Ford County Sheriff’s Office: Connectivity when it matters most

In rural Kansas, a call for backup can mean up to a 30-minute wait for Ford County Sheriff deputies. “FirstNet does give me a peace of mind. It’s good to know that we’ve got dependability in FirstNet,” says Ford County Sheriff Bill Carr. Hear how FirstNet is helping Ford County deputies connect quickly so they can stay safe as they do their jobs.

WATCH VIDEO

Using FirstNet to tackle big city problems in KS

Communication is critically important to rural Ford County, Kansas, writes Sheriff Bill Carr. “It’s critical infrastructure. When it comes to radios or phone usage, it’s a must for us to have equipment in working order – for the safety of our deputies and for the citizens we serve… That’s why we’re on FirstNet.”

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FirstNet, Built with AT&T now covers more first responders than any other network in the U.S.

In the nearly 5 years since the First Responder Network Authority selected AT&T to build and operate FirstNet®, we have moved quickly to bring more coverage, boost capacity and drive new capabilities for first responders and those who support them. Now, the public safety community on FirstNet has access to the nation’s largest coverage footprint, reaching more than 2.81 million square miles across the country. LEARN MORE ON PAGE 6

FirstNet cell sites launching nationwide to support public safety

FirstNet already covers over 99% of the U.S. population today. But to better serve public safety, we’re extending the reach of FirstNet by continuing to roll out high-quality spectrum, known as Band 14. So far, we’ve deployed Band 14 on existing cell sites in more than 700 markets nationwide. Check out the areas benefiting from a new, purpose-built FirstNet cell site. LEARN MORE
FirstNet and O2x collaborate to promote Healthy Hearts

Eat, sweat, and thrive your way to optimal heart health

By Dr. Maria L. Urso
PhD, O2X Specialist

Meeting the needs of first responders through innovative solutions is the foundation of FirstNet. As a result, first responders have the tools to respond effectively to everyday incidents and major disasters. These advances in communication technology help first responders make faster and better decisions related to public safety. But we still need to address a key aspect of responder readiness: making sure first responders are equipped with the tools they need to show up to serve their communities.

Heart attack is the leading cause of death for first responders. In the past decade, 50% of on-duty firefighter deaths were due to heart attack. First responders are acutely aware of the physical and emotional demands of their job. But many do not appreciate the strain that the dangerous work, heavy equipment, and overwhelming amount of stress place on the heart.

This strain, along with environmental challenges, dehydration, and toxic exposures, can easily trigger a sudden cardiac event. Lifestyle choices such as smoking, lack of exercise, and poor nutrition exacerbate the threat through obesity, hypertension, and poor heart health.

FirstNet expands on mission readiness

FirstNet understands the importance of addressing the needs of first responders to ensure they have tools on hand to live a heart-healthy lifestyle. In the last year, FirstNet has collaborated with O2X, a human performance company that provides customized wellness programs for first responders, public safety departments, the military, and federal agencies.

With cardiovascular disease a leading factor in deteriorating health for first responders, O2X challenges first responders who attend their programs to take action to reduce their personal risk of heart disease, as well as cancer and stroke.

Unfortunately, “being healthier” is often not enough to get individuals to make major lifestyle changes. And this is where the unique approach of O2X comes in. First, let’s take a step back to the “why” behind the “how.”

Heart attack is the leading cause of death for first responders. In the past decade, 50% of on-duty firefighter deaths were due to heart attack.

Why make changes?

We are living longer, so we must be doing something right. So why do you need to make changes?

Over the past century, one of the most remarkable human accomplishments is the extreme change in lifespan. In the U.S. alone, the average lifespan increased from 47 years in 1900 to 77 years in 2021. After minimizing the number of deaths from infectious disease in the 1900s, the leading cause of death became cardiovascular disease. Since the mid-1900s, medical advances to help treat cardiovascular disease have played the most significant role in increasing human lifespan.

Unfortunately, while we are now able to treat individuals with cardiovascular disease to extend their lifespan, the onset of cardiovascular disease usually signifies the end of an individual’s health span. Health span refers to the number of years an individual lives free from debilitating conditions associated with disease. In other words, while the average lifespan is 77 years, most people start to notice a significant decline in their quality of life at age 67 due to health problems associated with cardiovascular disease.

Why does that matter? When most people imagine age 65, they think of retirement and a chance to step away from the hectic life of a first responder or whatever

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RESPONDER HEALTH AND WELLNESS

FirstNet and O2x collaborate to promote Healthy Hearts

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career they have chosen. With retirement comes the freedom to live life to its fullest, without the constraints of a 40-hour work week, shiftwork, or raising a family. If you think about the consequences of deteriorating health at age 67, that blissful retirement phase of life takes an unexpected turn. Recognizing this gap, healthcare organizations have stressed the relevance of disease-free life. Of note, the American Heart Association has set a specific goal for 2030, aiming to lengthen the current health span by at least three years.

How do we fix this?
Lucky for us, we are not heading into this challenge unarmed. Decades of research examining the factors that lead to chronic disease, poor quality of life, and premature death, universally conclude that we can extend health span through changes in our lifestyle. These include quality nutrition, physical activity, and reduced stress and depression.

The challenging part is finding the “how” behind implementing these changes. That is where O2X comes in. With O2X, the message is not about doing it all at once, or making ambitious new year's resolutions (which, according to science, are mostly pushed to the back of the shelf by this time each year).

It’s about giving each person the tools to become 1% better every day. O2X helps those in their programs implement small changes to lifestyle, namely what and when they eat, how and when they move, and how they cope with and manage the stress in their life.

They have coined these three tenets “EAT SWEAT THRIVE,” and have been using this approach to build healthier and more resilient teams and first responders, while simultaneously documenting a decrease in cardiovascular disease.

Implementing the Three S’s
Science, Specificity and Support are three key facets to the O2X program that anyone can incorporate into their own approach to improved health and performance:

• **Science:** Evidence-based practices to improve health are plentiful. Unfortunately, there is a dizzying array of misinformation that can make designing nutrition, training, and mindfulness practices difficult. O2X follows the science, and their approach is backed by a solid foundation of research. Program principles that are taught are mirrored after pivotal nutrition, exercise, and mindfulness research studies.

If a diet, supplement, or training program lacks a scientific evidence base, it will not become part of the program. As a result, the programs are built on a foundation of proven success – whether the goal is to improve health, reach a new athletic peak, or maintain longevity in a stressful career.

• **Specificity:** The biggest contributor to failure when trying to change habits is “generalizing.” Most people attack a new goal with a broad and ambitious statement. Through their “1% better every day” philosophy, O2X works with clients to create small, incremental, and achievable goals that are sustainable. Using the “SMART goal” approach (Specific; Measurable; Achievable; Realistic; Timely), participants identify their big goals, and then break them up into smaller targets that are about 1% better than previous practices. Collectively, they add up to the bigger goal over time – whether it is losing 25 pounds, running a faster race, quitting smoking, or decreasing cholesterol.

• **Support:** The O2X program is exciting! Attendees leave inspired and motivated to start their own “1% better every day” journey. Research has shown, no matter how motivated you are, it’s just not possible to continue to achieve your goals without support. Individuals create their own support networks with (Continued on Page 4)
Eat, sweat, and thrive your way to optimal heart health

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family, friends, and co-workers, but for the day-to-day continuity of the program, the O2X App is an essential tool.

The App has daily workout ideas, recipes, inspiration, stress-busting or sleep-enhancing meditations, and encourages accountability. What’s more, if users have a question, they can submit it to the App and receive a personalized response from one of O2X’s specialists.

**Eating, Sweating, and Thriving**

The program is not just for people who want to make changes associated with poor health. Many first responders are “tactical” or “recreational” athletes who seek to improve their performance at work or in sport. Additionally, since many first responders are “career tactical athletes,” there is a significant focus on implementing changes that will help first responders finish their career as strong as (or stronger) than they started – mentally, physically, and emotionally.

Let’s look at some of the fundamentals that shape the O2X approach to optimizing performance, reducing incidence of cardiovascular disease, and making sure health span mirrors lifespan.

**EAT**

Understanding nutritional processes will help us make wise nutrition decisions. To do this, we need to follow scientifically sound and sustainable practices, not the latest fad from the media. O2X focuses on helping their clients understand the nutrients in food, how the body uses nutrients, and the relationship between diet, performance, and disease.

All clients learn to understand the importance of blood sugar stabilization and its significant impact on hunger, performance, and cardiovascular health markers in the blood, such as cholesterol and insulin sensitivity.

In short, consuming a Mediterranean style diet that consists of nutrient-dense foods such as whole grains, lean sources of protein (20–25g/meal), fruits, and vegetables results in immediate changes in blood sugar regulation. With blood sugar stabilized due to regular meals from nutrient-dense foods, immediate effects include improved mood, performance, and sleep, and a decrease in cravings, overeating, and indulging in sugary snacks. Over the long term, clients experience reductions in blood cholesterol and glucose, body weight, and body fat.

**SWEAT**

Exercise does it all. Whether cardiovascular exercise (e.g. running, swimming, biking, rowing, hiking, walking) or strength training, exercise improves blood flow, reduces blood pressure, regulates blood sugar, increases metabolism, assists in maintaining a healthy body weight, preserves joint health, and optimizes bone health. With proper intensity, volume, and frequency, physical activity exerts benefits in the short and long term.

During the training program, O2X conducts daily sessions that incorporate cardiovascular, strength, and flexibility exercises. The team of instructors uses exercises that require equipment, but also those that can be done anywhere (something we saw as an essential tool during the pandemic when many gyms were closed).

Key aspects of the program are in line with national guidelines for heart health, recommending a minimum of 2.5-3.5 hours of cardiovascular exercise each week. This can be obtained in 3-5 bouts of 30-45 minutes over the course of the week. Some who are first starting out break this up into several 5 to 10-minute bouts throughout the day.

You can also enhance cardiovascular training with daily

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flexibility exercises and 2–3 days of strength training each week. Here, tactical athletes learn you can accomplish strength training with the use of body weight and how to structure a progressive training program. Aside from the change in physical appearance and performance that keeps clients engaged, cardiovascular benefits include lowered resting heart rate, reductions in blood pressure, lowered cholesterol, a stronger, more efficient heart muscle, and stress reduction.

THRIVE

Stress is a key contributor to cardiovascular disease and poor health. We often think of busy days, heavy workloads, and life problems as the main contributors to stress. But we forget that poor sleep and interpersonal relationship problems can amplify the stress response to the challenges life throws our way. Collectively, the cycle of chronic stress, poor sleep, disconnected relationships, and occupational workload, accumulate.

This contributes to the onset of heart disease because of the undesirable changes in stress hormones in the blood, increases in blood sugar, abdominal weight gain, and increased heart rate and blood pressure.

The THRIVE portion of the O2X program takes a multifaceted approach to managing all sources of stress and works with clients on developing skills to better respond to those stressors. Tactical athletes learn techniques such as breathing exercises, guided meditation, dealing with setbacks, and optimizing performance under pressure. They identify ways to improve their sleep hygiene.

This is an aspect of the course that is often popular with goal setting, since it often takes many weeks to fall into a new sleep routine. Incorporating stress reduction and sleep hygiene into one’s lifestyle helps to minimize the daily contributors to heart disease. While those tend to be “silent changes,” participants also experience a more positive mindset, better coping skills, and enhanced recovery from exercise.

What’s your 1%?

FirstNet continues to improve the offerings it has for first responders to enhance their communication and safety.
OTHER NEWS

Covering more first responders than any other network

In the nearly 5 years since the First Responder Network Authority (FirstNet Authority) selected AT&T to build and operate FirstNet®, we have moved quickly to bring more coverage, boost capacity and drive new capabilities for first responders and the communities they serve – rural, urban and tribal. And now, the public safety community on FirstNet has access to the nation’s largest coverage footprint, reaching more than 2.81 million square miles across the country. That means we cover 50,000+ more square miles than the largest commercial networks – giving more first responders access to an entire ecosystem of innovative solutions to keep them mission ready.

“Interoperable connectivity is the foundation of FirstNet and the entire public safety-centric ecosystem it is driving,” said Jason Porter, President, Public Sector and FirstNet Program at AT&T. “As public safety’s partner, we’ve moved faster than anyone to deliver more coverage across tribal, rural and urban areas, powering the connections first responders count on most. And we’re doing it all with a hyper focus on the unique security, resiliency and reliability that their missions demand. Public safety is our priority and we’ll continue to be there for this vital community – no matter where their mission takes them.”

Public safety agencies and organizations in thousands of communities across the country are staying connected with FirstNet, Built with AT&T. And now, more first responders are gaining access to a one-of-a-kind 5G experience on FirstNet. 5G connectivity on FirstNet has launched in 10 new areas – Savannah (Georgia), Western Kansas, Lansing (Michigan), Minneapolis (Minnesota), Toledo (Ohio), Charleston (South Carolina), Hilton Head (South Carolina), Sioux Falls (South Dakota), Richmond (Virginia) and Redmond (Washington) – to further support public safety’s unique mission needs. These markets join 10 other previously announced cities, as well as parts of 40+ cities and more than 30 stadiums and venues which gives public safety access to 5G+ spectrum. And we’re continuing to roll out additional 5G connectivity for FirstNet in more communities nationwide.

“We are pleased to see FirstNet continue to grow and deliver coverage and capacity where public safety said they need it the most,” said Edward Parkinson, CEO, FirstNet Authority. “The FirstNet Authority has taken a public-safety-first approach that is unlike commercial networks. As we head into the 5th year of network deployment with our partner AT&T, we will continue to keep public safety at the forefront of everything we do.”

We’ve also deployed Band 14 spectrum nationwide. Band 14, public safety’s VIP lane, is nationwide, high-quality spectrum licensed directly to the FirstNet Authority for public safety specifically on the FirstNet network. In an emergency this band – or lane – can be cleared and locked exclusively for first responders and the extended public safety community. This is vital because, as seen at this year’s Big Game, a first responder uses 2+ times more data for their critical communications as compared to a general consumer.

Tens of thousands of communities are benefitting from the unique capabilities of Band 14. Since launching public safety’s network, we’ve upgraded tens of thousands of existing AT&T cell sites with public safety’s Band 14 spectrum, helping to surpass 95% of our Band 14 coverage target with the FirstNet Authority, as well as reaching several hundred thousand additional square miles beyond our target commitment. And we continue to roll out Band 14 to help provide public safety with dedicated connectivity when needed.

“The Navajo Nation continues to work with the FirstNet Authority and AT&T to build out FirstNet coverage throughout the Navajo Nation as part of a large collaborative effort to better serve our Navajo people, especially those in underserved areas,” said Jonathan Nez, President, Navajo Nation. “Ninety FirstNet towers sites (Continued on Page 7)
Covering more first responders than any other network

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have launched on the Navajo Nation so far, and we’re continuing to work together with the FirstNet Authority and AT&T to get additional sites launched. The FirstNet buildout represents a historic investment in broadband infrastructure for the Navajo Nation. Our first responders have used FirstNet mobile technology during wildfires, large public events and for COVID-19 mitigation efforts. We look forward to expanding our telecommunications capabilities further to provide more resources for our frontline warriors with the help of FirstNet.”

Strengthening network infrastructure

But we aren’t stopping there. The FCC estimates that over 10,000 lives could be saved each year if we were able to reach callers just 1 minute faster. And since 80% of wireless calls take place indoors, the need for in-building dedicated public safety connectivity is essential to public safety operations and overall safety. That’s why we are collaborating with Safer Buildings Coalition, the nation’s leading industry advocacy group focused on advancing policies, ideas, and technologies that ensure effective in-building communications capabilities for public safety personnel and the people they serve.

And we know there’s no connection more important than one that can help save a life. In 2021, the U.S. experienced more than 60 extreme weather and climate events coupled with increasing instabilities in the commercial power infrastructure landscape. While we’ve made significant investments to increase network resiliency, these unprecedented events have reinforced the need to take further action for today’s changing environment. That’s why we’re leading the industry by establishing a 3rd “emergency” pathway to each mobility network hub (MTSO). And as public safety’s partner, we’ll continue to set the bar on what success looks like for network resiliency now and in the future.

Further reinforcing the reliability of FirstNet, we’ve gone farther than anyone in the industry to secure public safety’s communications. FirstNet is now the first-ever nationwide network with comprehensive tower-to-core network encryption. And since FirstNet is designed with a defense-in-depth security strategy that goes well beyond standard commercial network security measures, first responders have superior protection without sacrificing usability or impacting public safety’s missions.

Why is this important?

In less than 5 years, 56 states and territories unanimously opted-in to FirstNet; we launched the highly secure dedicated FirstNet network core to give first responders their own network; and added so many square miles to our service area that it was like we added the entire state of California nearly 3 times over.

Today, FirstNet is solving for common and long-standing communications challenges that first responders face – things like interoperability, network congestion and commercial network providers slowing public safety’s data connection. It’s giving them superior coverage for day-to-day response and life-saving missions. While commercial wireless offerings remain available to public safety, FirstNet continues to grow because it offers distinct advantages from those commercial offerings. FirstNet comes with unique features, functionality and dedicated spectrum when needed for the public safety community. That’s why public safety fought for their own, separate, dedicated platform, championing the vision that led to the creation of FirstNet.

Bridging the digital divide

Over the past 5 years (2017–2021), AT&T T’s total investment in the United States, including capital investment and acquisitions of wireless spectrum, was more than $130 billion. And the FirstNet network expansion is one way we are helping ensure all of public

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Using FirstNet to battle big city problems in rural KS

By Bill Carr
Sheriff, Ford County, Kansas

In Ford County, Kansas, it’s not uncommon to have a deputy on the eastern part of Highway 50, and another deputy on the opposite corner down on Highway 54, near the Ford/Clark County Line.

So, our communication is absolutely important to us. It’s critical infrastructure. When it comes to radios or phone usage, it’s a must for us to have equipment that’s in working order – for the safety of our deputies and for the citizens we serve.

We have a population of approximately 35,000 citizens and serve 12 communities throughout the county. It’s a very diverse population in Ford County.

We’re not shielded from any crime out here in Western Kansas. So, we need to have the right equipment to make sure we can get from point A to point B, communicate with dispatch and do what we need to do.

That’s why we’re on FirstNet.

Waiting for back-up

Just a few years ago, before I moved up to the sheriff’s position and before we joined FirstNet, I conducted a traffic stop at 2:30 in the morning. It was on the far southeast corner of Ford County, off Highway 54. I was in a low area of the community near railroad tracks right, next to a farmhouse. And radio coverage was not the best.

Dispatch was able to capture my location when I initially checked out. But once I got out of my car and approached the vehicle, things went south. I tried to communicate with the radio to no avail.

I wasn’t able to get back to my patrol vehicle. And after a little tussle and wrestling around, I was able to get both individuals detained.

Even after that, trying to relay to responding units, communication was scratchy at best. I was there roughly 40 minutes before my backup unit arrived.

The FirstNet difference

We’ve come a long way in advancements with technology since then – with the upgrades and the radio system. And FirstNet is giving us an added area of coverage that we’re really looking forward to and hoping to get deployed with all the deputies here in the near future.

“One of the advantages I see in having FirstNet is the ability to just pick up the phone and know that I’ve got connectivity… So, whether I need to dial 9-1-1 or connect to dispatch directly or to another responding deputy, it’s nice knowing that I have that coverage.”

One of the advantages I see in having FirstNet is the ability to just pick up the phone and know that I’ve got connectivity. We all carry our cellphones. So, whether I need to dial 9-1-1 or connect to dispatch directly or to another responding deputy, it’s nice knowing that I have that coverage.

Another key area that has really helped is having the mobile data terminals in our vehicles and using apps – especially when we dispatch officers to a car crash. In the past, we had to write everything down by hand on a notepad. Then we’d go back to the office, sit down, call dispatch, ask them to fax us a copy of the CAD printouts and do our reports.

Today, we can just fire up the MDT while we’re on scene waiting for the wrecker, go into the CAD report system and fill out the reports while on the scene. Basically, we can have everything done prior to the wrecker even arriving.

It keeps my staff out where they’re visible. And not driving back and forth saves on fuel consumption. It keeps them in the rural areas where I want them to be. I want them out patrolling more.

And with the COVID 19 threat, reducing the drive time back and forth from the field to the station also reduced contact with others and helped us cut down on cross contamination. That was a key part of this: just to keep

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that separation there and safety of the individuals and deputies alike.

Reliability plus peace of mind

We’ve since put Cradlepoints in our vehicles. We’ve got mobile data terminals installed. We use a mobile app, and it’s been an absolute success. The staff enjoys it. And we’ve got access points throughout our building. And with the Cradlepoint in each vehicle, we’re able to just dial in at any point and pull off to the side of the road and file reports from the field, limiting everybody coming into the office just to get online and try to do reports.

I’d say the biggest thing right now is just having reliability. It’s knowing that we can rely on the service FirstNet provides and not losing our coverage. FirstNet has definitely stepped up to a new level. And it’s good to know that we’ve got dependability in FirstNet.

Sheriff Bill Carr has been the sheriff in Ford County, Kansas, since 2015. And he’s been with the Ford County Sheriff’s Office for nearly 30 years.

Covering more first responders than any other network in the U.S.

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safety – and the communities they serve – have access to critical connectivity to help meet the urgent challenges of today and tomorrow.

We already cover more than 99% of the U.S. population today, but FirstNet is built for all public safety. That means every first responder – career or volunteer; federal, tribal, state or local; urban, suburban or rural. We are working closely with local telecom providers across the country to more quickly address rural coverage needs and expand the reach of FirstNet for the public safety community.

Thanks to these collaborations we were able to nearly quadruple our coverage in Nebraska since launching FirstNet. And we’ve deployed Band 14 across nearly 100 cell sites on the Navajo Nation.

And with FirstNet, it’s about where first responders need connectivity. That’s why the build is being done with direct feedback from public safety and local stakeholders. This feedback has been instrumental in deploying Band 14 spectrum nationwide. And it’s helped to launch nearly 1,000 new sites in rural, remote and tribal areas so far – including areas where emergency responses have been previously challenged. From collaborating with local providers to building out new cell sites in remote locations, this new infrastructure will help improve the overall coverage and network capacity experience for public safety on FirstNet and AT&T wireless customers in the area.

Residents, visitors and businesses can take advantage of the AT&T commercial spectrum bands, as well as Band 14 when additional capacity is available.

What makes 5G on FirstNet “one of a kind?”

FirstNet is not a commercial network. And that means our approach to 5G for public safety must be different from the way your friends and family experience 5G. With FirstNet, we’re taking the right steps for public safety in a way that meets their unique mission needs.

While 5G connectivity will ultimately bring a combination of benefits like ultra-low latency and ultra-high speeds to support all kinds of users, it’s essential we approach 5G in a different way for first responders. That’s why first responders maintain voice communications with priority and preemption on LTE, while the FirstNet network determines the best route for data traffic, whether that’s 5G or LTE spectrum.

1 As of EOY 2021