

How to make your NG9-1-1 solution a success

Q&A with Lumen's Jim Carlson

Next Generation 9-1-1 (NG9-1-1) is all about saving lives. It is a sea of change in technology that protects citizens and first responders. Because NG9-1-1 is composed of many parts that must be integrated and supported as a single solution, it is more complex than past approaches. Yet, those charged with protecting the public should not have to worry about that complexity. Public Safety Access Points (PSAPs) are dedicated to protecting the public, not managing major IT projects.

Lumen has a long history of supporting PSAPs and public safety in general. Jim Carlson, Lumen Public Safety Sales Director, sat down to address some of the common questions about NG9-1-1.



Can you offer a brief overview of just what NG9-1-1 is?

The national 9-1-1 emergency phone system is an incredible accomplishment of the 20th century. About a decade ago, the concept of NG9-1-1 started as a way to update that system with digital technology. That puts the emergency system onto the same roadmap as all the digital innovation going on across the technology industry. As plans developed, it became clear that NG9-1-1 delivers more than just a new phone system. Digital technology made it easier to collect a lot more information about a situation and deliver it to first responders. It could be video, text or digitized records. So, it became a much more holistic idea than simply shifting to a digital phone network. Today, NG9-1-1 is about bringing together all the available data on a situation at the right place and the right time. It helps the dispatchers, the first responders and, ultimately, the citizens.



What are some of the challenges of NG9-1-1?

It's much more complex technologically than the previous 9-1-1 system. Several components, from the network to the call-handling system to various software elements, must be integrated to deliver a solution that just works. To create that "just works" capability requires an underlying platform. It's like building a house. It's easy to think about decorating lots of rooms, but if you don't have a strong foundation, you don't have a house. Public safety solutions have to come together on a platform that's strong and secure.



What's the Lumen approach to establishing that foundation?

Lumen operates with a platform and ecosystem model. The Lumen platform is composed of: adaptive networking, edge cloud, connected security and collaboration services. For NG9-1-1, we view the network as the foundation and we can layer other capabilities on top of that. We then partner with a range of technology providers who focus on specific pieces of the overall solution such as the call-handling system. Because we work closely with those companies, we become experts in their technologies so that we can integrate them on top of our platform. This allows us to select the best-of-breed components for the various parts of the solution. We then stand behind the completed project, providing training where necessary.



What can PSAP operators do to get smart about security?

First, recognize that the threats exist. Second, get educated. There is information provided by groups such as NENA and APCO that can get you smart enough to engage with someone like Lumen to ask good questions and get the answers you need. Lastly, find out where you really are. Lumen offers professional services that can do a risk assessment. Then, we can work together to design a solution that addresses your issues. That also implies another important point about making sure you work with someone who can integrate all the NG9-1-1 pieces into a platform. Your NG9-1-1 system needs to be secure without impeding the speed of operation that you need in a PSAP. And that is not a trivial engineering task. You can't just bolt things together and expect it to work smoothly.



How can PSAP operators manage all this complexity when they do not have a lot of IT resources?

The simple answer is you shouldn't have to. If your vendor is doing things right, it should just work. Lumen also offers NG9-1-1 as a managed service. You shouldn't have to worry about upgrade cycles and software licenses. Let us do that. You focus on saving lives.



You mentioned security, are there security risks unique to NG9-1-1?

All these digital technologies use Internet Protocol (IP). That standard helps things work together, but it also potentially opens more doors for bad actors to get into your system. That's true of any digital system. Security becomes part of the NG9-1-1 complexity that I mentioned earlier. We build security into the network, then layer additional services on top of that. Our ecosystem also includes partners that may provide targeted defenses against specific types of attacks. Lumen is also a primary carrier of the Internet backbone, so we can see threats before they might impact our customers. We have a threat intelligence unit called [Black Lotus Labs®](#) that analyzes potential threats based on Internet traffic.

Jim Carlson, is Lumen's Sales Director for Public Safety. He has more than 30 years of experience in technology and related fields and he currently spends his time working with public safety agencies nation wide on tech modernization and digital transformation.

Get started on bringing your 9-1-1 system into the 21st century.

Contact your Lumen representative today:

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