FIRSTNET®

Newsletter

PulsePoint Respond: A cardiac patient's story

When Al Hart suffered a cardiac arrest during a run, his friends didn't know their call to 911 would do more than send an EMS crew his way. A FirstNet Certified® app also alerted people who had opted in to be notified when dispatch sends a crew to help someone nearby. See how his story turned out. **WATCH VIDEO**.

The story of two FirstNet apps

By Richard Price
President, Founder of the PulsePoint Foundation and former Fire Chief

About 12 years ago, I was having lunch in San Ramon Valley, in the district where I was a fire chief. And I heard a siren in the distance.

As I sat there, that siren grew louder and louder and that unit came closer until it pulled into the parking lot and stopped right in front of the restaurant where I was eating. Only after speaking with the responding crew did I learn that right next door, somebody was unconscious, unresponsive, and in cardiac arrest.

It was a pretty startling incident to think about. I am CPR trained and had an AED in my car and probably could have made a difference in the outcome of that event. I was so close, but totally unaware.

FirstNet surpasses 2.8 million connections and establishes market leadership with law enforcement

Aggressive Band 14 coverage expansion over 95% complete; FirstNet ecosystem expands with new mission-ready solutions

By AT&T

More than 18,500 public safety agencies and organizations, accounting for more than 2.8 million connections1 nationwide, are now on FirstNet®, Built with AT&T* – the only nationwide communications network built with and for America's first responders.

This growth has helped us to establish our market leadership position within the law enforcement community, including with the San Francisco Sheriff's Department, Brevard County Sheriff's Office, and Newark Police Department (New Jersey), and the Florida Division of Emergency Management – among the latest agencies to sign on to public safety's network.

"In less than 5 years, we've built a network with and for America's first responders and have built an ecosystem with the communication tools and technologies they need every day, on every mission," said

Heart attack survivor becomes advocate for CPR training

By Al Hart
Retired Technology Director, Triathlete
with Trish Hart
Triathlete, Retired Teacher

I'm a triathlete and marathon runner. I have a passion for it. But I kind of fell into it by accident. I was running and training for a marathon and my wife, Trish, was going to do an Olympic triathlon in Hawaii.

They all seemed to be having a lot of fun. And I was pretty miserable running 16 miles along the lava rock. I thought, there's got to be something to this whole tri thing. So, I fell into doing triathlons and I absolutely loved it. That's also how I came to realize that life is really short and you have to make sure you live each moment.

I was training for an Ironman two years ago, when I collapsed with cardiac arrest. But thanks to an app on someone's phone, I am here today. Now I spend a lot of my time making sure that people have the PulsePoint Respond App on their phones, because it saved my life.

When someone calls 9-1-1, it alerts anyone in the vicinity with the app on their phone that there may be a person needing CPR nearby. So, if you know CPR, and it happens to be close to you, you can help – and maybe save a life.

The Ironman

It happened in June of 2019. I was training for an Ironman and we were out at Shadow Cliffs Recreational Area, between Pleasanton and Livermore, California. We swam in the morning and then went out and did a 56- to 60-mile bike ride together.

I wasn't feeling great. But I just kind of figured it was an off day. When you're training so much, there are days like that. And you wonder why you got out of bed. So, I chalked it up to just having one of those days.

I got off the bike and we came in and then went out for a run. But as I was running, I just didn't feel right. I remember seeing people as I was

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running by. I remember looking to the lake and thinking I've got less than a half a mile to go. So just suck it up and finish. There will something cold and chocolate milk at the end. Just finish.

And then I went down.

Filling in the gaps

That's where Trish has helped me fill in the gaps.

She told me I was in front of her on the trail when she noticed a commotion ahead. Her first thought was that it was a bike crash – because it was a multi-use bike and running path. But she didn't see a bike. Then she got a feeling and asked our friend to run ahead and make sure it wasn't me.

When our friend didn't answer fast enough, she yelled, "Is it Al?"

He said, "Yes." And she said it took her breath away. She ran to me and I was on the ground, unresponsive. There were a few people there, another friend of ours and two strangers. She said she could see my eyes rolling back and kept telling me, "Oh, hell no, you're not going anywhere."

One person was administering CPR.

Another, whom we later found out was Juliana Schirmer, had called 9-1-1, which triggered the PulsePoint alert. That brought two lifeguards from the nearby lake with AEDs. And two firefighter cadets saw what was happening and stopped. They all took turns performing compressions and counting.

When the paramedics arrived, they put a mainline in my shin and shot me up with epinephrine. I was probably out between six and seven minutes. Clinically dead.

A week later

The next thing I remember is waking up in a hospital.

They had wheeled me right into the Cath Lab at Stanford Valley Medical Center/Stanford Valley Care. I had 100 percent blockage and 90 percent blockage in two different arteries. I got two stents. But after that procedure, I didn't wake up. The concern was brain damage. I was in a chemically-induced coma for 5 days.

I remember waking up and them asking me questions like, "Who are you?" Thankfully, I knew who I was. But it took a while for it to register

Heart attack survivor becomes advocate for CPR training

what happened. I was in shock.

Two months later, I got a chance to meet the people who saved my life. And that's the first time I really heard about PulsePoint.

I'm still trying to piece everything together. I had always said, "Hi!" to the lifeguards, but I had not met any of them. I had not met Bill and Juliana Schirmer, the first responders, or the two cadets who showed up.

Making a difference

When I heard about the app, I felt like I needed to do something.

There is a reason I survived. And I believe there's a reason I'm still here – and that's to become an advocate for learning CPR and getting involved. You can't just sit on the sidelines.

Bill and Juliana could have kept on driving. Those cadets could have kept on driving. And if the lifeguards, didn't have the app, they would have never known to come on up there. I know in my heart there's a reason I'm here.

Sometimes, you're given a second chance. I've kind of had a "second birthday" and this is when I look back and know I've got to make a difference.

One of the things that came out of this was people wanting to do something. The husband of one of the principals at the school district where I worked is a firefighter and EMT. He offered to do the training to get people CPR certified. Over 90 percent of the staff in the district got CPR certified. And they did it because they wanted to make a difference.

A lot of them said they realized it was important. I've been pushing all of them to get the PulsePoint app. Everybody who was certified got the PulsePoint app.

The PulsePoint App

We also helped launch the app in Marin County, where we live.

For counties or areas that don't have

Instead of having just the fire department or just the EMTs, you are now mobilizing your own community. You have people out there who are CPR-certified who can help.

PulsePoint, it's critical to have this. Sure, there's a cost to implement anything. But instead of having just the fire department or just the EMTs, you are now mobilizing your own community. You have people out there who are CPR-certified who can help.

They can give you that critical time that allows the EMTs to get there. It's those minutes – and all the people who responded – that bought me that time.

If it wasn't for those people, according to the doctors and my cardiologist, I would not be here.

It's not just an app on your phone. It's about saving a life.

That brings me back to the reason for counties needing to have this. It really comes down to making the people around you and your community part of your force. They will buy those minutes or seconds – that time to get the responders there. You're saving people's lives.

Moving on

Now, I'm training again.

Getting back to it is important to me. Since the cardiac arrest, I'm just enjoying every moment. Before, I was in a competitive mode – always trying to figure out how to better my time, be

stronger. Now, the passion is just about getting out there and enjoying it.

I'm not a great swimmer, but I can swim. Once I hit the bike, I just take it all in. I check the scenery out, see other people. And I try to be as encouraging to others.

This last weekend was a tough weekend for me because it really hit home what a miracle it was. We lost a friend of ours recently. He was doing what he loves. He's somebody I've coached with and a dear friend. And he passed away from cardiac arrest. While running.

He was doing the Mount Hood to the coast and he was out on his second leg of the relay. And he had a cardiac arrest. Somebody came. But it was so far away and by the time people could get to him, he was gone.

Like Trish said: Time matters. And this app buys time.

Al Hart is a retired technology director, marathon runner and triathlete. And Trish Hart is a triathlete and a retired elementary school teacher. Al and Trish, have become advocates for CPR training – and for the PulsePoint App since Al survived a cardiac arrest while training for an Ironman race.

How PulsePoint Respond and PulsePoint AED came to be

(Continued from Page 1)

And that's where the idea for the PulsePoint App started.

The birth of an idea

I didn't have a radio with me. But I had my phone and I wondered if we could use a person's cell phone like firefighters use a radio to notify people near a cardiac arrest or near someone in need directly from the dispatch center.

The dispatch center would know where the cardiac arrest was – and the phone would know the responders' location. And I wondered, "Could we marry those two together?" I thought about how we dispatch firefighters and paramedics to incidents. They don't have to see the incident. We know where the incidents are and we send them to those events.

So it was a fairly simple idea: Notify people who were near events based on their cellphone location. This was 11-12 years ago and push notifications and GPS on devices were still fairly new. But that was the genesis of the idea – at lunch that day on the back of a napkin.

Brainstorming

So we started brainstorming right then. San Ramon Valley Fire Protection District was doing a good job with cardiac arrest survival. We were teaching CPR in our community, placing AEDs, and dispatchers were giving CPR instructions over the phone.

We trained our crews in high performance CPR. We were doing everything we were supposed to, everything we knew to do.

But this exposed a gap. While we train a lot of people, they might not witness that event. So the question was, "How do we get them there – if they're close enough to get there before the fire department – so they can provide aid?"

It was an exciting idea to pursue, to see if we could bring these pieces together.

We spent a year trying to make that idea work. Fire departments don't have developers on staff, but we had a very good understanding of the problem.
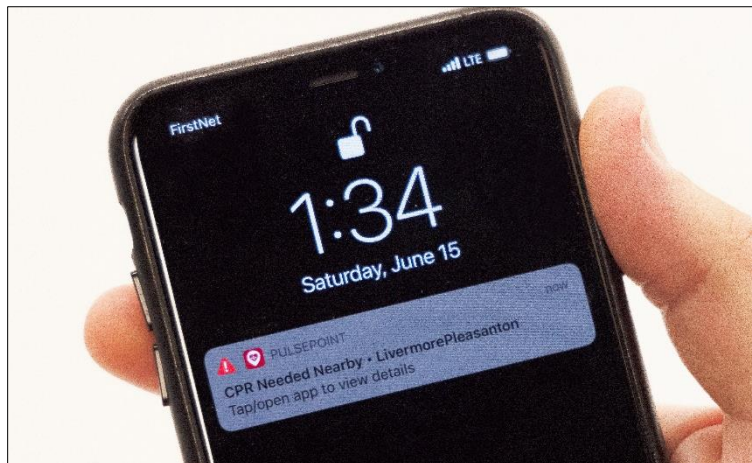
The question was, "How do we get them there – if they're close enough to get there before the fire department – so they can provide aid?"

When you have a cardiac arrest, your heart stops, you stop breathing and have maybe 10 minutes to survive.

To get a paramedic, firefighter, EMS to that scene – and not just parked in front, but at the patient's side doing CPR, applying an AED – inside that 10 minutes is critical. It's 10 minutes before you have no chance of survival, but less than that – 4-6 minutes – before you start having damage from not having circulation in your body to your organs and your brain.

Because of this excruciatingly short window of opportunity, most people don't survive cardiac arrest. We understood the problem. We just didn't have mobile app developers on staff.

Partnering with a university

So we partnered with Northern Kentucky University. They had a mobile app development program with a graduation requirement to create a real world app.

With their expertise of mobile app development, our expertise in cardiac arrest response and emergency dispatch, we brought this idea together and proved that it would work. Plus, we had variety of members of the fire department who were specialists in IT and dispatch.

Once we completed that proof of concept, we deployed in the community to about 170,000 people

and we had great early success. That led to creation of the PulsePoint Foundation because there was interest in it from other fire departments and EMS agencies. It was not something our fire department could sustain, but they saw the potential and they wanted to see it move into other agencies, across the country.

The San Ramon Valley Fire Protection District actually formed the 501(c)(3) PulsePoint Foundation to help other agencies deploy the app. I left the fire department at that time to run the foundation. One of the initial board members of the foundation was an elected board member of the fire department. They worked to set up the board. I worked to set up the staff and the volunteers that would help the other agencies.

Today, PulsePoint is in more than 4,000 communities.

What success looks like

One of the first times it activated was at a coffee shop in a downtown area on a weekend morning. When the crews arrived, they had two people doing CPR and about eight people clapping to 100 beats a minute, encouraging those rescuers.

A lot of times when crews arrive, nobody is doing CPR, no AED is in

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How PulsePoint Respond and PulsePoint AED came to be

(Continued from Page 4)

use, and you know your chances of success are low. You're starting in a hole.

But when you arrive on scene and CPR is in progress, or you see AED pads on somebody's chest with someone delivering shocks, you're motivated. You know, you have a chance for this person to survive. And to see people respond to the scene from the app – and not just one person, but two people – that's exciting. CPR can be hard work. So having multiple people on scene is ideal.

There were other early successes like that. Initially, we weren't sure if people would download the app or if they would be willing to respond. Today, we have more than 3 million people who have downloaded the app. So we've learned that people will participate and they will respond. They want to be part of the solution.

And we need them because there's no way professional responders can always get there in time. That's why we train people in CPR. It's why we place AEDs in the community because you just can't build enough fire stations. You can't have enough ambulances to arrive in those short timeframes. You're already relying on the community. So all we were doing is increasing the efficiency around those existing resources.

Getting FirstNet Certified™

One of the early design considerations of PulsePoint was that we would not introduce any new dispatcher workflow. We wanted the activation of the app to be transparent to the dispatch operation. We didn't want to bring up another screen or do something that would make call processing take longer or require new training. So that meant we had to build a very sophisticated interface that we could integrate tightly with the computer aided dispatch (CAD) system.

In doing that, we needed a way to instill confidence in those public safety agencies and in our CAD partners that we were doing things correctly, storing
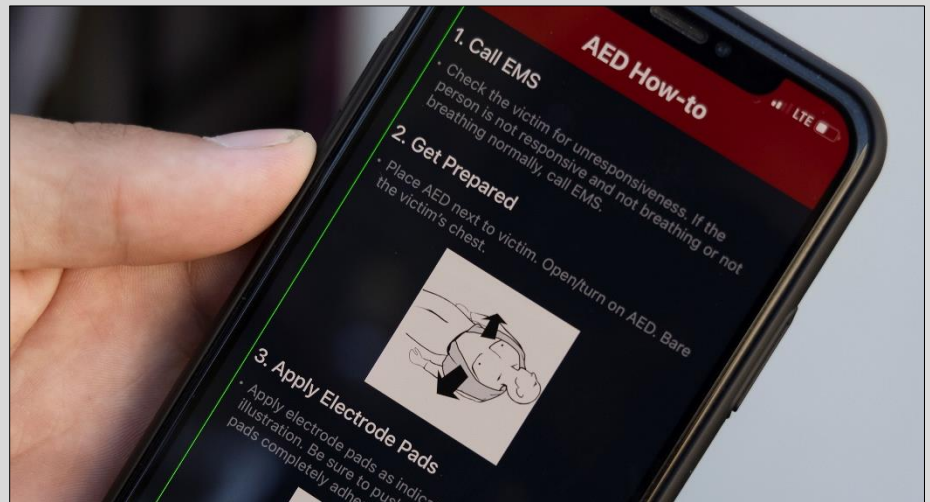
The story of two FirstNet Apps

Cardiac cases offer a very small window of time for first responders to help. Hear how San Ramon Valley Fire Protection District Chief Richard Price – now retired – came up with the idea of an app that would mobilize the community to help first responders with these responses. **WATCH VIDEO**

data properly and taking privacy into consideration.

To do that, we turned to FirstNet because FirstNet would do those types of reviews. They would make sure that the application was secure. They would make sure that it was reliable. They would make sure that it used the network efficiently.

Before FirstNet, there was nobody looking at those kinds of things. And now PulsePoint Respond and PulsePoint AED are both FirstNet Certified™ apps.

Getting FirstNet Certified was a milestone to achieve. Receiving certification is a lot of work, and it was an accomplishment for sure. Today, we:

- Have about 3 million users who carry the app.
- Are in more than 4,000 communities.
- Have notified more than 500,000 people of a nearby need for CPR on more than 150,000 cardiac arrest events.
- Process more than 800 reports of

- cardiac arrest each day from PulsePoint-connected agencies.

We don't activate on all of those reports because we don't always have somebody nearby. We notify people who are nearby – and, on average, more than five minutes ahead of first responders arriving. We call that the early arrival opportunity – like when I was in that restaurant. We typically notify two to three people per event.

The responders

The response time for our PulsePoint-activated users is slightly over two minutes, which is a fantastic response time. If you can arrive in that first two minutes, you're going to make a significant difference.

To think about what happened with Al Hart – the difference it made in his life and everything he's been able to do since – there is nothing more satisfying to our team. Much of our team is volunteer.

Our development staff work for other companies and volunteer their time

PULSEPOINT

How PulsePoint Respond and PulsePoint AED came to be

with the foundation. To them, those outcomes are what makes their effort worthwhile. It's why we're all here doing what we're doing.

But I don't want to underestimate the impact that it has on the people who respond.

They are the ones telling their story. It'll be a doctor who responded to a neighbor's house or a nurse who was on duty and crosses the street to a bus stop or a teacher who leaves their classroom to respond to another classroom.

The majority are firefighters, paramedics, nurses, doctors, lifeguards. They're carrying the app off-duty and have the confidence to respond.

It takes a lot of courage to respond. Probably half the people who take a CPR class won't be able to respond. But if multiple people go, it makes a difference. Where I might not have the courage by myself, if a couple other people show up with me, together we could do it. Bringing two or three people to the scene helps.

So it's pretty special to have the Al and Trishes of the world out telling your story and talking about what's possible and realizing the promise of PulsePoint. Because in the beginning it was just a story, it was just an idea. I have been following FirstNet since its inception, especially on the app development side.

Obviously, it's a highly redundant,

reliable network that works across disciplines, which creates the opportunity for a common operating picture. We're very, very fortunate as a country to have FirstNet.

Richard Price was in the fire service for 33 years. He began his career as a firefighter at 18 years old and worked his way through the ranks, holding most positions in the fire service, including line battalion chief for 18 years. His duties included IT and dispatch responsibilities, which would later come to serve him well.

He retired as fire chief from the San Ramon Valley Fire Protection District and transitioned directly from the fire service into the PulsePoint Foundation.

OTHER NEWS

FirstNet Innovator of the Month – Axon

Our November innovator of the month is Axon. Axon's mission is to protect life with a network of devices and apps to help public safety personnel become smarter and safer. Our products – including our latest bodycam Axon Body 3, which is now FirstNet Ready® – have an impact on every aspect of a public safety officer's experience. **LEARN MORE**
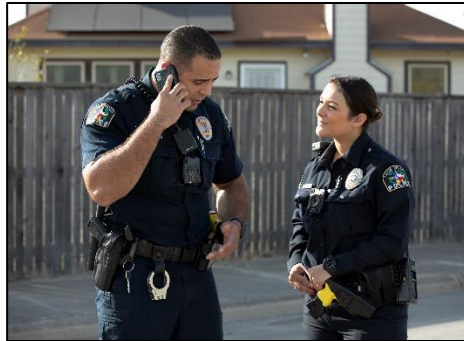
Agency Admins, get training on digital tools you need

Learn how to manage your products and services with free courses that show you how to navigate the tools you need, including Uplift and FirstNet Central. Register today for our instructor-led training courses available to you and your colleagues. **LEARN MORE**

First Responders

Connect your way and save

Check out the latest promotions for individual users.

SEE OFFERS

FIRSTNET SURPASSES 2.8 MILLION CONNECTIONS

Aggressive Band 14 coverage expansion over 95% complete

said Jason Porter, *President, Public Sector and FirstNet Program, AT&T.* As the FirstNet market leadership grows, we will continue to innovate new solutions and enhance existing ones, helping to ensure public safety has access to the information they need, when they need it."

Public safety is using FirstNet to manage daily operations, planned events, and emergency situations and disasters. From San Francisco's Fleet Week earlier this month to COVID-19 testing centers and wildfires in the West, FirstNet is keeping public safety connected unlike any other network. In fact, so far this year FirstNet has deployed more than 650 solutions to support public safety's emergency response – from dedicated FirstNet SatCOLTs to expediting network restoration efforts.

"When an emergency strikes, reliable communication is vital for our department and the communities we serve," said Sheriff Paul Miyamoto, San Francisco Sheriff's Office. *"*We are proud to partner with FirstNet, and confident that this technology will help our members make better decisions at incidents to help mitigate the loss of life and property. FirstNet also ensures streamlined communication between regional public safety agencies during mutual aid incidents." We're also giving first responders truly dedicated coverage and capacity when they need it most. So far, we've surpassed 95% of our nationwide Band 14 coverage target with the First Responder Network Authority (FirstNet Authority), well ahead of schedule. And public safety's dedicated ecosystem is expanding to support the growing subscribers.

There are now 315+ FirstNet Ready® devices and more than 180 apps in the FirstNet App Catalog, which includes a carefully curated category of safety and wellness apps to further support the mental and physical health of first responders. The FirstNet App Catalog is geared to first responders, featuring

Public safety is using FirstNet to manage daily operations, planned events, and emergency situations and disasters.

apps relevant to public safety's mission, and gives FirstNet subscribers a dedicated site to find meaningful new solutions that have been specifically reviewed for use with their network.

"From accelerating innovations in mapping technologies to simplifying access to devices, FirstNet continues to raise the bar for what it means to be a network built for and by public safety," said Ed Parkinson, *CEO of the FirstNet Authority.* "Feedback from America's first responders is at the center of everything we do, and the FirstNet Authority will continue to work with public safety and AT&T to evolve and enhance the network based on their operational needs."

By listening to what public safety needs, we're introducing new mission-centric solutions including Locate Standard for FirstNet, a new dynamic mapping application that includes Z-Axis, and NumberSync for Samsung wearables.

Why is this important?

FirstNet is public safety's network. While commercial wireless offerings are available to public safety, FirstNet continues to grow because it stands apart from those commercial offerings.

Unlike commercial networks, FirstNet is built to public safety's strict specifications and requirements. It is providing first responders with truly dedicated coverage and capacity when they need it, unique benefits like always-on priority and preemption, and high-quality Band 14 spectrum. These advanced capabilities help emergency managers, fire, EMS and law enforcement save lives and protect their communities.

We continue to listen to public safety and focus on delivering the services they need, on their network. Nowhere else can public safety get its own nationwide, dedicated communications platform with the mission-ready and mission-critical standards-based solutions they need to keep themselves and their communities safe.

What are the new solutions?

FirstNet is expanding public safety's network and rolling out mission-driven innovative solutions. These new solutions and offers will give public safety new capabilities:

- **Locate Standard and Locate Pro Offer for FirstNet:** As every public safety agency knows,

FIRSTNET SURPASSES 2.8 MILLION CONNECTIONS

Aggressive Band 14 coverage expansion over 95% complete

coordinating first responders in the field during emergency situations can be challenging. Existing solutions that use radio to verbally communicate position provide limited situational awareness, especially within multi-story structures. This limited location visibility can lead to delayed response times and error-prone operational decisions.

FirstNet understands these challenges and will soon provide first responders an exclusive solution to solve this problem – Locate Standard for FirstNet. This dynamic mapping application empowers public safety by providing near real-time responder locations on a detail-rich map, including Z-Axis (or vertical position) to identify a team member's location during critical times. Locate Standard provides greater efficiency to keep your teams safe, improve situational awareness and coordination and decrease response times.

Agencies on FirstNet can sign-up for Locate Standard free for 1-year, along with Locate Pro – a premium mapping solution, and Activate – an emergency callout and team mobilization tool, free for the first 2 months of the offer.[2]

- **NumberSync for Samsung Wearables:** NumberSync allows a user to "twin" a smartphone with a
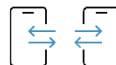
*There are now 315+ **FirstNet Ready®** devices and more than 180 apps in the FirstNet App Catalog, which includes a carefully curated category of safety and wellness apps to further support the mental and physical health of first responders.*

wearable, like a smartwatch, to make and receive calls and text messages, check email, monitor health status and more without the smartphone present. Coming soon, this functionality will be more widely available to public safety with the Samsung Galaxy Watch3, Watch4 and the Watch4 Classic wearables. This is just another technology advantage available to first responders. For more about the value FirstNet brings to public safety, check out FirstNet.com.

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[1]*As of Q3 2021*

[2]*Ltd. time offer. Select locations only. Avail. only to verified FirstNet public safety entities for Agency Paid Primary user lines of service. After said free mos., must opt-in & pay a per mo. charge per subscriber.*

Data charges may apply for app download and usage. Add'l fees, taxes & other charges & restr's apply.

See https://www.firstnet.com/content/dam/firstnet/white-papers/firstnet-locate-standard-for-firstnet.pdf or store rep for details.

Agency Admins

Get your team the gear they need

Check out the latest promotions for agency paid users.

SEE OFFERS