveness.

- **Infrastructure**—Pre-crisis investment in upgrading physical urban infrastructure can save countless dollars in post-crisis rebuilding efforts, particularly in coastal urban areas with dense populations and significant GDP concentrations. While fiscal pressures and competing pent-up demand for new infrastructure projects present limitations on government, investment in infrastructure maintenance, land use management, and resilience can make an enormous difference.
- **Government Procurement**—Procurement is often the area of government that is least efficient and most vulnerable to corruption. Natural disasters exacerbate this problem, as the reliance on cash and paper all but eliminates the ability to transparently and effectively deploy and compensate government vendors. Small and medium enterprises (SMEs), often at the front end of the emergency response supply chain (medicine, food, shelter, debris removal, road repair, etc.), can only function for so long without being paid, and they often don't have the liquidity to manage through a multi-month crisis. Pre-issued and pre-positioned procurement cards, instant issue

emergency procurement cards, and virtual cards are all variations on how card technology is increasing transparency and driving best practices in ensuring governments' ability to procure in a crisis.

• Emergency Relief Funds Distribution Process—The financial inclusion agenda is directly related to emergency funds transfer. If one were to draw a Venn diagram consisting of three circles, one for poor families that require government financial assistance. one for the unbanked, and another for the hardest hit victims of natural disasters, the three circles would end up being virtually concentric. That is why the plight of the unbanked and the policy agenda around government benefit payments is fully aligned with successful post-crisis distribution of emergency relief funds; the recipients are often the same. Currently, the prepaid benefit card is the solution of choice in this area, replacing paper voucher systems; helicopters carrying emergency bags loaded with cash will soon become a thing of the past.

Electronic banking tools and the use of cards have become increasingly important in reassuring donors that the monies they provide not only arrive but are having an impact. In fact, it is important to note that recent aid donors (governments, NGOs or corporates), are not only committing less to countries where aid flows lack transparency and control, but in many cases, they are actually refusing to push the send button for lack of comfort around the fund distribution processes.

Going forward, as mobile financial solutions become more common in developing countries, we will likely see the mobile phone overtake benefit cards as a crisis payment form. Approximately two billion people in the world have mobile phones but are still without bank accounts; in the Venn diagram above, one could draw a fourth circle for mobile subscribers and it would also be a concentric fit. The potential for mobile finance to have a material impact on natural disaster response and relief is significant, as the phone will carry with it all the capabilities of the prepaid card, as well as identity solutions, and the ability to store and receive critical information.

Following a disaster, governments are frequently faced with financial strains to fund recovery and rebuild damaged areas. Having plans in place that enable liquidity during the immediate crisis is essential. At a time when governments are mired in debt and deficits, finding creative funding solutions is imperative. One way to manage the financial risks of disasters is by issuing catastrophic bonds, which pay out in the event of specified parametric thresholds and take advantage of investor desire to take uncorrelated risk. Mexico has been at the forefront of sovereign risk mitigation strategies vis-à-vis natural disasters, insuring against Atlantic and Pacific hurricanes as well as earthquakes.

Any discussion of natural disaster response would not be complete without mention of the ever-increasing role of the private sector and global corporate citizenship in this area. Socially responsible corporate citizenship in the disaster area has been transformed markedly since the Asian tsunami of 2004, as many corporations have moved from simple cash donation activities to coordinated inkind giving, in-area and out-of area advice and technical support. In addition, the level and sophistication of precrisis alignment and partnership between the private sector, NGOs, and governments have improved. There are countless partnership examples, including Coca-Cola and the Red Cross, Swiss-Re and USAID, Target and FEMA, FedEx and the U.S. Chamber of Commerce, as well as Citi and the World Food Programme. These partnerships bring innovation to response efforts with a focus on improving speed, efficiency, and impact. However, what really defines the success of these public-private efforts is their focus on pre-crisis planning and preparation.

A Strategic Approach to Response and Recovery

By Frazier Wilson, Vice President Shell Oil Company Foundation, and Manager, Social Investment Shell Oil Company

Shell had a wake-up call in 2005 that changed the way our company responds to a crisis and assists communities in recovering from a disaster. That year, we were hit with a double whammy—in late August, Hurricane Katrina severely impacted coastal cities along the Mississippi, Alabama, and Louisiana coastlines, including New Orleans, where Shell has a major office location and nearby manufacturing facilities. A month later, another major storm, Hurricane Rita, struck the Texas Gulf Coast, impacting a key petrochemical center in Southeast Texas that supplies much of the South and East coasts with fuel.

These back-to-back hurricanes in the Gulf of Mexico dramatically impacted Shell's people and operations in Louisiana and Texas. While we had operational and business continuity plans in place, the storms tested our response capacity on a scale we had not previously experienced and taught us some valuable lessons in how we could more effectively respond to future disasters.

The Importance of Business Continuity

The hurricanes of 2005 underscored the importance of getting back to business as quickly as possible. After Katrina, our Crisis Management and Business Continuity Plans helped us get our refineries up and running to meet the demand for gasoline and other petroleum products. We also successfully relocated 4,000 employees in New Orleans to locations in Houston so that we could continue business while repairs were made to our facilities at One Shell Square in New Orleans.

Our lessons learned from that experience helped us develop more robust Crisis Management and Business Continuity



Plans to ensure the safety of personnel and protection of the environment and to minimize impacts on production and supply. Our current plan is adaptable to any situation and has an improved operating structure, including the ability to deploy the Shell Americas Response Team to support multiple businesses with incident management, communications, business continuity, and long-term recovery planning.

We have improved our capacity to secure additional office space, temporary housing, and transportation for employees in the event of a natural disaster. We have more robust procedures for effectively communicating with employees and the news media immediately after a crisis, including backup communications and IT systems.

Our business continuity efforts not only help Shell, but they also are important in helping the broader community with response and recovery. Shell works closely with local, state and federal officials to address issues, such as fuel supply disruptions, particularly along evacuation and recovery routes. We staff our refineries with emergency personnel 24/7 in order to return to full operation as quickly as possible. During hurricane season, as a significant storm is approaching, we secure generators to help supply power to Shell-branded stations and distribution terminals where most needed and arrange diesel fuel shipments via rail.

Strategic Community Response

We have also learned to become a more effective partner in helping communities rebound after a crisis. In the past, we would immediately write a check to agencies for disaster response. Today, we play a critical role in long-term recovery.



We have worked to develop and maintain relationships with state and local leaders and with volunteer commissions the people with the boots on the ground—to be prepared for the next disaster. This helps us know whom to call to find out the most pressing needs and how we can best help when disaster strikes. This approach enabled us to respond quickly to multiple natural disasters across the United States last year.

During 2011, Shell donated more than \$500,000 to recovery efforts around the country as communities dealt with devastating tornados in the Midwest and South, wildfires in Texas, and flooding in Pennsylvania. We worked with state volunteer commissions and disaster relief agencies, and spoke with retail staff and wholesalers on the ground in hard-hit areas to determine recovery needs. In many states, that meant providing Shell Gift Cards for agencies to allocate to disaster recovery volunteers, responders needing fuel for generators and other equipment, and disaster victims in need of fuel.

In Texas, Shell donated \$160,000 to the Texas Forest Service to support local fire departments, while our wholesalers provided support to emergency crews and local residents impacted by devastating wildfires that destroyed more than 1,000 homes in September 2011. After 100,000 people in Pennsylvania were forced to flee the rising Susquehanna River that same month, Shell provided monetary support to three community agencies to support ongoing recovery needs in some of the hardest hit counties.

Besides financial support, Shell provides community support through its employees, wholesalers, and retailers. After storms hit the Midwest, employees at our Deer Park Refinery near Houston raised \$2,000 to support American Red Cross disaster relief efforts. During the wildfires in Texas, one of our communications staff members served as a volunteer public information officer for one of the hardest hit counties. We worked with our wholesalers to help get the only retail facility in town reopened quickly after a tornado rampaged Hackleburg, Alabama, and a Shell station in Bastrop was a lifeline for first responders fighting wildfires in Bastrop, Texas, providing them free water, ice, and food.

There were different types of crises with different needs. Because we had cultivated relationships with government and social services agencies, we were able to direct our help to where it was needed most. It's a smarter and more strategic way to make a difference when disaster strikes.



Public-Private Partnership

Maryland Businesses Get Their Stake in Emergency Response

By Kathy Snyder, President/CEO, Maryland Chamber of Commerce Patrick Donoho, President, Maryland Retailers Association Jock Menzies, President, American Logistics Aid Network Oliver R. Davidson, Senior Advisor, Business Civic Leadership Center

> Many heartwarming stories start with an urgent late night call asking for help. A personal connection combined with the ability and desire to help our neighbors can produce positive results even in unfortunate circumstances.

> In Maryland, this scenario played out when the Maryland Emergency Management Agency (MEMA) called business leaders because an emergency shelter established in summer 2011 for Hurricane Irene had an unanticipated need. Drawing on prior relationships, MEMA contacted the Maryland Retailers Association (MRA) to arrange meals for an emergency shelter housing 2,500 evacuees from Ocean City. "This relationship allowed MEMA to reach hundreds of retailers with one phone call," said Patrick Donoho, president of MRA. A single point of contact for MEMA and the private sector is vital to quick response and coordinated efforts



between the public and private sectors. MRA was able to reach out to all its grocers directly and quickly identify a company that was willing and able to respond to the request.

The successful outcome was possible because MEMA and the business community had a working relationship developed over several months. The meeting establishing this collaboration was hosted by MEMA with leadership by The American Logistics Aid Network (ALAN), the U.S. Chamber of Commerce Business Civic Leadership Center (BCLC), and support by the Maryland Long Term Recovery Task Force, the Federal Emergency Management Agency's Private Sector Office, and the Association of Contingency Planners, Maryland Chapter.

The participants established an informal Maryland business emergency network. Emergency situation information and preparedness tips are circulated among business members to raise awareness to stimulate emergency planning and mitigation actions to reduce possible losses. In addition, business members are invited to join the Maryland Long Term Recovery Task Force, a collaborative effort of MEMA and the Maryland Voluntary Organizations Active in Disasters (MD VOAD).

Kathy Snyder, president/CEO of the Maryland Chamber of Commerce, said "Chambers of Commerce have members from all industries, and this network can be very valuable during and following disasters. In anticipation of Hurricane Irene, the Maryland Chamber utilized its new relationship with MEMA by sharing with its members statewide, including 50 local chambers of commerce, specific service or product



needs. Commercial real estate firms reviewed available sites for parking of tractor trailers. HVAC, heavy machinery, and other service companies were provided information about who to contact to offer assistance. For the most part, these were new leads for MEMA to pursue."

The state chamber also collected cell phone numbers of local chamber executives in the areas predicted to suffer the most when the hurricane made landfall. This expanded the state chamber's network of resources and provided a feedback mechanism for local chambers to share member needs following the event. While none needed assistance due to the relatively limited damage from this particular storm, the relationship was established to be ready and available to help.

Jock Menzies, president of ALAN and chairman of Maryland's The Terminal Corporation, explained his interest. "I was chair of the Central Maryland Red Cross when Hurricane Isabel came through and, I drew heavily on my connections to meet pressing needs. When ALAN was established following Hurricane Katrina, I got involved because I knew businesses want to help with community needs. It is our people, markets, and capacity that are impacted, and we need them all back online to revive the economy. In preparation for Irene, ALAN identified needed resources in Maryland as well as in New England states, drawing on local networks. Integrating the private sector into the situation and making it aware of potential needs allows companies to better respond to specific requests, opening a window to possibly unseen resources."

"Businesses are an integral component in disaster preparedness, response and recovery", said Richard G. Muth, executive director of MEMA. Regardless of the industry to which they cater, businesses are at the hub of any local city, town, or community. The services and products they provide help communities withstand a critical event and recover so much more quickly after disaster strikes.

Muth believes so strongly in this idea that in 2011 he created a Business Operations Concept (BOC) for Maryland as an initial means for MEMA to enter into agreements with businesses that can assist during critical events. In early 2012, he is formally establishing an Office of Resiliency designed to work with communities statewide to build resiliency. Muth explained, "During a disaster and while government is focused on restoring critical infrastructure to prestorm readiness, local businesses have the ability to empower people to come together—neighbor helping neighbor— providing community resiliency and restoring a sense of normalcy to their community. I cannot underscore enough how vital businesses are to successfully mitigating any disaster."

Public-Private Collaboration: Six Years After Hurricane Katrina



By Mark Cooper, Senior Director of Global Emergency Management, Walmart Stores, Inc.

> Hurricane Katrina changed everything in emergency management, especially the role of the private sector in disaster response. Walmart was singled out at the time for its leadership in helping communities respond. It's a perspective I personally observed as a first responder to the disaster. Now, as head of the company's emergency management department, that perspective helps shape our public-private collaboration at the state and federal levels every day.

> In early 2008, the public and the media had high expectations for newly elected Louisiana Gov. Bobby Jindal and his Cabinet as we prepared for his first hurricane season. At that time, I was the newly appointed director of the Louisiana Governor's Office of Homeland Security and Emergency Preparedness (GOHSEP). The governor's directive for GOHSEP and the role of the private sector during a disaster was clear: Support the resiliency of Louisiana's businesses and use their capabilities in disaster response whenever possible.

> While the government's hurricane response plans had matured leading up to the 2008 hurricane season, the role of the private sector was still largely undefined, including how businesses could be leveraged to help support disaster response. Much had been documented about Walmart's success during Hurricane Katrina, especially the utilization of its supply chain capabilities. Walmart was also first to deliver vital commodities to first responders and stranded citizens and was one of the first to reopen stores in the heavily impacted areas. I had seen, firsthand, Walmart's impact when I was deputy chief with Los Angeles County Fire, deployed to New Orleans one week after the levies

broke. Walmart was open allowing me to purchase muchneeded personal items (after sleeping on chairs in downtown New Orleans). But the question remained: What role should and could the private sector play in disaster response?

As the 2008 hurricane season began, Louisiana built upon the Walmart example in several key areas. First, GOHSEP partnered with Walmart to help launch the state's first preparedness campaign, "Get a Game Plan," with the premise that government was only part of the solution. Citizen preparedness was essential to any successful response and recovery (i.e., the "Whole Community" being promoted by FEMA). The Louisiana/Walmart collaboration included a successful plan with the store's pharmacies and the distribution of preparedness information with every



prescription, including items for preparedness kits that could be purchased in the stores. Walmart also helped support a preparedness program for children through Louisiana's schools and ran public service announcements on television monitors at the cash registers in its stores.

Walmart's successful response to Hurricane Katrina also contributed to Gov. Jindal's and Louisiana's launch of the country's first, fully operational Business Emergency Operations Center (BEOC). Named a best practice by the Department of Homeland Security, the Louisiana BEOC provides a platform for private-sector industries and businesses, including retail, to communicate, collaborate, and coordinate with government during a disaster.

This integration also enables government to leverage the capabilities of the private sector in disaster response and contributes to a community's overall ability to manage through a disaster. For example, during Hurricane Gustav in 2008, Louisiana utilized the BEOC concept when local restaurants supported mass feeding operations for impacted people. This program saved taxpayers approximately \$1.5 million compared with the cost of FEMA-purchased Meals Ready to Eat (MRE). This partnership also infused some much-needed revenue into the hurricane-damaged economy.

The Louisiana examples demonstrate the potential of the private sector in all areas of emergency management. However, not all states have a public-private sector strategy. Challenges remain in many areas. This includes credentialing businesses and allowing their essential personnel to return when they are important to the initial stages of recovery. During Hurricane Irene, states had different procedures—or in some cases no procedures—for credentialing, as well as other regulations that presented challenges to business attempting to reopen. This made it extremely difficult for the private sector to plan and execute their recovery plans and resume business operations, thus helping communities return.



Think about it this way: When Walmart, Sam's Club, and other retailers are able to get their people into a disaster area to restore operations, this provides the community with access to many of the basic and life-sustaining things it will need (e.g., food, generators, cleaning supplies). This also provides a place where people can meet their neighbors, exchange stories, and reconnect with the comfort of knowing that they are all right. Having businesses back in operation helps restore normalcy to life after a disaster and takes some degree of pressure off government entities as they address larger issues.

Small businesses can be very vulnerable during disaster recovery, and their obstacles to access can be even greater. While much has been done to prepare large companies, many mom-and-pop businesses remain underprepared. Their resiliency is also vital to bringing the community back.

Walmart and Sam's Club will not rest on past successes. We will continue to promote public-private collaboration, including in our international markets. We will also continue to support FEMA and state efforts to establish BEOCs to address issues such as credentialing and to support small businesses preparedness. We're proud to play a leadership role globally, helping our customers live better by doing our part to be a neighbor that they can count on when a disaster strikes.



Logistics

We Love the Logistics of Disaster Response

By Ken Sternad, President, The UPS Foundation



There is an increasing focus on the issue of long-term recovery following disasters and urgent humanitarian crises. This is a good thing. The lessons of Katrina and other major disasters inform us that much work still needs to be done to coordinate effective strategies to help communities recover and thrive after a major humanitarian crisis.

Yet one of the most effective strategies for ensuring the long-term recovery of a community following a disaster remains the investment in preparation—having the plans and tools in place to respond immediately and efficiently to get the recovery process started as quickly as possible.

Increasingly, corporations active in disaster response are interested in opportunities to become further engaged by providing skilled services and intellectual capital—in addition to dollars—and by fostering collaboration between the public, private, and nonprofit sectors. Companies recognize that there are great opportunities to maximize efficiencies, reduce cost, speed relief efforts, and ultimately get communities on track faster toward long-term recovery.

In UPS's case, this means helping disaster organizations up front with all aspects of the logistics surrounding a crisis. It includes better inventory management, commodity tracking, warehousing, and transportation—all of which can help ensure that supplies are positioned and resources are in place for efficient and rapid response to disasters.

One example is the work UPS is doing with the American Red Cross in the Gulf region of the United States. We have worked with the Red Cross to train UPS logisticians as first responders to disasters, and place them on Logistics Actions Teams (LATs) in key locations like Florida,



New Orleans, and Texas. We are looking at additional opportunities in Alabama and Mississippi to form a ring of logistics capabilities around the Gulf.

UPS is also funding a pilot test with the Red Cross to introduce leading-edge commodity tracking technology in its work. This technology will help in the logistics around warehousing, inventory management, and prepositioning of supplies in the Southeast in advance of the hurricane season to ensure a rapid and effective response when disasters strike.

The same type of collaboration will be required for the more challenging task of developing effective models for longer



term recovery. One promising effort is being undertaken by the St. Bernard Project (SBP) out of New Orleans.

The SBP is an award-winning nonprofit focused on rebuilding both homes and lives for vulnerable families, senior citizens, and physically challenged residents who are struggling to recover from the devastation and trauma caused by Hurricane Katrina and the 2011 Gulf oil spill. With its innovative, vertically integrated construction system, SBP serves as a model for disaster rebuilding and affordable housing that can be replicated in most any community.

SBP has served as a great example of collaboration between public and private enterprises and is now looking to take its model to other communities impacted by disasters, such as Joplin, Missouri.

UPS is putting its logistics expertise behind SBP and is also helping connect it to other organizations in the disaster response space that can complement its efforts and build out more effective recovery capabilities. For example, UPS has connected SBP with an innovative organization that has the potential to play an important role in disaster response—Toolbank USA.

ToolBank USA's concept is to use a network of local "toolbanks" to steward a vast inventory of actual tools for use by other charities to advance their missions. Through quick and reliable access to large quantities of high-quality tools, each ToolBank transforms volunteerism in its area. ToolBank is now working on a disaster protocol, in which it will reserve all or part of its inventory in a local area for use in disaster response efforts and integrate its work with other disaster relief nonprofits.

We believe that there is great potential to develop new solutions with increased collaboration among innovative organizations like SBP and ToolBank USA and the larger and more established disaster response organizations.

While every disaster is different, every disaster shares the same "life cycle"—preparedness, urgent response, and longer term recovery. Virtually any company can play a valuable role in at least one stage of this life cycle. When combined with collaborative efforts among the public and nonprofit sectors involved in disasters, great potential exists to make new breakthroughs in helping communities recover from disasters.



Logistics Support During Disasters: Another Day at the Office



By Shane O'Connor, Program Advisor, FedEx Global Citizenship

So how does FedEx spring into action on behalf of global disaster relief NGOs during major disasters? When asked by Business Civic Leadership Center (BCLC) for an article in response to this question, I immediately thought of John Frazier, a project engineer in our international engineering group at FedEx Express. When disasters arise and we engage with international relief organizations to support their efforts to save lives and sustain communities in dire need, John is one of the first people we call.

There is a lot of conversation these days about "skills-based volunteering." The idea is that corporations can increase the capacity of the nonprofits they serve not just by writing checks but also by offering the time and expertise of their team members. Financial services companies can offer professionals to help people in need to learn how to budget or do their taxes. IT experts can help with computer networks or other IT needs.



On his "day job," John is immersed in the world of international logistics and transportation. He develops systems and standard operating procedures to help customers navigate intricate customs requirements, laborious regulatory issues, the shipment of complex commodities, and other varied idiosyncratic needs related to differing processes required by the more than 220 countries and territories that FedEx serves.

He is also creates customized processes to meet the sometimes unique requirements of our customers regarding unusual commodities, high-value shipments, extra large quantities of products needing to be transported on specific timetables, special security needs, etc.

John's particular skill set makes him an invaluable contact and asset for our department, FedEx Global Citizenship, and for meeting the special requirements of the international relief organizations we work with year round. When it comes to transporting medicines, specialized medical equipment and other relief supplies to disaster hit areas, John is an expert at working with customs houses, regulatory bodies, ministries of health, and other agencies to get lifesaving and life-sustaining materials wherever in the world they need to go.

And he does it FAST!

In one instance, in helping a relief agency respond to a disaster, he whittled a customs clearance process down from six weeks to two days! In day-to-day, nondisaster times, John works with pharmaceutical and other companies to expedite deliveries and assist with things like regulatory licenses and



FedEx project engineers Karen McConnico and John Frazier volunteering their logistics expertise to Heart to Heart International at one of their relief aid warehouses in Haiti.

health permits. So when disaster strikes, John is one of our go-to guys. The relationships he has built with our operations experts and with customs and regulatory officials around the world definitely come in handy. He not only provides superior service levels for our regular customers, but he also steps up to help relief agencies save lives.

In the aftermath of the Haiti earthquake, FedEx provided 13 complimentary charter flights full of medicines and aid materials to Haiti, including one for the International Federation of Red Cross and Red Crescent Societies (IFRC) from Panama City, Panama, to the affected area. In addition to the IFRC, John also worked with Heart to Heart International (HHI), Direct Relief International (DRI), and others to get medicine and equipment to Haiti.

As a logistics expert, John also knows his way around a warehouse. He has visited HHI's primary warehouse in Kansas

City, Kansas, to advise on a more effective and efficient warehouse operation. In the chaos following a major disaster, it's great to be able to call on the logistics expertise of FedEx team members.

John also made a trip to our hub at Charles De Gaulle airport in Paris, France, in support of a Forward Response Center (FRC) that we established there for HHI to provide warehousing at our facility. Having the FRC there helps us expedite the movement of materials to disaster stricken areas on that side of the world. It also facilitates donations from European-based companies and more closely engages our non-U.S. team members in our ongoing work in disaster response. Most recently, we activated the FRC in support of famine relief efforts for the Horn of Africa.

So how does FedEx use our logistics capabilities during disasters? Just another day at the office.





An Unprecedented Crisis in the Horn of Africa Prompts an Extraordinary Response From Cargill

By Mark Murphy, Director of Corporate Responsibility and Assistant Vice President of Corporate Affairs, Cargill

> Humanitarian organizations call it a crisis unlike any other. The worst drought in 60 years in Sub-Saharan Africa, coupled with conflict in Somali last year, left 13 million people at risk for starvation and malnutrition—a number greater than all the inhabitants of New York City and Los Angeles.

> In the face of this unprecedented disaster, Cargill donated 10,000 metric tons (more than 22 million pounds) of rice to support the World Food Program (WFP) USA's efforts to fight starvation in the Horn of Africa. It is the largest ever food contribution from a company to WFP USA, as well as our largest ever food donation. The rice, enough to feed nearly 1 million people for one month according to WFP, arrived from India at the port of Mombasa in Kenya in late November 2011.

The donation grew out of a conversation between Dr. Rajiv Shah, administrator of the United States Agency for International Development (USAID), and Greg Page, Cargill chairman and chief executive officer. Shah described how thousands more children in the Horn might die without specific action to save their lives. Page decided that Cargill needed to respond in an unprecedented way "given Cargill's vision to nourish people, the desperate need and our unique ability to source and move food to where it is needed." With financial support from its family shareholders, Cargill committed to a \$5 million shipment of rice.

Deploying Cargill people in business units with the experience and knowledge to meet such a challenge, a Cargill team was put together to originate and source the rice and manage the ocean transportation and logistics to deliver and donate the grain. The work, uniquely suited to Cargill's strengths and capabilities of moving food from areas of surplus to areas of need, required exceptional coordination both within the company and with WFP. "This donation really shows our ability to use our capabilities to help others," said Michel Meyer, Cargill team leader, who helped coordinate the efforts. Cargill people across the organization pitched in, working at times around the clock, to ensure that all the key parts of the mission came together to move such a big shipment of grain as expeditiously as possible.

The first task was determining the best grain to donate. After assessing several options, WFP and Cargill settled on rice,





since it both met local diet preferences and addressed current food shortfalls. Finding a vessel proved difficult. Cargill's Ocean Transportation business unit had to knock on every door, since many ship owners refuse to send vessels to Mombasa because it's so close to Somalia where piracy is a major issue. Quality control was a key issue for the Cargill team handling the rice purchase in India. The rice was purchased exclusively from the Indian state where the highest quality grain is grown. Team members were on-site as it was milled and bagged.

Following a 23-day voyage across the Indian Ocean, the more than 200,000 bags of rice arrived in Mombasa. The food was turned over to WFP for unloading and distribution in Kenya, the country where WFP saw the largest food shortfalls. "Providing emergency assistance was the right thing to do," said Page. "But the public and private sectors also need to focus on long-term solutions to hunger and work together to ensure that all 7 billion people on this planet have access to safe, nutritious, and affordable food." Steps to help improve food security include the following:

- Enabling open markets—Governments must encourage open trade and a fair, transparent, rulesbased, and rigorously enforced system so that food surpluses can reach areas of deficit.
- **Supporting small-holder farmers**—Small-holder farmers need support to fulfill their expanding roles in feeding the hungry and fighting malnutrition. Training and practical support helps small-holder farmers increase their productivity in a sustainable way and raise their living standards.
- Fostering cooperation between the public and private sectors—Civil society, governments, academia, and the private sector must work together toward solutions, such as training farmers in sustainable practices, helping farmers invest cooperatively in storage and other infrastructure, and facilitating harvest loans.

Finding ways to alleviate hunger, whether the result of a growing world population, a natural disaster, or a man-made conflict, isn't easy. But as we learned in this situation, when businesses tap into their core competencies, they can help others by capitalizing on what they do best.



Information Technology

Using Expert Networking Knowledge to Assist Communities in Crisis Resilience



By Rakesh Bharania, Network Consulting Engineer, Cisco

As the frequency and severity of natural and man-made disasters increases, emergency responders require an increasingly complex array of information to respond effectively. Based on disasters, such as the September 11th attacks and the 2004 Indian Ocean tsunami, Cisco Systems created a disaster response team that is able to deploy communications experts and equipment globally on extremely short notice. Funded through the Cisco Corporate Social Responsibility (CSR) program, the team's numerous deployments demonstrate the value of public-private partnerships and "whole community" planning as articulated by FEMA Administrator Craig Fugate.

Any significant disaster creates a tremendous need for communications and interoperability between response agencies, including government and non-governmental



organizations (NGOs), the military, and other organizations working to support an affected community. The immediate need for Internet access, including email, chat, videoconferencing, social media and any number of other applications, means that computing and communications technology are expected in any successful response.

"We get involved in ways nobody else does."

John Chambers, CEO, Cisco

Cisco Systems realized years ago that our communications technology and core competencies were going to be increasingly important in disaster responses around the world. To meet the challenge, we established the Cisco Tactical Operations team, specifically trained and equipped to deploy emergency networks and communications infrastructure in austere crisis environments during the acute phase of a disaster. The team's first response was during Hurricane Katrina in 2005, and in recent years, the scope has increased beyond the United States to additional responses in Haiti, Japan, New Zealand, Australia, and Pakistan.

In order to scale to the level needed by catastrophic disasters, Cisco Tactical Operations augments its team with the Disaster Incident Response Team (DIRT) program. This enables Cisco employees to volunteer to train and deploy into a disaster alongside Cisco Tactical Operations. This cadre of trained specialists avoids the problem many well-meaning businesses run into in disaster response—sending otherwise unprepared personnel into a crisis environment without adequate training, logistics, leadership, or security. The



primary DIRT teams are based in the United States at the San Jose, California, and Raleigh, North Carolina, Cisco campuses with satellite teams in the United Kingdom and China.

While it is common for individuals to want to volunteer on an ad-hoc basis when they see a disaster, a business that wishes to get involved in emergency response faces a set of unique considerations that should be taken into account. While most businesses will want to do the right thing for the community in times of crisis, it is important not to be seen as exploiting the disaster or its victims to further a business agenda. By leading with compassion and transparency, the business builds trust with the responder community and the public. Cisco actively partners with local, state, and federal organizations and allied cross-sector partners to develop appropriate mutual aid and response protocols. Internal to the company, Tactical Operations has active discussions with the various Cisco crisis management teams, legal, and corporate communications. Cisco is by no means unique in having an emergency response program. Other tech companies, such as Microsoft, Google, and Ericsson, have dedicated teams that respond to crisis situations. Collaboration among these teams is common, as witnessed when Google partnered with Cisco to respond to the 2010 San Bruno, California, gas pipeline explosion in support of the San Mateo County Office of Emergency Services.

The private sector has access to a tremendous amount of material resources and skilled individuals, as well as a vested interest in seeing the timely recovery of disaster-affected communities. The experience over numerous emergency deployments at Cisco demonstrates that the smart use of technology can help save lives and mitigate suffering. Additionally, the team continues to demonstrate that doing the right thing for the community is invariably the right thing to do for Cisco.

Visit www.cisco.com/go/tacops to learn more.



Beyond Search & Rescue: Improving Disaster Zone's Long-Term Prospects

By Diane Melley, Director, IBM Corporate Citizenship and Corporate Affairs, IBM

IBM was privileged to offer assistance in 2011 to areas in Japan that were severely affected by a powerful earthquake and subsequent tsunami. While the immediate situation in Japan demanded our focus, IBM also continued to help other parts of the world that had suffered natural disasters. This was accomplished through the spontaneous volunteerism of our employees, as well as by more formal IBM initiatives.

IBM's mobilizations in the immediate aftermath of a disaster tend to coalesce around the provision of information technology—typically, providing government, rescue, and aid organizations with the means to gather, manage, and analyze critical information. We leave the more immediate material needs to those in the government and private sectors who are in a better position to provide search and rescue, food, shelter, and financial assistance. We've generally followed this formula for the 32 disasters in 19 countries to which we've responded since 2001.



Our employees take particular pride when they can also contribute to the longer term success of a region or city. After providing the ideas and expertise that can help local governments stabilize very tenuous circumstances, they often help formulate strategic plans to rebuild civic, societal, and commercial institutions even stronger and smarter than before.

For example, in the days and weeks following the tragedy in Japan, IBM opened its computer servers and data centers to Hiroshima University, which wanted to fortify its website that provided information on radiation exposure. IBM hosted the site in its cloud, keeping the information safe and readily available. We also used our data center to host IBM Smart Cloud for social business software so that non-governmental organizations could better communicate and coordinate.

Another critical application we hosted in the cloud for use by Yamagata and Iwate prefectures was Sahana, free and open source software governed by the Sahana Software Foundation and developed voluntarily by the open source community in the wake of the 2004 South Asian Tsunami. Sahana, which IBM engineers have long helped develop, champion, and deploy, is used to track people, money, and material so that families can be reunited and efforts can be coordinated. It has seen at least one dozen major deployments since 2005. In Japan, Sahana helped track tens of thousands of refugees, supported by an Android application created by IBM, to capture data about shelters.

But there were also longer term projects in Japan that IBM formally assisted with. For instance, we made Smarter Cities Challenge grants to Sendai and Ishinomaki cities, providing them with free access to some of our top experts, who spent weeks on-site. In Sendai, IBM consultants surveyed



homeowners, business owners, civic groups, social service organizations, and the local government about the kind of city they envision. That information will be combined with more technical data pinpointing the safest places for roads, buildings, and utilities.

Our volunteers helped other countries with long-range healing and recovery efforts. For instance, in Pakistan, where extensive flash flooding caused widespread damage and population displacement in August 2010, IBM sponsored intensive workshops in 2011 for frontline health workers and aid providers, providing psychological support. In Antofagasta, Chile, rocked by damaging earthquakes in 2010, a team of IBM experts recommended ways for the city to rebuild its transportation, health care, recreation, energy, and water management services even more efficiently and sustainably than before the disaster. And in Chegndu, China, devastated by earthquakes in 2008, IBMers mapped out a plan to make the region more progressive, pro-business, technologically advanced, educationally sophisticated, and environmentally sustainable. Some of our long-term relief efforts during 2011 culminated, as they often do, with a donation to local schools of the IBM KidSmart Early Learning program, which includes computers, software, furniture and teacher training to help children learn and explore concepts in math, science, language, and teamwork. We translated into Japanese two guides helping aid workers recognize and respond to the signs of trauma in children and adults affected by the disaster. We also offer legal, marketing, personnel and contractual templates, forms, and materials to help small businesses prosper.

The rationale for these efforts is to brighten the prospect of survivors' long-term success so that disasters do not define who they are. We want the rebuilding process to proceed in a smarter, more methodical fashion. These are resourceful, capable, and resilient people from whom we can gain infinite inspiration. And, in many ways, that was one of our most profound lessons in disaster relief that we learned in 2011.

Google's Crisis Response Initiative

By Nigel Snoad, Product Manager, Google Crisis Response

Google's Crisis Response initiative seeks to make critical information more accessible around natural disasters and humanitarian crises. The Google Crisis Response team is a part of Google.org, the philanthropic arm of the company. What we've seen is that during crises we're able to harness the incredible energy and talents of our employees to help others. We have a staff of engineers, product managers, partnership professionals, and volunteers from across the company, all of whom are motivated to mitigate the impact of crises.

Though Google has been active in crisis response for many years, including in the aftermath of Hurricane Katrina, the team was formally organized during the response to the Haiti earthquake in early 2010. In a burst of intense activity, volunteers put together an information page about the crisis and helped with the acquisition and sharing of geographic information, including satellite and aerial imagery. They also created the Person Finder application, a way to help people searching for missing friends and family.

Person Finder came about because during the Haiti response Googlers saw multiple sites across the Web with siloed, independent missing persons' databases. Victims, family, and friends (and I was one) had to find, enter, and search on each of these missing persons lists. A small team of dedicated Google engineers (based in Mountain View, California New York City, London, and Israel) felt it could help with this problem. The team launched Person Finder in 72 hours, building off an open data standard: PFIF (Person Finder Interchange Format). It was quickly adopted by numerous sites across the web, including CNN, The New York Times, and NPR. Person Finder is now an open-source project with an open application programming interface (API). Since the initial Haiti response, our team has actively responded to more than 30 crises in 10 languages, working with local Google teams and partners around the world. Following the devastating March 2011 earthquake and tsunami in Japan, our team, in partnership with the Google Japan office, worked around the clock to provide as much authoritative, near-real-time information as we could, including road closings, power outages, and an instance of Person Finder that ended up with more than 600,000 records.

Throughout these responses, we've noticed some interesting things. Perhaps unsurprisingly, in many countries people use the search function and the Internet during crises to seek assistance or find out what's going on. The Internet is also remarkably resilient in locations where there is significant Internet penetration. Following massive disruptions, such as the




2010 Haiti and Chile earthquakes, and the 2011 Christchurch New Zealand earthquake, the Internet either continued to be accessible or recovered remarkably quickly, sometimes faster than phone networks. The power of the Internet as an information platform is undeniable. Our team continues to innovate and find new ways to enable Internet users to find the most relevant and important information possible before, during, and after a disaster.

If a major weather event is headed to your area, you might go online to search for the information you need: What's happening? Where and when will it strike? How severe will it be? What resources are available to help? In this spirit, our team recently launched Google Public Alerts on Google Maps a platform designed to bring relevant emergency alerts when and where you're searching for them. Google Public Alerts is one of our first steps to providing a scalable and ongoing answer to some of these questions. We're initially partnering with the U.S. National Oceanic and Atmospheric Administration (NOAA), the National Weather Service, and the U.S. Geological Survey (USGS), but we want to partner with other

agencies, such as state, county and city-level emergency management offices, and first responders at all levels of government, and encourage them to adopt the Common Alerting Protocol (CAP) standard.

Tools like our landing pages, which provide emergency numbers, resources for first responders, and other relevant information in the wake of a large-scale disaster event, Crisis Maps, Person Finder and Google Public Alerts are one component of our response efforts. We also advocate with Governments for open data so that they are better prepared to communicate significant information to their citizenry in times of disaster. We are proud that as a team and as a company we can leverage our resources and core skills to make a difference. Communities and agencies have a tremendous opportunity to better prepare for disasters by making data accessible and using technology, and our partnership with them is critical in helping save lives.

You can find out more about the Google Crisis Response team at google.org/crisisresponse.

MICROSOFT

Increasing Information and Technology Capacity in Times of Disaster



Within 24 hours of the earthquake in Haiti in 2010 the nonprofit NetHope was working with the world's leading humanitarian response organizations to understand what technology infrastructure and services were required to support relief and response efforts in the country. In a short space of time, NetHope and their partners had high-speed Internet access set up and accessible through a VSAT/wireless network in 25 locations being used by 17 NGOs.

Similarly, within 48 hours of the earthquake and tsunami in Japan, NetHope was working with member organizations, such as the International Federation of Red Cross, World Vision, and Save the Children, to identify the communications and information technology needs to get the right technology where it was needed most. This included delivering 250 laptops running Windows 7 and Office 2010 to humanitarian field workers to better share information and coordinate relief efforts.

The impact of this work is real, immediate, and incredibly important to support humanitarian response in the aftermath of tragic events.

NetHope is dedicated to finding and implementing the best available technology to improve NGO operations and efficiency. Microsoft believes that technology has the ability to solve many of the most pressing social issues and positively impact the world. It's one of the reasons that Microsoft has partnered closely with NetHope since 2005, providing more than \$44 million to explore how technology can effectively support development and humanitarian relief efforts around the world.

Rather than waste time and resources managing individual requests from a wide variety of humanitarian organizations when a disaster occurs, Microsoft works with NetHope to





provide a single point of contact to understand the situation on the ground and quickly deliver the technology relief agencies need to support their critical work. We spend less time on coordination and more time on delivering the right technology to the right place to have the maximum impact. Our partnership with NetHope is central to this approach and enables us to respond with greater speed and scale.

This is the same approach Microsoft is uses to support humanitarian aid organizations operating in the Horn of Africa region where horrible drought conditions are impacting millions of people in Somalia, Kenya, and Ethiopia. Working with NetHope, Microsoft has been able to provide more than \$15 million worth of software to help those organizations on the ground ramp up more quickly, communicate more effectively, and provide much-needed relief to the people of that region. NetHope's relationship with these key organizations allows us to work in this way—without that partnership, providing that type of assistance would be cumbersome and expensive to manage.

Responding to a disaster is critical, and preparation prior to the event has a fundamental impact on how fast organizations are able to respond. Technology is central to that response. We provide software grants to members of NetHope, helping them build up their own technology capacity both at headquarters and in the field. This technology infusion enables the creation of scalable, stable systems so that the organizations can spend the precious moments after a disaster strikes offering relief, instead of worrying about the infrastructure.

The partnership between Microsoft and NetHope goes beyond disaster preparedness and response; it extends to recovery and rebuilding. In Haiti for example, the NetHope Academy is a result of a close partnership between NetHope, Microsoft, Cisco, and Accenture. It's a program that addresses the country's needs after the initial relief effort, and it provides



real-world, on-the-job training opportunities for Haitian computer science students in corporations and in humanitarian organizations. The people graduating from the program will be those rebuilding the country's technology infrastructure. This type of collaboration benefits nonprofits, technology partners, and the communities in which they serve.



Insurance

ALLSTATE

A Promise to Our Communities Is Our Business

By Mike Roche, Executive Vice President of Claims, Allstate

Unlike other companies, Allstate doesn't make a mass of widgets. There are no factories that create what we sell. No assembly lines rolling off new products. What we sell is a promise—a promise to be there for our customers when it matters most. We've built our reputation on our ability to respond to disasters, both large and small, and restore people's lives.

We've been insuring Americans for more than 80 years. In that time, we've come to realize that insurance plays an invaluable role in protecting the fabric of America. We offer communities and families the security they need in uncertain times. Part of this includes the footprint we leave before, during, and after a catastrophe.

When Mother Nature unleashes its fury, Allstate brings in its National Catastrophe Team (NCT) to help customers recover from their losses. Together, with employees from local claim



offices and Allstate agency owners, our NCT mobilizes into action from staging areas. Initial response teams, which are deployed in advance of the storm, assess damage and provide intelligence to leadership on where to deploy resources.

Within hours, hundreds of team members begin arriving onsite. We begin canvassing impacted neighborhoods on foot and in cars to further assess damages and provide customers with immediate assistance. Natural disasters are the "ultimate moment of truth" for Allstate—an extreme test of our talents, dedication, and resources.

But our responsibility as an insurer transcends our standard business of handling claims after a loss. We also have an obligation to each and every community we serve to make it the best it can be. That's why we work very closely with local, state, and federal agencies to leverage resources, share information, and provide customers with immediate assistance.

Take our response in Joplin, Missouri, for example. In May 2011, a massive tornado ripped a path of destruction there. While NCT members responded to the affected areas, Allstate agency owners and employees worked to rebuild the community. They started with some of Joplin's smallest citizens—its children.

Our family of Allstaters in Missouri, Colorado, and Kansas led efforts to gather school supplies for affected students almost immediately after the disaster. In August, as Joplin students were nearing the start of school, Allstaters delivered \$4,000 in supplies and gift cards, along with an Allstate Foundation grant for \$25,000. Even more than the commitment we place on protecting our customers' hopes and dreams and restoring their security after a catastrophic event, we believe that we can play a vital role as an advocate for change. With this in mind, we continue to seek new solutions to the way government and the private sector can prepare for and respond to catastrophes.

We actively support ProtectingAmerica.org, a broadbased coalition that advocates for a stronger partnership between local, state and federal governments and the private sector to better prepare and protect Americans from natural disasters. This approach would abandon the often chaotic scramble to recover from the devastating aftermath of catastrophes by giving state and local governments more tools to protect citizens before, during, and after catastrophic events.

We remain focused on protecting people from natural disasters. We will continue to bring our experience and expertise to bear in finding new ways to protect American



families. It's what customers expect of us—that we'll live up to the Good Hands promise we made when they chose Allstate. After all, customers are the reason we're here. They have put their trust in us to be there to help during the most vulnerable times of their lives.



Infrastructure



Degenkolb's 70-Year Tradition of Earthquake Chasing Lessons Learned

By Chris Poland, Chairman and Senior Principal, Degenkolb Engineers

Learning from earthquakes through reconnaissance trips is a valued tradition at Degenkolb Engineers. Since our founding in 1940, our engineers have been observing damage after earthquakes through these trips and adjusting how we practice engineering as a result. Our experiences, combined with those of many others, ultimately lead to new design procedures and building code provisions. The learning continues with every earthquake—most recently those in Haiti, Chile, New Zealand, and Japan—and each is unique in its own regard. Haiti is teaching us, however, that when disaster strikes a developing country where modern building codes are not used, the challenge becomes working with the community to transition the construction culture to one that rebuilds using resilient community standards.

More than two years ago, the earthquake in Haiti crippled the already troubled nation's infrastructure. The 7.2 magnitude earthquake displaced more than 3 million residents and damaged or destroyed hundreds of thousands of buildings, both commercial and residential. Effective enforcement of seismic standards was not present in Haiti before the earthquake.

Degenkolb initially sent a four-person reconnaissance team to assess the damage. During this 10-day mission to Portau-Prince, the team assisted with post-earthquake building inspections. It became apparent that the recovery and reconstruction techniques being considered were not well tailored to the country's construction style, not aligned with a seismic retrofit process, and not aimed at getting people back into their homes as quickly as possible. Procedures were needed to determine the significance of the damage and identify the needed seismic retrofits that could be implemented at the same time as the earthquake damage was repaired. This would allow displaced people to return to their homes more quickly.

Engineers from Degenkolb have led or participated in the development of almost all U.S. seismic standards in use today, and we were determined to use this experience to create seismic standards for Haiti. At the same time, Build Change—a nonprofit social enterprise dedicated to training homeowners, builders, engineers, and government officials on how to build earthquake-resistant houses around the world—agreed to assist the Haitian government with technical assistance, training services, building codes, and inspection checklist systems. Along with their engineering partners, they developed structural engineering





design resources for the government, such as design drawings, design rules, bills of quantity, cost estimates and construction quality checklists, and retrofitting solutions for common construction systems used in Haiti. Degenkolb initially joined the Build Change team as a peer reviewer, and our role has grown to include the development and implementation of a comprehensive retrofit guideline and training program.

The newly developed evaluation and retrofit procedure starts with a site visit and checklist evaluation to identify major deficiencies. The procedure is sophisticated and simple to implement, but it still requires engineering judgment to execute correctly. Engineers measure and document the building, define the usable walls, identify the building type, and complete the evaluation checklist. It turns out that many buildings do not need significant retrofit. The trick to the process is maximizing the benefit to the owner for every dollar spent on retrofitting a house. It avoids the common and expensive practice of unnecessarily tearing down older and damaged houses and rebuilding.

Degenkolb continues to train engineers from the Ministry of Transportation, Public Works and Communication (MTPTC), and the local engineers employed by Build Change. The momentum for retrofits is growing, and families are beginning to move back into their retrofitted and repaired homes with a new sense of security. This time, Degenkolb's earthquake reconnaissance has led to helping a developing country begin the long process of achieving resilience in an affordable, sustainable, and achievable manner.



Learn From the Past, Be Involved in the Future

By Ashley Wilson, Communications Specialist, Proteus On-Demand



When disaster strikes, media attention is placed on emergency response, but in the long term, recovery also is key to restoring communities. Combining speed and flexibility, effective recovery prioritizes the needs of these communities, from life safety to government functionality.

Throughout a disaster, governments and corporations must be able to convene and communicate in order to function properly. As a premier provider of specialty buildings and service projects around the world, Proteus On-Demand Facilities (Proteus) has constructed turnkey, highly functional buildings to enable governments and corporations to operate more effectively after a natural disaster. The ongoing recovery in Haiti is a prime example of how Proteus is helping entities get back to business after a disaster. Proteus has continued to aid the revival and rebuilding of Haiti since the earthquake in January 2010. Partnering with the U.S. Agency for International Development (USAID) and the World Bank, Proteus has worked to provide semipermanent office solutions for many critical government ministries in Haiti.

The Presidential Palace, along with other various ministries, were completely demolished by the 2010 earthquake, leaving employees without a workplace and a country without the



capability to function. To help continue operations, Proteus provided the government with turnkey office space for more than 500 ministry employees. The ability of the government to assemble for discussions, meet with donors and other governments, plan and coordinate disaster response and recovery, and hold elections was dramatically improved.

The Inspector General of Finance, the Economic and Finance Minister, and Director General of Taxation were in need of office space. By helping rebuild these ministries, Proteus' clients have boosted Haiti's ability to facilitate economic activity by collecting duties and taxes, paying bills, disbursing money, and handling many other responsibilities.

Proteus' U.S. and Haitian team's flexible approach, speed and local expertise expedited the comprehensive delivery of each project and building. The team achieved this by managing the designing of the infrastructure, transporting materials and equipment through customs, and overseeing the construction processes. All the office structures are equipped with sanitary facilities, power, lighting, HVAC, water filtration, security, furniture, IT, and communications. Because each structure is equipped with backup satellites and generators to maintain power and communications, the Haitian government will not be without the ability to function for more than five minutes should another disaster occur. Proteus ultimately left a legacy of supplemental infrastructure for the government of Haiti by equipping various ministries with large, secure, reconfigurable office space.

Proteus has been called upon on numerous occasions by government entities, corporations, and communities to support disaster relief and recovery. As a company with expertise in creating comprehensive solutions specific to customers' needs, Proteus maintains constant readiness to serve communities in the midst of crises or broad-scale disasters by building fully integrated, temporary structures for both short and long term solutions, such as housing, office space, retail stores, schools, hospitals, warehouses, call centers, and distribution centers.



Storm of Ideas

By Russel Gehrke, Founder, Project JOMO

The children of Joplin, Missouri and their families have been greatly affected by the damage left behind from the May 22, 2011 EF5 tornado that destroyed much of their town. Many people who were killed or injured in the Joplin tornado were swept from their homes, which would have been less likely if they had a proper shelter. This situation is considered the norm for an estimated 21 million people in "Hurricane and Tornado Alley," where safe rooms and storm shelters are often not an option because of their expense. The need for affordable safe rooms or storm shelters in storm-prone communities is no longer a luxury but a necessity.

Often times, post-storm, adults and children alike have feelings of anxiety, fear, anger and insecurity of the future. Having an "at-home" or even "near-home" storm shelter can be a powerful tool to help children and adults deal with the tramatic aftereffect of living through a devastating tornado, like the one last spring in Joplin.

Just days after the storm, with the idea of affordable safe rooms and storm shelters fresh in his mind, Project JOMO's founder, Russel Gehrke, observed that nearly all the composite plastic playgrounds of Joplin survived the storm, with many only having a few scratches, while the property around the playgrounds lay in ruins.

With this in mind, Project JOMO was formed to make affordable (as well as donated) storm shelters to the thousands of people in Joplin and Tornado Alley. With the data collected by the Project JOMO team and hundreds of hours of research and development, a system to produce them was created. Project JOMO's shelters have some steel or concrete used in them, but they are mostly composed of plastic composite materials. Composite materials by weight are about five times stronger than steel and outperform concrete. That's why police and soldiers wear bullet-proof vests not made of steel or cement but, rather, of a composition material that consists mostly of a plastic fiber called Kevlar.

When flying debris in a tornado hits a JOMO shelter, it hits the shelters thick composite layer. The composite's molecules are able to take on the kinetic energy of the high-velocity debris, hold their positions, and create a stretching force on each individual molecule from the debris. While some of the composites molecules do break under the strain, most will absorb the energy by simply stretching a small amount. This serves to dissipate the energy and momentum of the debris. The debris then stops very quickly because it has given up its





energy to the composites, instead of the people inside the JOMO shelter.

The production of Project JOMO's shelters are a combination of long-time work experience, off-the-shelf fabrication technologies, industrial partners, and charitable organizations. Gehrke is often hired by companies to determine alternative methods of diverting waste streams via recycling, value adding, and energy conservation. Today, these same company composites waste streams can be recycled and reengineered to be used to build JOMO shelters. The composite materials in Project JOMO's blocks (ballistic concrete forms) come from recycled polyethylene and/or polypropylene. Each block weighs more than 15 pounds. Inside the blocks are two pieces of iron rebar that cross through each block, and once set in place, the blocks are filled with cement for ballast weight.

Project JOMO plans on helping the local economy and being a large part of the recovery process by providing children and their families' peace of mind from future storms and give them a safe place to go at home via a JOMO storm shelter.



Debris Removal

Changing Lives Through Sustainable Progress

By Jim Baumgartner, Director of Corporate Public Affairs, Caterpillar

More than two years have passed since a 7.3-magnitude earthquake devastated the country of Haiti. The catastrophe battered a nation already bearing the burden of widespread poverty, hunger, and disease.

The United Nations estimated that more than 3 million Haitians were affected by the 2010 earthquake. Some international agencies reported the loss of life at 300,000.

Global relief and rebuilding efforts began immediately after the disaster, and Caterpillar Inc. was among the dedicated first-response organizations to provide needed funds, equipment, training, and leadership.



Stepping Up

Just days after the earthquake, the Caterpillar Foundation responded with an outright contribution of \$200,000. An aggressive matching program for employees, retirees, and dealers pushed the total to more than \$800,000 for Red Cross disaster relief.

Caterpillar followed its initial investment with a significant equipment donation through Haytrac, its dealer in Haiti. Within two weeks of the earthquake, Caterpillar provided excavators, loaders, track-type tractors, and specialty tool attachments to assist with the massive cleanup efforts. A team of Caterpillar engineers and operators accompanied the equipment to Haiti. Their expertise and leadership were vital to the first-response endeavors and the training of the Haitian people, who quickly learned to operate Caterpillar equipment and clear the massive amounts of rubble that blanketed urban areas.

Haytrac's operator-training programs were created in conjunction with CHF International, a global development and humanitarian assistance program. As longtime partners in disaster relief and international aid, Caterpillar and CHF are dedicated to sustainable progress around the world.

Transforming Communities

In the months following the disaster, Caterpillar continued to find new ways to help improve the quality of life for the people of Haiti.



Courtesy of CHF International

In summer 2010, the Caterpillar Foundation partnered with the Pan American Development Foundation (PADF) on a drainage canal cleanup project impacting more than 150,000 Haitians. The transformational project had additional economic benefits for the region, as more than 1,200 local jobs were created.

The Foundation also contributed \$1 million as part of a joint relief investment with PADF and the Clinton Bush Haiti Fund. The combined grant of \$3 million was presented to the Organization of American States for the repair of multifamily homes in the areas hit hardest by the earthquake. This repair work is helping move Haitians out of tent cities and back into their homes.

Building a Better Future

"Commitment" defines Caterpillar's work at home and around the world. As individuals and as a company, Caterpillar contributes significant time and resources to promoting the health, welfare, and economic stability of the communities it serves.

As Haiti continues to recover from the devastation of the 2010 earthquake, Caterpillar's leaders, employees, retirees, dealers, and partners will help build a better future through programs that drive sustainable progress.

We should all be proud of those who have given their donations of money, time, and prayers to the people of Haiti. There is a lot of work left to be done, but we can be assured that Team Caterpillar will be there to help.



Courtesy of CHF International/Evan Abramson

Helping Jefferson County Recover

By David Preus, Assistant Vice President, and Dawn Brown, Ceres Environmental

On April 27, 2011, a devastating line of severe storms and tornados ripped through the southeastern United States, leaving disaster and destruction in their wake. One of the hardest hit states was Alabama, and among the hardest hit areas of the state was Jefferson County, home to the city of Birmingham and the most populous county in Alabama. Ceres Environmental Services, Inc., based in Florida, set out to see what could be done to help Jefferson County recover—not just to clean up debris but to provide a sense of camaraderie, assistance, and hope to the people of the county.

A Ceres representative was on the ground in Jefferson County within four hours of the tornado strike, talking with residents and assessing the situation. Ceres President Troy Garrett and Assistant Vice President David Preus mobilized equipment and personnel while meeting local subcontractors to see how Ceres could help.



After securing a contract with the county, Ceres continued to look for ways to involve members of the community in the recovery efforts. Ceres flew in Tia Laurie, a subcontractor liaison and a longtime Ceres employee, with established local subcontracting resources cultivated over a period of years. Laurie enlisted the help of established, trusted subcontractors, such as locally based and minority-owned Dawson Development, Inc. and locally based Veterans Landscaping, Inc. Ceres furthered efforts in local hiring by providing more than 11,000 work hours to residents of The Lovelady Center, a Birmingham-based shelter whose goal is to "restore hope and rebuild lives" of the women who reside there. Additional staffing requirements were fulfilled by Saber, another local minority staffing agency, and KwikJobs, Inc., based in Birmingham.





Ceres's actions to fill our work force with local companies and individuals illustrate some of our standard operating procedures during disaster recovery contracts. We have learned to assist our customers such as Jefferson County to get back on their feet in more ways than just removing the debris left behind by the disaster that devastated the area.

Giving residents work in their own communities provides people with a sense of contribution and normalcy in a difficult situation. The county was already dealing with a difficult economy and keeping work local was one way to help the county recover on a deeper level than simply removing the debris from the streets. That is what Ceres strives to do in every location in which we work.

We at Ceres are proud of the job we did in Jefferson County we are proud of the letter we received from James Stephens, Jefferson county commissioner of finance and information technology, which stated, in part:

Ceres Environmental was on the ground within 72 hours. They showed extreme reliability and dedication

in the midst of chaos. Organized and diligent, their team quickly learned our people, our systems and our area. Ceres Environmental helped to organize and utilize Alabama contractors, allowing local people to heal by doing something to help in their own backyards. Ceres assistance resulted in people getting back into their communities and starting their building process. Residents that were hit hardest in communities like, Pleasant Grove, Concord, and Forestdale are today, after only four months, moving in to new and rebuilt homes. After witnessing the profound success and partnership of Jefferson County and Ceres Environmental, other Alabama Counties selected Ceres for debris cleanup in their area. Ceres Environmental has my highest recommendation.

Ceres is humbled to have made a difference to the residents and to have had the opportunity to serve a tremendous group of citizens who did not just look to us for help—they helped themselves recover—and that's the best way for a community to heal.



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