

## A CASE STUDY

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# Weathering Hurricane Sandy - Telx Data Center Never Went Down

By [GAIL DUTTON](#) in [BUSINESS CONTINUITY/DISASTER RECOVERY](#),  
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Hurricane Sandy, which ravaged the East Coast in October 2012, put data centers' disaster recovery plans to the test. Massive, long-duration power outages, sketchy communications, impassable roads, rationed fuel and displaced personnel were the major challenges; yet, during the hurricane and its aftermath, data center host Telx never went down.

With four data centers in New York and New Jersey, and a fifth coming online in spring 2013, Telx hosts many of the large financial institutions and telecommunications providers that form the backbone of American business. For them, downtime for any reason was unacceptable and could hamper recovery throughout the region.

## Planning Key to Survival

Eric Shepcaro, CEO of Telx, attributes the company's ability to remain operational during and after the hurricane to detailed planning. Once clear the hurricane would hit, "We performed maintenance on our equipment, including batteries and generators, and tested our mission-critical gear to ensure everything was in working order. We topped off our fuel systems and created a delivery schedule for the following days to ensure supplies," he recalls.

The company also arranged for 40 employees to remain onsite for the week during and after the storm to work with customers and to maintain the data center. Having these people essentially living at the data centers required arranging for food, drinks and bedding. "We're fortunate— more so in New York than in New Jersey—that many of our employees live very close to our facilities," he adds.

“The other important thing for which our customers sent kudos was that we continuously updated our website and customer-facing portal about what was occurring, and our plans and activities before and after the storm,” Shepcaro says. The objective was to over-communicate, rather than risk under-communicating. Customers wanted to know how much generator fuel Telx had on hand, how long that would last, and whether Telx was accepting new customers, he elaborates.

## **Electricity and Fuel**

After the hurricane struck, communications capabilities were sporadic. Telx provided a variety of ways to communicate, banking that if one option was unavailable, another would be. They employed cell phones, land lines, email, internet sites and Twitter. Telx also encouraged employees to check in as soon after the storm as possible, so the company could assess the state (and availability) of its workforce and resources.

“We, like everyone, suffered a loss of commercial power, but our customers never suffered because we had backup generators.” Telx’s New York City data center ran on generators for more than five days with no customer downtime. The Clifton, NJ, facility used backup power during two separate six-hour periods, and intermittently as the utility company—Public Service Electric & Gas (PSE&G)—turned off electricity to repair the power lines.

“We used 60,000 gallons of fuel for the two New York and two New Jersey facilities,” Shepcaro says. In addition to simply ensuring adequate fuel, Telx also had to perform maintenance on the generators while they were in use. “No one—at least in this area—has had to operate a data center this long on generator power,” he says. “We anticipated a shortage of generator technicians from vendors, so we ensured the right people were on site and could do work vendors normally would perform. It was like watching a pit crew at a NASCAR race, changing filters or performing other maintenance as quickly as possible so a generator didn’t shut down.”

“Another part of the challenge was getting fuel delivered every two days after the storm. It wasn’t easy.” Telx worked closely with vendors and cities to get the trucks through. New Jersey, for example, has an intricate roadway system with multiple ways to get anywhere. Therefore, fuel delivery trucks typically had multiple

paths to reach facilities. Roads into Manhattan, in contrast, were limited by flooded tunnels. “In New York, most of the roads were shut down,” he says.

Employees also faced fuel issues. With refineries shut down, gas lines stretched miles as rationing plans were put in place. As Michael Allen Seeve, president of Mountain Development Corp. and landlord to Telx, recounts, “For most people gas was a real issue. People didn’t want to drive far so for that week many employees worked from home. At Mountain Development, we didn’t anticipate the gas shortage or the inability for gas stations to power their pumps.” The developer established car pools to ease the problem for its employees. Throughout the crisis, “Gasoline was our biggest issue,” Seeve says.

## **Lessons for the Industry**

Mountain Development Corp. expanded its disaster recovery plan after the storm to reflect gaps. Telx, however, has made no significant changes.

“We’ve gone through blackouts and 9/11, and we continue to rehearse. We have a very detailed business continuity plan and very strong best practices we operate for our companies,” Shepcaro says. Consequently, as the company developed its after action report, nothing stood out that needed changing. “We do quarterly reviews of the plan, and a total refresh every 12 to 18 months for the corporation and facilities. Ironically, at about the time the hurricane hit, we were doing a total refresh of the corporate disaster recovery plan, and each facility was reviewing its own plan, focusing on technology changes and employee communications.

## **DR Awareness Grew**

Immediately after the hurricane, non-customers whose storage facilities had lost power flooded Telx with calls in the hopes it could make them operational. Telx helped many migrate. Investment advisor Capstone, for example, brought its data center up in New Jersey, when flooding affected its New York facility.

Riding out disasters with little or no disruption requires forethought. As Mountain Development Corp.’s Seeve points out, “You win now because of the work you did years ago.” Although some of Mountain Development’s Clifton and Newark facilities

experienced roof damage and power challenges, its data center clients—of which Telx is one—weathered the storm well.

That occurred, he says, because of the tenants' own preparations and Mountain Development's facilities planning. "We went through exercises with PSE&G and designed the facilities to have dual electric service to create a layer of redundancy." The facilities also contain feeds from multiple telecommunications carriers and internet providers to minimize the risk of service disruption. Consequently, "We didn't lose emails or data. In a disaster, if you at least can get email and communicate with people, it's more bearable," Seeve asserts.

"Hurricane Sandy was a great reminder that there are professionals with years of experience anticipating and preparing for these events. The smartest of them pre-planned and worked with locals to build infrastructure and connectivity to withstand the unknown."

So, make sure to "position yourself" before the next disaster strikes.

*Gail Dutton has covered the IT industry throughout its development and is a contributing writer for AFCOM's publications. She can be reached at [gaildutton@gmail.com](mailto:gaildutton@gmail.com). This article originally appeared in Data Center Management magazine.*

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