

Overcoming Broadband Disconnection During Disasters

How a company focused on space flight provides a critical connection during times of crisis.

By Bernie Bogle / *Connected Nation*

Perhaps the need to access information becomes most important when disaster strikes. That was never more evident than in the days following December 10, 2021.

According to the National Weather Service (NWS), 61 tornadoes tore a deadly and destructive path across eight states. The NWS called the intensity of these thunderstorms and tornadoes “remarkable” because they happened in autumn rather than spring or summer when they were most expected.

Among those who found themselves in the paths of those devastating storms were members of the Connected Nation (CN) team, including me.

A FIRSTHAND ACCOUNT

I live in Bowling Green, Kentucky. As you may know, the December tornadoes ravaged the community and state. Some areas of my hometown are still devastated by the damage.

In some Bowling Green neighborhoods, home after home was decimated, with the occasional lucky one being missed – as if the twisters had hopscotched through the town.

My immediate family was extremely fortunate that the storm missed us almost completely. My sister had no damage at her house, but a gas station was ripped to shreds just a mile down the road, leaving gas pumps bent sideways. My sister-in-law’s home had some roof and tree damage, and many homes were

destroyed down her street and on the next street over. She was without power for a few weeks.

Still, we were lucky. All our loved ones were safe, with only minor inconveniences. But this scary experience brought another issue to light – the need for internet connectivity during natural disasters or emergencies.

NO ACCESS, NO INFORMATION

The tornados touched down in the middle of the night on a Friday. Our power flickered, then came back on almost immediately. Our internet and cable went out and stayed out all weekend. They weren’t restored until Monday morning. As a result, we had limited to no access to news. We could learn what was happening only from those in other communities who could occasionally call or text us using the limited cell coverage we had.

It’s hard to explain if you haven’t experienced it, but the fact that we couldn’t find out much about the extent of the damage was disturbing. We knew that emergency personnel and utility crews were already working around the clock to meet the community’s most pressing needs. But, because we were physically unscathed, we felt a bit isolated – emergency crews were already taxed, meaning we were likely on our own if an emergency arose.

Connected Nation has several employees in Bowling Green and the surrounding area. As the chief financial officer, I felt responsible for checking on my work family. Saturday



Satellite dishes are ready for deployment in Western Kentucky.



A Starlink technician gets ready to place equipment on top of a building.

morning, I and others on the leadership team began studying Connected Nation's staff to make sure they and their families were all safe; thankfully, everyone was OK, albeit rattled.

Two of my children are in community college and still live at home. Many times, we checked our phones to look something up online or to try to get news about what was happening outside our home – but our efforts were met mostly with radio silence.

Being so disconnected was disturbing. To distract myself, I did what I typically do at that time of year: I finished making Christmas cookies. Before the storm, I had made multiple batches. I iced them in bright green, red, blue or yellow the next day. That was how I coped with feelings of uncertainty. (By the way, some of those Christmas cookies found their way to utility workers, who spent long hours working to restore power to our town.)

The adage is true – you don't know what you've got until it's gone. That weekend, my family felt the loss of connectivity. The tornadoes had only a tiny impact on my family compared with others. Still, it was eye-opening to see just how much we all need and

rely on the internet every single day – connectivity *matters*.

As you might imagine, this severed connectivity was an inconvenience for those of us still with homes, but it was critical to the life-saving rescue and recovery efforts that followed for weeks and months. Restoring this vital link was no easy task because traditional infrastructure was mauled beyond repair and, in some cases, beyond recognition.

HELP FROM ABOVE

After learning of the devastation, loss of life, and heroism of our first responders, our friends from SpaceX in Washington, D.C., whom CN has had the pleasure of working alongside in policy matters for several years, called to offer thoughts, prayers and assistance in a most unexpected way: SpaceX operates a new broadband technology that relies on low-Earth-orbit (LEO) satellites to establish high-speed internet access wirelessly.

Starlink is the name of this new product from the labs of Elon Musk. Though it is a great entrant to any established broadband market, it is most applicable in providing service in places where current networks don't exist – for instance, in the remote or

rural corners of the U.S. or in storm-ravaged Western Kentucky, where everything was destroyed.

In a matter of 24 hours, we watched in awe and gratitude as a team of Starlink engineers sprang into action and deployed from as far away as the Pacific Northwest to bring and install more than 20 Starlink stations, established uplink to their satellites, and restored resilient and high-speed connections (in some cases more than 100 Mbps!) to towns all over Western Kentucky.

The Starlink kits provided secure connections for the private use of Kentucky emergency response efforts and for public Wi-Fi access, so that families and businesses could attempt reconnection with customers and loved ones. In one instance, a neighboring police chief had been working without a computer network and could not write police reports. Before SpaceX arrived, his office could only take dispatch calls through a computer with a cell tower link.

Did I mention that SpaceX did this gratis? Relationships matter, especially in a crisis.

My thoughts and prayers continue to go out to those who lost loved ones



A Starlink employee deploys equipment to connect a Kentucky church serving meals to those impacted by the tornadoes.

and property during the December storms. We still cringe in Bowling Green when the wind blows hard, but we are a community whose members have been there for one another and will continue to help one another brave any storm. ❖



Bernie Bogle is the CFO of Connected Nation, a national nonprofit organization that develops and provides tools and resources to help states and

communities create and implement solutions to their broadband and digital technology gaps. A CPA and chartered global management accountant, she oversees Connected Nation's finances and ensures compliance on all grants and resource allocations.

Broadband Communities

congratulates

our Multifamily News Correspondent and
Executive Consultant

Valerie M. Sargent

on her nomination for
The Leukemia & Lymphoma Society's
Woman of the Year campaign!

In the last decade, over **50%** of cancer treatments and industry drugs came from LLS funded research. Thank you, Valerie, for raising funds to cure cancer once and for all!

To join us in supporting Valerie with a donation:
<https://pages.lls.org/mwoy/ocie/ocie22/vsargent>

Interested in LLS corporate sponsor donations
or matching company donation programs?
Contact Valerie at www.valeriemsargent.com

To Donate:

