



WHEN ECONOMIC DEVASTATION HIT, SD-WAN HELPED WITH RECOVERY AND REHABILITATION



INDUSTRY

MANAGED SERVICES CARRIER

HEADQUARTERS

LOS ANGELES, CA

CHALLENGES

- Flooding and wind disrupted network connectivity for households and businesses alike
- Storm victims were unable to receive information about where to get relief and support
- Local businesses prevented from transacting and continuing with livelihood

RESULTS

- City Hall, to connect with its constituents and provide assistance information
- Area SMBs gained Internet access and were able to return to “business-as-usual” and continue transacting
- Reduced economic impact of entire towns being offline and inaccessible
- Enabled impacted areas to receive aid and information to begin rebuilding after the devastation

When the infrastructure fell apart in the wake of the massive storm, TPx and SD-WAN helped get the residents connected to the outside world.

In our current highly connected world, we often forget that the technology itself and the underlying network infrastructure on which it performs, can play a pivotal part in the betterment of the lives of individual people or communities. It has the capability of helping and saving lives. This fact became critically apparent when portions of the United States were devastated during a particularly violent hurricane season.

Hurricane Harvey. Starting as a tropical wave in the Atlantic Ocean, Hurricane Harvey gained strength and earned an official storm designation as it moved toward the U.S., reaching Category 4 status before making landfall in Texas. In a four-day period, many areas affected by Hurricane Harvey received over 40 inches of rain. The result was massive flooding that affected thousands of homes and businesses and displaced over 30,000 people. It left the cities it touched in ruins and its people struggling to find help and assistance to survive its aftermath.

The torrential waters, resulting flooding, and strong winds caused havoc on many cities' communication networks. Homes and businesses lost their access to electricity, to network connectivity and to phone lines. People didn't know how to find assistance or where to go for help and businesses were unable to process payments for needed supplies for those needing to purchase them.

City Hall was the go-to place for information, the central location for help and recovery efforts. It was easily the key to the entire community, becoming the cornerstone for those towns affected, offering programs, access to money, permits, and overall direction. The Federal Emergency Management Agency (FEMA) set up offices in City Hall to process paperwork and to work with contracting companies to start to provide assistance to the population and begin rebuilding.

With citizens needing access to information to get assistance, businesses needed to access a network to process payments, and City Hall needing to make information available online and get that information to its community, having access to the cloud and Internet was critically important.

TPx Steps Up

TPx jumped in to help the communities affected by Hurricane Harvey. Many of the communities hardest hit were small and the bulk of the businesses in the area were categorized as small to medium who relied on local patronage to survive. Without the ability to order supplies or process transactions, these SMBs, the true identity of the towns in which they reside, would not last long.

TPx knew that providing City Hall with connectivity to the community and to organizations outside the community who could help with support, was the priority.

And for TPx, it wasn't about just helping its own existing customers. It was helping the entire community, regardless of whether or not they were customers or would become customers in afterwards. The affected communities needed life support to keep beating. There were no large enterprises that could help with infusions of money to get the towns back on their feet. The towns and their SMBs would need to do this themselves and they needed a solution, fast.

Deployment: Designate, Drop, and Done

With its history of working with VMware SD-WAN™ by VeloCloud®, TPx knew that the technology and its infrastructure would be a game-changer for these communities. The ease with which it deployed, the connectivity that it delivered, and the speed at which it could be rolled out would be the conduit to change.

First, TPx connected two VMware SD-WAN Edges at City Hall that would allow the entire building to quickly gain access to the Internet to begin communicating with the outside world, disseminating information to the community, accessing recovery information, and processing paperwork.

Next, TPx began to deliver VMware SD-WAN Edges to organizations that needed access. To receive service, businesses did not need to be an existing TPx customer, so TPx waived charges and created temporary contracts that were spliced, abbreviated, and designed for short-term implementations. Service was then dropped at each location with a VMware SD-WAN Edge, and as long as some electricity could be accessed, the business could begin accessing the Internet and processing transactions, returning to “business as usual.”

Users found the VMware SD-WAN Edge to be extremely energy efficient, drawing very little power to operate, which is important when most businesses depended on battery powered generators. This became a significant factor as brown-outs and power issues are an everyday occurrence.

TPx field engineers drove around the affected areas with trucks containing VMware SD-WAN Edges, Cradlepoint 4G LTE devices, and simplified contracts. Using a fast-track provisioning strategy, the field engineers were able to deploy several businesses connectivity in a single day.

Because VMware SD-WAN can use any type of transport available (private connections, Internet, DSL, cable, LTE, etc.), connecting was simple. AT&T was able to salvage several cell towers and then rolled in “Cells on Wheels” that expanded the ability to access cellular to the masses. With most locations not able to use a wired Internet access, they instead depended on 4G LTE using a Cradlepoint device that TPx provided and connected to the VMware SD-WAN Edge and deployed quickly with a standard non-custom profile. Even with just very little cell service working, the VMware SD-WAN Edges was able to optimize the delivery and provide high-quality connections.

The Recovery

The results of the havoc created by Hurricane Harvey remain months after the storm dissipated. But with TPx's quick thinking and ability to react quickly, the backbone and lifeline of the towns that were under water have a strong chance of survival. By connecting City Halls, the central point of relief and rebuilding, to the town constituents, the economy in these areas, while having taken a hit, will be able to bounce back and eventually return to normal. In the absence of TPx and VMware SD-WAN, using only legacy equipment and infrastructure, this would not be possible.

Without TPx rolling out SD-WAN to the SMBs in the area so that they could transact as normal, 40% of these locally-owned organizations would have gone out of business. The ripple effect on the affected towns' economies would be tremendous and long lasting, potentially bankrupting the communities who depend on SMBs for their livelihood.