

FIRSTNET HELPS SAVE LIVES

How the Nation's Most Important Wireless Network was Born

On the morning of Sept. 11, 2001, Chief Chuck Dowd pulled up to the security gate at the New York City 9-1-1 Center where he was commanding officer of the New York Police Department's communications division. An officer told him that a small plane had just hit one of the World Trade Center buildings. While the news concerned him, he had no idea what he was about to walk into.

"I went into the 9-1-1 Center and the place was a madhouse," Dowd said. "As you can imagine, the calls were coming in from everywhere and they were horrific. Our folks were talking to people in the buildings who they knew were not going to get out alive. It was a terrible time."

Meanwhile, at the scene, first responders were racing into the buildings in an attempt to rescue those trapped inside. With police, fire and emergency medical services (EMS) all converging on the towers at once, coordinating communications quickly became challenging, if not impossible.

"The ability to share information via radio between the NYPD and the FDNY wasn't there because we were using two different radio systems," Dowd said. "It was a stark reminder of just how bad things were that day."

As the news spread and the rest of the country came to grips with what was happening, first responders from other states headed to New York and Washington, D.C. While their assistance was welcomed, their presence further complicated the communications conundrum.

"People were writing notes on pieces of paper and running them around Ground Zero and the Pentagon," said Chief Jeff Johnson, former president of the International Association of Fire Chiefs. "You had agencies trying to cross the river to come to Manhattan and they all worked on different land-mobile-radio systems, none of which were designed to interoperate with each other."

In the years to follow, Johnson joined Dowd and a host of others to play pivotal roles in solving the public safety communications issues that 9/11 exposed. In 2004, Ed Parkinson was working as an aide for U.S. Rep. Peter King (R-NY). In this role, he worked with constituents to champion causes in support of issues backed by the congressman. One such constituent group included Johnson and Dowd and came to be known as the Public Safety Alliance. The Alliance approached the legislator's office with the idea of securing a dedicated block of spectrum — the scarce airwaves that wireless communications travel over — for dedicated use by the public safety community.

"It was the first time that we got everybody in public safety on the same page on one effort," Dowd said. "That had never happened before. We were laser-focused on acquiring that spectrum and advocating for that spectrum in Washington. And it was a tough road."

Rep. King stepped up as an early advocate and drafted the initial legislation to secure a prime block of spectrum, now known as Band 14, for public safety use. Specifically, the spectrum would give first responders the ability to not only communicate with each other and share data across departments and jurisdictions, but also to get priority and preemption over all other traffic using the airwaves. While 9/11 served as an impetus for the effort, with the need for an improved public safety communications system cited in the Congressional 9/11 Commission Report, communications failures had long been an issue for first responders across the country. From spotty cellular coverage in rural areas to saturated bandwidth in the midst of wildfires and emergencies in concentrated areas, the inability to communicate cost lives.

While Congress did not take action on the initial bill, it served as a critical catalyst for the initiative. The Alliance persisted and secured bipartisan support from Sens. Jay Rockefeller (D-WV) and John McCain (R-AZ), as well as other legislators. Still, the Alliance faced stiff opposition from those who felt the spectrum was too valuable an asset and could be sold to help pay down the federal deficit. But eventually, the Alliance earned support from then-Vice President Joe Biden, which was essential in getting the Obama administration on board.

"The Vice President listened to our arguments and said, 'I can think of nothing more important than getting public safety the communications tools they need. I will get this done.' And he kept his word," recalls Johnson.

Then, after years of sending letters, showing up to meetings and events in uniform and lobbying legislators, Mother Nature fatefully intervened to further help the Alliance prove its point.

"We had been making this case up on the Hill and people just didn't get it," said Chris Moore, another key member of the Alliance who served as the San Jose police chief until his retirement in 2013. "Then, in 2011, we had a big earthquake on the East Coast, and the people in D.C. thought a bomb had gone off. Hill staffers tried to make calls and couldn't because the cellular networks were saturated. All of a sudden, the case we were making was demonstrated right in front of their own eyes, impacting them directly."

And in Feb. 2012, Congress created the First Responder Network Authority (FirstNet Authority) as part of the Middle Class Tax Relief and Job Creation Act.

The law allocated 20 MHz of spectrum and \$7 billion for the FirstNet Authority to build, operate and maintain a nationwide broadband network dedicated to first responders.

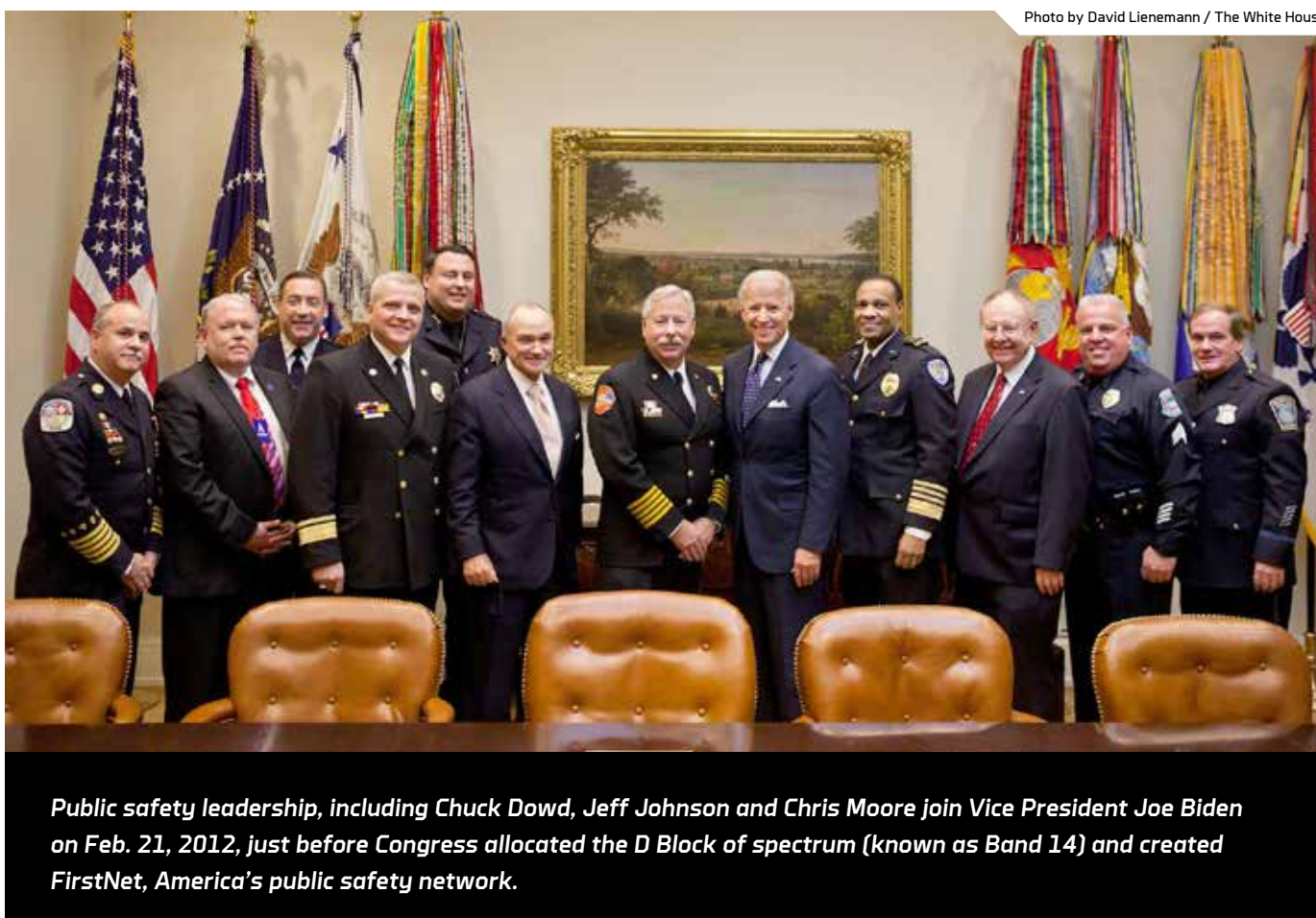
The FirstNet Authority spent years consulting with federal, state, tribal and local public safety entities to determine specifically what they needed in their network. And in 2017, the federal government selected AT&T to bring the network to life through a unique 25-year public-private partnership.

Today, FirstNet covers 2.71 million square miles across 50 states, five territories and D.C. with more than 17,000 public safety agencies and organizations — representing over 2.5 million connections — on the network. Understanding the importance of public safety's communications needs, AT&T expanded FirstNet to further boost its network capacity and give first responders always-on priority and preemption capabilities across all of its LTE spectrum bands, as well as Band 14: the block of spectrum public safety spent years fighting for. In an emergency, Band 14 can be cleared and locked just for FirstNet subscribers. That means, in addition to being able to talk with each other no matter which department or jurisdiction they're based, first responder communications on FirstNet are always shielded from commercial network congestion and won't get bogged down by spikes in wireless traffic during large events and emergencies.

"FirstNet helps save lives," said Parkinson, who now serves as the FirstNet Authority's CEO. "I don't know of a more important reason to have an asset like FirstNet out there for public safety to use and for the public to benefit from."

Dowd, who has since retired from the NYPD, added that while events like 9/11 made the need for FirstNet crystal clear, first responders feel its impact every day.

"And whether it's in New York City or in a rural county in Iowa," he said, "it makes a difference."



Public safety leadership, including Chuck Dowd, Jeff Johnson and Chris Moore join Vice President Joe Biden on Feb. 21, 2012, just before Congress allocated the D Block of spectrum (known as Band 14) and created FirstNet, America's public safety network.